

Monday, February 01, 2010

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REQUEST NUMBER: 10-1514

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis
General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

These Samples are on:
LANL Request Number: 10-1514
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/1/2010
TURNAROUND/REPORT DUE: 3/3/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:906.0	1	RE15-10-8062	R	1/27/2010	
	SW-846:6020	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6020		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-8083	W	1/27/2010	
		1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
SW-846:6850		1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
SW-846:7470A		1	RE15-10-8083	W	1/27/2010	
SW-846:7471A		1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:7471A						
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
SW-846:8062						
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
SW-846:8321A_MOD						
		1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	

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PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8321A_MOD	SW-846:9012A	1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-8083	W	1/27/2010	

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LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1514C

LOS ALAMOS

REQUEST NUMBER: 10-1514

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7980	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7980	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7958	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7958	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7960	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7960	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7979	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7979	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7972	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7972	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7957	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7957	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7974	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7974	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7961	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7961	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7971	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7971	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7966	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7966	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7959	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7959	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7969	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7969	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8061	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8061	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8063	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8063	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8062	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8062	1	POLY	H3	Ice	R
RE15-10-8062	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8083	1	POLY	METALS+U-GEL	Nitric Acid	W

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LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1514C

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
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RE15-10-8083	1	POLY	SW-846:6850	Ice	W
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RE15-10-8083	1	POLY	TCN	Sodium Hydroxide	W
--------------	---	------	-----	------------------	---

Relinquished By:

Date

Time

Received By:

Date

Time

 2/1/10 3:00

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7959

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		0845		SUB-MEDIA:		TUFF 1	
PRS ID: 15-008(b)		ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID: 15-610749		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		0.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		0.7		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		S		EXCAVATED: YES (NO) / NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES (NO) / NA			
BOREHOLE: YES (NO) / NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 L POLY IL RS 01-11-10	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Light brown silty sand some ^{72m 1/27/10} rock tuff fragments,
pine needles, wood chips

SAMPLE COMMENTS: ^{72m 1/27/10}
NA Wire not placed in sample containers

LOCATION DESC: 8b-33 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE NEG

Alpha \leq 22 dpm
Beta/Gamma \leq 7170 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.2}{3.0} \text{ ppm}$

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) Estevan Lopez (Signature)	Date/Time 1/28/10 0805 AM	RECEIVED BY (Printed Name) Sherry Sherwood (Signature)	Date/Time 1/28/10 0805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7960

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/27/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		0859	SUB-MEDIA:		TUFF 1
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	15-610749	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	3.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	3.6	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	R	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAT POLY 1 liter 1-11-10 KC	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: pinkish grey tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-33 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 49 dpm
Beta/Gamma \leq 5440 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.4}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 1/28/10 8:05 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature)	Date/Time 1/28/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8062

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1142		SUB-MEDIA:		TUFF 1	
PRS ID: 15-008(b)		ok		SAMPLE TECH CODE:		HA	
LOCATION ID: UNK		15-F10752		FIELD QC TYPE:		FD	
LOCATION TYPE: GENERIC		ok		FIELD PREP:		NA	
TOP DEPTH: 0		3.0		SAMPLE USAGE:		QC	
BOTTOM DEPTH: 0		4.2		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		R		EXCAVATED: YES/NO/NA		NO/NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	72m 1/27/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 11 liter 1/11/10 R	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7966

Pinkish gray tuff

SAMPLE COMMENTS:

Hit tuff at 3.3'

LOCATION DESC:

8b-70 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 44 dpm
Beta/Gamma \leq 2150 dpm

PID $\frac{\text{Ambient Reading}}{0.4} = 0.0$ ppm

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) Estevan Lopez (Signature) <i>E Lopez</i>	Date/Time 1/28/10 0811 AM	RECEIVED BY (Printed Name) <i>Mike M...</i> (Signature) <i>Mike M...</i>	Date/Time 1/28/10 811
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7958

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA: QBT3		Allh	
TIME COLLECTED (HH:MM)		0835		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID:	15-610748	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	3.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	4.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1L RS 01-11-10	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sandy silt, some clay

FD RE 15-10-8061

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-34 near top


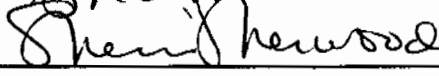
FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 60 dpm
Beta/Gamma \leq 14040 dpmPID $\frac{\text{Ambient Reading}}{1.7} = \frac{0.2}{1.7}$ ppm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT) R Saunders

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) 	Date/Time 1/28/10 7:57 AM	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) 	Date/Time 1/28/10 757
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8063

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	QBT3		Alh
TIME COLLECTED (HH:MM)		1351		SUB-MEDIA:	TUFF1		NA
PRS ID:	15-008(b)		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK		15-1010756	FIELD QC TYPE:	ED		
LOCATION TYPE:	GENERIC		OK	FIELD PREP:	NA		
TOP DEPTH:	0		0.0	SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0		0.7	SCREEN/PORT DESC:			NA
FIELD MATRIX:	B		S	EXCAVATED: YES/NO	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO NA
BOREHOLE: YES/NO	NA			BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1/11/10 xc	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7973

Dark brown silty sand, moist, tuff fragments
minor clay

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-56 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE NEG

Alpha \leq 49 dpm
Beta/Gamma \leq 2120 dpmPID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 1/28/10 0812 Am	RECEIVED BY (Printed Name) Uchir Alatorre (Signature)	Date/Time 1/28/10 812
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8061

WORK ORDER:

	<u>AS PLANNED</u>	<u>AS COLLECTED</u>		<u>AS PLANNED</u>	<u>AS COLLECTED</u>
DATE COLLECTED(MM/DD/YYYY):		01/27/2010	MEDIA:	QBT3	Allh
TIME COLLECTED (HH:MM)		0835	SUB-MEDIA:	TUEF1	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	UNK	15-610748	FIELD QC TYPE:	ED	↓
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	↓
TOP DEPTH:	0	3.0	SAMPLE USAGE:	QC	↓
BOTTOM DEPTH:	0	4.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:
				NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		225/127/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1.11.10 LC	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7958

Brown sandy silt, some clay

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-34 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 66 dpm
Beta/Gamma = 14,040 dpm

PID $\frac{\text{Ambient Reading}}{1.7} = \frac{0.2}{1.7} \text{ ppm}$

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) <i>[Signature]</i>	Date/Time 1/28/10 0811 AM	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) <i>[Signature]</i>	Date/Time 1/28/10 811
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7972

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1336		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610755	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	3.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.6		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES	NO/NA		
BOREHOLE: YES	NO/NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	WA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter (1/11/10) LC	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Grey tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-57 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 88 dpm
Beta/Gamma = 2450 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.2}{1.0}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarlane

RELINQUISHED BY (Printed Name) <i>Estevan Lujan</i> (Signature) <i>[Signature]</i>	Date/Time 1/28/10 0811 AM	RECEIVED BY (Printed Name) <i>McLise Matz</i> (Signature) <i>[Signature]</i>	Date/Time 1/28/10 811
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7979

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	QBT3		A11h
TIME COLLECTED (HH:MM)		1533		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610759			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES (NO) NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES (NO) NA
BOREHOLE: YES (NO) NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	y	
1		H3	500 ML POLY	Ice	y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter (1/11/10) etc	Ice	y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC:

Brown silty sand, some rocks and wood chips

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-55 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpm
Beta/Gamma \leq 2050 dpm

HE negative
PID $\frac{\text{Ambient}}{\text{Reading}} \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 1/28/10 07:51 AM	RECEIVED BY (Printed Name) Sheri Sherwood (Signature)	Date/Time 1/28/10 0757
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7974

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/27/2010	MEDIA:	QBT3	OK
TIME COLLECTED (HH:MM)		1407	SUB-MEDIA:	TUFF 1	✓
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610756	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	2.7	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	3.3	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	R	EXCAVATED: YES/NO	NA	
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES/NO	NA	
BOREHOLE: YES/NO	NA		BOREHOLE DECLINATION:	NA	
			BOREHOLE DIRECTION:	NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 liter 1/11/10 RC	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: whitish grey tuff

FR: RE15-10-8084

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b - 56 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 38 dpm
Beta/Gamma \leq 2287 dpmPID $\frac{\text{Ambient}}{\text{Reading}} \frac{0.1}{0.5}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarlane

RELINQUISHED BY (Printed Name) <i>Estevan Lujan</i> (Signature) <i>[Signature]</i>	Date/Time 1/28/10 0810 AM	RECEIVED BY (Printed Name) <i>Velise Natch</i> (Signature) <i>[Signature]</i>	Date/Time 1/28/10 8/10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7961

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	QBT3		Alh
TIME COLLECTED (HH:MM)		0927		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610750	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	6.5		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES <input checked="" type="radio"/> NO <input type="radio"/> NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES <input checked="" type="radio"/> NO <input type="radio"/> NA
BOREHOLE: YES <input checked="" type="radio"/> NO <input type="radio"/> NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1/11/10 re	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sandy silt, pine needles, some rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-61 mesa top
next to pine tree

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha \leq 22 dpm
Beta/Gamma \leq 3700 dpmPID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.3}{2.7}$ ppm

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 1/27/10 0806 AM	RECEIVED BY (Printed Name) Henry Sherwood (Signature)	Date/Time 1/28/10 0806
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7971

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1323		SUB-MEDIA:		TUFF 1	
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610755	↓		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:		NA	
TOP DEPTH:	0	0.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	0.5		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA		NO/NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1/11/10 etc	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: wet silty sandy clay and wood chips

SAMPLE COMMENTS: hit tuff at 6 inch

LOCATION DESC: 8b-57 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha = 55 dpm
Beta/Gamma = 6256 dpmPID Ambient 0.0
Reading 0.4 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLM CFarland

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) <i>E Lujan</i>	Date/Time 1/28/10 0810 AM	RECEIVED BY (Printed Name) <i>White</i> (Signature) <i>White</i>	Date/Time 1/28/10 8/10
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7966

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1142		SUB-MEDIA:	TUFF1		↓
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610752	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	3.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	4.2		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				WATER FLOWING: YES/NO/NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 11/11/10-2C	Ice	Y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Pinkish gray tuff

FD: RE15-10-8062

SAMPLE COMMENTS:

hit tuff at 3.3' 11/27/10

LOCATION DESC:

8b-70 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:


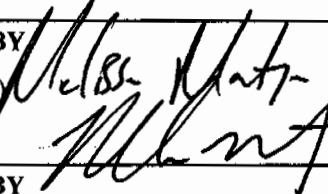
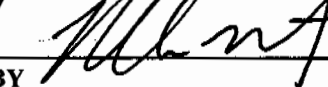
Alpha \leq 44 dpm
Beta/Gamma \leq 2150 dpmPID $\frac{\text{Ambient}}{\text{Reading}} \frac{0.0}{6.4}$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT)

TLMcFarlane

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) 	Date/Time 1/28/10 0808 AM	RECEIVED BY (Printed Name)  (Signature) 	Date/Time 1/28/10 808
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7980

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		1545		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-008(b)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610759	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	3.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	3.7		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA	NO		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	y	
1		H3	500 ML POLY	Ice	y	
1		Met+U+CLO4+C N	1 GAL POLY 1 liter 1/11/10	Ice	y	
1		NMED Explosives list	250 ML AMBER GLASS	Ice	y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC: grayish pink tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

8b-55 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 49 dpm
Beta/Gamma \leq 2042 dpm

PID $\frac{\text{Ambient}}{\text{Reading}} \frac{0.1}{0.3}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature) <i>E Lujan</i>	Date/Time 1/28/10 07:52 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) <i>Sherri Sherwood</i>	Date/Time 1/28/10 752
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7957

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	OBT3		Alh
TIME COLLECTED (HH:MM)		0825		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610748	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	1.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA	NO/NA		
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY IL 25 01-11-10	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown silty sand, some rocks, pine needles, and wood chips

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b- 34 mesa top

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha ≤ 16 dpm

Beta/Gamma ≤ 8210 dpm

PID $\frac{\text{Ambient Reading} \times 0.4}{0.5}$ ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT) R Saunders

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 1/28/10 7:55 AM	RECEIVED BY (Printed Name) Melissa White (Signature)	Date/Time 1/28/10 7:55
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7969

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		2:58:30 1238 1301		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-008(b)		ok	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610754		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		0.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		0.5	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		S	EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 liter 1/11/10 RC	Ice	Y	
1	↓	NMED Explosives list	250 ML AMBER GLASS	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown sand numerous pebbles, minor clay

SAMPLE COMMENTS: next to road

LOCATION DESC: 8b - 74 mesa top

FIELD SCREENING/MEASUREMENT RESULTS: HE NEG

Alpha \leq 38 dpm
Beta/Gamma \leq 2150 dpm

PID Ambient 0.0
Reading 0.0 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) Estevan Lejan (Signature)	Date/Time 1/28/10 0809 AM	RECEIVED BY (Printed Name) Sheri Sherwood (Signature)	Date/Time 1/28/10 0809
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499

EVENT NAME: 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8083

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/27/2010		MEDIA:	NA		ok
TIME COLLECTED (HH:MM)		1027		SUB-MEDIA:	OTHER		
PRS ID:	15-008(b)	ok		SAMPLE TECH CODE:	DC		
LOCATION ID:	UNK	15-610751		FIELD QC TYPE:	ER		
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	UF		
TOP DEPTH:	0			SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0			SCREEN/PORT DESC:			NA
FIELD MATRIX:	W			EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				WATER FLOWING: YES/NO/NA			
BOREHOLE DECLINATION:	NA			BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	y	
1	↓	SW-846:6850	250 ML POLY	Ice	y	
1	↓	TCN	500 ML POLY	Sodium Hydroxide	y	

SAMPLE DESC: QC Sample of RE15-10-7963

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 72m 1/27/10 dpmBeta/Gamma = 72m 1/27/10 dpmPID 72m 1/27/10 Ambient Reading = ppm

COLLECTED BY (PRINT)

TLMCFarlang

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) <u>Estevan Lujan</u> (Signature) <u>[Signature]</u>	Date/Time <u>1/28/10</u> <u>0813 AM</u>	RECEIVED BY (Printed Name) <u>Miss. [Signature]</u> (Signature) <u>[Signature]</u>	Date/Time <u>1/28/10</u> <u>813</u>
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Rad Screening Data Release Form

The Following samples were received at the Field Support Facility (FSF) without screening data (list sample number):

RE15-10-7978	RE15-10-7961	RE15-10-7969
" " 7979	7962	7970
" " 7980	7960	7971
" " 7880	7962	7972
" " 7891	7963	7973
" " 7892	7964	7974
" " 7957	7965	8061
" " 7958	7966	8062
7959	7967	8063
	7968	7975
		7976
		7977

These samples will not be shipped until radiological screening data documentation arrives at the FSF. I understand that it is my responsibility to ensure this information arrives at the FSF in a timely manner. If holding times are missed because screening data does not arrive, I will pick up the samples.

.....

The following samples do not require rad screening data for the reasons stated (list sample numbers):

RE15-10-8083

RE15-10-8084

Reason: *Field Rinsate*

.....

Print Last Name

Lujan

Signature

[Signature]

Date

1/28/10

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1514 VALIDATION DATE: 3/17/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input checked="" type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | <input type="checkbox"/> PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): _____ | | | |

Section II. Completeness Check


- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):


- The MS/MSD for the water batch was performed on a sample from another LANL RN and the raw data for the parent sample were not present in the data package. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 3/17/10


VALIDATOR'S SIGNATURE: *Linda Thal* DATE: 3/17/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The Internal Standard (IS) relative retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC0b	R, PERC0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC1d	R, PERC1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, PERC4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$.	N/A	J+, PERC4a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99 .	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R, PERC7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, PERC15	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29. The sample was diluted because target analytes were > the Initial verification calibration.	UJ, PERC15a	J, PERC15a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	31. The Interference Check Sample was not within $\pm 20\%$ of the known value.	UJ, PERC16a	J, PERC16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7980
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979001
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 95.4

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	1.38	ug/kg	J	1	23-FEB-10 14:27	per0223015a
	Perchlorate Isotope Ratio			3.46			1	23-FEB-10 14:27	per0223015a
14797-73-0	Perchlorate-101	.524	2.1	1.28	ug/kg	J	1	23-FEB-10 14:27	per0223015a
	Perchlorate-O(18)			5.20	ug/kg		1	23-FEB-10 14:27	per0223015a

^a When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7958

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979002

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.622	2.49	0.622	ug/kg	U	1	23-FEB-10 14:51	per0223018a
	Perchlorate Isotope Ratio						1	23-FEB-10 14:51	per0223018a
14797-73-0	Perchlorate-101	.622	2.49	0.622	ug/kg	U	1	23-FEB-10 14:51	per0223018a
	Perchlorate-O(18)			5.77	ug/kg		1	23-FEB-10 14:51	per0223018a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7960

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979003

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 93.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.14	0.536	ug/kg	U	1	23-FEB-10 14:59	per0223019a
	Perchlorate Isotope Ratio						1	23-FEB-10 14:59	per0223019a
14797-73-0	Perchlorate-101	.536	2.14	0.536	ug/kg	U	1	23-FEB-10 14:59	per0223019a
	Perchlorate-O(18)			5.04	ug/kg		1	23-FEB-10 14:59	per0223019a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7979
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979004
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 74

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 15:07	per0223020a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:07	per0223020a
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 15:07	per0223020a
	Perchlorate-O(18)			6.30	ug/kg		1	23-FEB-10 15:07	per0223020a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X $\frac{1}{\text{Aliquot}}$ %Solids

LT 3/17/10

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7972
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979005
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 91.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 15:15	per0223021a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:15	per0223021a
14797-73-0	Perchlorate-101	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 15:15	per0223021a
	Perchlorate-O(18)			5.20	ug/kg		1	23-FEB-10 15:15	per0223021a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7957
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979006
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 77

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	23-FEB-10 15:47	per0223025a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:47	per0223025a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	23-FEB-10 15:47	per0223025a
	Perchlorate-O(18)			6.09	ug/kg		1	23-FEB-10 15:47	per0223025a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X $\frac{1}{\% \text{Solids}}$
 Aliquot

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7974

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979007

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 94.9

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.527	2.11	0.527	ug/kg	U	1	23-FEB-10 15:55	per0223026a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:55	per0223026a
14797-73-0	Perchlorate-101	.527	2.11	0.527	ug/kg	U	1	23-FEB-10 15:55	per0223026a
	Perchlorate-O(18)			5.14	ug/kg		1	23-FEB-10 15:55	per0223026a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7961

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979008

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte ^A	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.34	0.586	ug/kg	U	1	23-FEB-10 16:03	per0223027a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:03	per0223027a
14797-73-0	Perchlorate-101	.586	2.34	0.586	ug/kg	U	1	23-FEB-10 16:03	per0223027a
	Perchlorate-O(18)			5.44	ug/kg		1	23-FEB-10 16:03	per0223027a

^A When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7971

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979009

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 74

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 16:11	per0223028a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:11	per0223028a
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 16:11	per0223028a
	Perchlorate-O(18)			6.68	ug/kg		1	23-FEB-10 16:11	per0223028a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X ¹ %Solids
Aliquot

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7966
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979010
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 90.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:20	per0223029a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:20	per0223029a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:20	per0223029a
	Perchlorate-O(18)			5.12	ug/kg		1	23-FEB-10 16:20	per0223029a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7959

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979011

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 79

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.632	2.53	0.632	ug/kg	U	1	23-FEB-10 16:28	per0223030a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:28	per0223030a
14797-73-0	Perchlorate-101	.632	2.53	0.632	ug/kg	U	1	23-FEB-10 16:28	per0223030a
	Perchlorate-O(18)			6.06	ug/kg		1	23-FEB-10 16:28	per0223030a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7969

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979012

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 90.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:36	per0223031a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:36	per0223031a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:36	per0223031a
	Perchlorate-O(18)			5.05	ug/kg		1	23-FEB-10 16:36	per0223031a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8061

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979013

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.35	0.586	ug/kg	U	1	23-FEB-10 16:44	per0223032a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:44	per0223032a
14797-73-0	Perchlorate-101	.586	2.35	0.586	ug/kg	U	1	23-FEB-10 16:44	per0223032a
	Perchlorate-O(18)			5.64	ug/kg		1	23-FEB-10 16:44	per0223032a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8063

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979014

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 82

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.613	2.45	0.613	ug/kg	U	1	23-FEB-10 16:52	per0223033a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:52	per0223033a
14797-73-0	Perchlorate-101	.613	2.45	0.613	ug/kg	U	1	23-FEB-10 16:52	per0223033a
	Perchlorate-O(18)			5.93	ug/kg		1	23-FEB-10 16:52	per0223033a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

P perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-8062

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979015

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 90.5

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.552	ug/kg	U	1	23-FEB-10 17:00	per0223034a
	Perchlorate Isotope Ratio						1	23-FEB-10 17:00	per0223034a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	23-FEB-10 17:00	per0223034a
	Perchlorate-O(18)			5.12	ug/kg		1	23-FEB-10 17:00	per0223034a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

LT 3/17/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 950027
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. RE15-10-8083
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514-1
 GEL Sample ID: 245981001
 Date Filtered: 07-FEB-10
 Injection Volume (uL): 20
 %Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:06	per0208067a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:06	per0208067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:06	per0208067a
	Perchlorate-O(18)			0.481	ug/L		1	08-FEB-10 21:06	per0208067a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X Concentrated Extract Volume X $\frac{1}{\% \text{Solids}}$
 Aliquot

LT 3/17/10

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1514 VALIDATION DATE: 3/17/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input checked="" type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): | | | |

Section II. Completeness Check

- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

1. The %D for HMX was >20% with positive bias for the CCV associated with samples RE15-10-7980, -7958, -7960, -7979, -7972 and -7957. The %D for RDX was >20% with positive bias for the CCV associated with sample -8062. The %D for 2,6-diamino-4-nitrotoluene was >20% with positive bias for the CCV associated with samples -7980 and -7958. The RDX result for sample -8062 was a detect and, thus, was qualified UJ,HE7c. The remaining associated sample results were NDs and, thus, were not qualified.
2. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate RT criteria could not be evaluated. No sample data were qualified as a result.
3. The LCS %R for tetryl was < the laboratory's LAL but $\geq 10\%$. The associated sample results were NDs and, thus, were qualified UJ,HE12a. The LCS %R for 2,6-diamino-4-nitrotoluene was > the laboratory's UAL. The associated sample results were NDs and, thus, were not qualified.
4. The MS %Rs for 2,6-diamino-4-nitrotoluene and 2,4-diamino-6-nitrotoluene were > the laboratory's UAL. The associated sample results were NDs and, thus, were not qualified.

Reviewed by: ETM

Level: 1

Date: 3/17/10

VALIDATOR'S SIGNATURE:

A. Neal

DATE: 3/17/10

Form 5122-1, Revision 0.0

LOS ALAMOS


Environmental Restoration Project

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST**5122-2****LC/MS/MS High Explosive Analytical Data Validation Checklist**


Records Use only



Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The IS retention time has shifted by more than 30 seconds.	R, UJ, HE0	J, HE0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE0b	R, HE0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The quantitating IS area count is <25% of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow the method-specific windows.	R, HE1a	J, HE1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count for the quantitating IS is <70% but >25% of the average of that obtained from the calibration standards.	UJ, HE1b	J+, HE1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count for the quantitating IS is >130% of the average of that obtained from the calibration standards.	UJ, HE1c	J-, HE1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE1d	R, HE1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The surrogate is <10%R. Follow the external laboratory limits.	R, HE3	J-, HE3
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.	UJ, HE3a	J-, HE3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE3b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. At least one surrogate is > the Upper Acceptance Limit and one surrogate is < the Lower Acceptance Limit. Follow the external laboratory limits.	UJ, HE3c	J, HE3c

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST	
5122-2 LC/MS/MS High Explosive Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE3d	R, HE3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The sample result is ≤ 5 times the concentration of the related analyte in the method blank.	U, HE4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5x$.	N/A	J, HE4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. The sample result is ≤ 5 times the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, HE4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE4e	R, HE4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The absence of sample carry-over must be determined and verified.	N/A	R, N, HE4f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, HE7	J, HE7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is less < 0.99 .	UJ, R, HE7a	J, HE7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The affected analytes were analyzed with a RRF of < 0.05 in the initial calibration and/or CCV.	UJ, R, HE7b	J, HE7b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. The ICV and/or CCV were recovered outside the method limits.	UJ, R, HE7c	J, HE7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, HE7d	J, HE7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, HE7f	R, HE7f

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST	
5122-2 LC/MS/MS High Explosive Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The mass spectral documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE8a	R, HE8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, HE9	J-, HE9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The holding time was >2 times the applicable holding time requirement.	R, HE9a	J-, HE9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, HE12c	R, HE12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	34. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, HE15	R, HE15
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. The sample was diluted because target analytes were > the initial verification calibration.	UJ, HE15a	J, HE15a

LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST**5122-2****LC/MS/MS High Explosive Analytical Data Validation Checklist**

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. The Contract Required Detection Limit Check Standard (CRI) sample did not pass method acceptance criteria.	UJ, R, HE16	J, HE16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	37. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, HE16c	R, HE16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	38. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, HE19	J, R, HE19
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	39. Duplicate, dilution, or reanalysis.	UJ, HE88	J, HE88

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979001

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 248576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301048a

Date Analyzed: 02-MAR-10 14:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979001

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220046.wiff

Date Analyzed: 23-FEB-10 04:49

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7958

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979002

Sample Amount 2

Moisture: 19.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301051a

Date Analyzed: 02-MAR-10 16:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7958

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979002

Sample Amount 2

Moisture: 19.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220049.wiff

Date Analyzed: 23-FEB-10 05:36

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7960

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979003

Sample Amount 2

Moisture: 6.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 248576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301052a

Date Analyzed: 02-MAR-10 16:44

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7960

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979003

Sample Amount 2

Moisture: 6.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240014.wiff

Date Analyzed: 24-FEB-10 13:22

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7979

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979004

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 248576

Concentrated Extract Volume (mL) 10

Date Extracted: 02-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301053a

Date Analyzed: 02-MAR-10 17:14

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7979

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979004

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240015.wiff

Date Analyzed: 24-FEB-10 13:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7972

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979005

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301054a

Date Analyzed: 02-MAR-10 17:43

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7972

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979005

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240016.wiff

Date Analyzed: 24-FEB-10 13:53

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7957

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979006

Sample Amount 2

Moisture: 22.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 02-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301055a

Date Analyzed: 02-MAR-10 18:13

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7957

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979006

Sample Amount 2

Moisture: 22.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240017.wiff

Date Analyzed: 24-FEB-10 14:09

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7974

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979007

Sample Amount 2

Moisture: 5.1

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301059a

Date Analyzed: 02-MAR-10 20:11

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX UJ,HE12a	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7974

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979007

Sample Amount 2

Moisture: 5.1

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240018.wiff

Date Analyzed: 24-FEB-10 14:25

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7961

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979008

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301060a

Date Analyzed: 02-MAR-10 20:40

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	263	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7961

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979008

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240019.wiff

Date Analyzed: 24-FEB-10 14:40

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	625	J
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7971

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979009

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301061a

Date Analyzed: 02-MAR-10 21:10

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7971

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979009

Sample Amount 2

Moisture: 25.2

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240020.wiff

Date Analyzed: 24-FEB-10 14:56

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7966

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979010

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301062a

Date Analyzed: 02-MAR-10 21:39

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	135	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	1430	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7966

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979010

Sample Amount 2

Moisture: 2.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240021.wiff

Date Analyzed: 24-FEB-10 15:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	331	J
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7959

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979011

Sample Amount 2

Moisture: 20.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301063a

Date Analyzed: 02-MAR-10 22:09

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7959

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979011

Sample Amount 2

Moisture: 20.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240022.wiff

Date Analyzed: 24-FEB-10 15:28

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7969

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979012

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301064a

Date Analyzed: 02-MAR-10 22:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	205	J
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	2160	
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7969

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979012

Sample Amount 2

Moisture: 2.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 5

Injection Volume (uL): 50

GEL data file: EXP0301100a

Date Analyzed: 03-MAR-10 16:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX	10900	

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample ID: RE15-10-7969

Lab Code: GEL GEL Job No (SDG) 10-1514

Matrix: SOIL GEL Sample ID: 245979012

Sample Amount 2 Moisture: 9.6

Amount Units g Date Received: 02-FEB-10

Extraction Type Sonication Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10 Date Extracted: 09-FEB-10

Dilution Factor: 2 Injection Volume (uL): 50

GEL data file: EXS02240023.wiff Date Analyzed: 24-FEB-10 15:43

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	8490	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8061

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979013

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301065a

Date Analyzed: 02-MAR-10 23:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8061

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979013

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240027.wiff

Date Analyzed: 24-FEB-10 16:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8063

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979014

Sample Amount 2

Moisture: 18.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301066a

Date Analyzed: 02-MAR-10 23:37

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8063

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979014

Sample Amount 2

Moisture: 18.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240028.wiff

Date Analyzed: 24-FEB-10 17:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8062

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979015

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301099a

Date Analyzed: 03-MAR-10 15:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX J,HE7c	217	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	2270	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8062

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979015

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240029.wiff

Date Analyzed: 24-FEB-10 17:18

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

LT 3/17/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1514 VALIDATION DATE: 3/17/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input checked="" type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS |
- ☐ OTHER (DESCRIBE): Polychlorinated Biphenyls

Section II. Completeness Check

- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

- The decachlorobiphenyl surrogate %R was > the laboratory's UAL on both columns for sample RE15-10-8061. The aroclor-1254, -1260 and -1268 sample results were detects and, thus, were qualified J+,P3b. The remaining associated sample results were NDs and, thus, were not qualified.
- The MS/MSD was performed on a sample from another LANL RN and the raw data for the parent sample were no included in the data package. No sample data were qualified as a result.

Reviewed by: ETM

Level: 1

Date: 3/17/10

VALIDATOR'S SIGNATURE: *L. Thal*

DATE: 3/17/10

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, P7	J, P7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, P7a	J, P7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The breakdown criteria have been exceeded. This can cause high bias in the reported results and potential false positive results for the breakdown products Endrin ketone, Endrin aldehyde, DDD, and DDE.	UJ, P13a	J+, P13a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The breakdown documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P13b	R, P13b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, P4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X.	N/A	J, P4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P4e	R, P4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Required retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P0b	R, P0b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The surrogate is $<10\%R$. Follow the external laboratory limits located within the associated data package.	R, P3	J-, P3

ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB) ANALYTICAL DATA VALIDATION CHECKLIST

5116-2

Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data Validation Checklist

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The surrogate is < the Lower Acceptance Level (LAL) but $\geq 10\%R$. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, P3c	J, P3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P3d	R, P3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, P12a	J-, P12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P12c	R, P12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The second dissimilar column documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, P8a	R, P8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. Duplicate, Dilution, or reanalysis.	UJ, P88	J, P88

**ORGANOCHLORINE PESTICIDE (PEST) AND POLYCHLORINATED BIPHENYL (PCB)
ANALYTICAL DATA VALIDATION CHECKLIST**

5116-2

**Organochlorine Pesticide (PEST) and Polychlorinated
Biphenyl (PCB) Analytical Data Validation Checklist**

Records Use only



Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytes identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. The LANL project chemist identified quality deficiencies in the reported data that requires further qualification. This code can only be used and/or under advisement by the LANL project chemist.	UJ, R, P19	J, R, P19

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-1514	Date Collected:	01/27/2010 12:00	Matrix:	R
Lab Sample ID:	245979013	Date Received:	02/02/2010 09:10	%Moisture:	14.7
Client ID:	RE15-10-8061	Client:	LANL010	Project:	LANL01004
Batch ID:	951299	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	02/11/2010 16:47	Inst:	ECD1A.I	Dilution:	1
Prep Date:	02/10/2010 21:22	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	055f5501.d	Aliquot:	30.13 g	Final Volume:	1 mL
	055b5501.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.89	ug/kg	1.30	3.89	1
11104-28-2	Aroclor-1221	U	3.89	ug/kg	1.30	3.89	1
11141-16-5	Aroclor-1232	U	3.89	ug/kg	1.30	3.89	1
53469-21-9	Aroclor-1242	U	3.89	ug/kg	1.30	3.89	1
12672-29-6	Aroclor-1248	U	3.89	ug/kg	1.30	3.89	1
11097-69-1	Aroclor-1254		23.2	ug/kg	1.30	3.89	1 J+ P3b
11096-82-5	Aroclor-1260		34.6	ug/kg	1.30	3.89	2
11100-14-4	Aroclor-1268		97.3	ug/kg	1.30	3.89	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1514
Lab Sample ID: 245979015

Date Collected: 01/27/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1


PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1514
Lab Sample ID: 245979014Date Collected: 01/27/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 18.5
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Partname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.09	ug/kg	1.36	4.09	1
11104-28-2	Aroclor-1221	U	4.09	ug/kg	1.36	4.09	1
11141-16-5	Aroclor-1232	U	4.09	ug/kg	1.36	4.09	1
53469-21-9	Aroclor-1242	U	4.09	ug/kg	1.36	4.09	1
12672-29-6	Aroclor-1248	U	4.09	ug/kg	1.36	4.09	1
11097-69-1	Aroclor-1254	P	4.10	ug/kg	1.36	4.09	1
11096-82-5	Aroclor-1260	U	4.09	ug/kg	1.36	4.09	1

LT 3/17/10


DATA VALIDATION COVER SHEET	
<div style="display: flex; justify-content: space-between;"> <div>5118-1</div> <div style="text-align: center;">Data Validation Cover Sheet</div> </div>	<div style="text-align: center;">Records Use only</div> <div style="text-align: center;">  </div>

Section I.	
REQUEST NUMBER: 10-1514	VALIDATION DATE: 3/17/10
LAB CODE: GEL	
CONTRACT LABORATORY NAME: GEL Laboratories LLC	
VALIDATOR: Linda Thal	ORGANIZATION: Analytical Quality Associates, Inc.
ANALYTICAL SUITE (CHECK ALL THAT APPLY):	
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES
<input type="checkbox"/> TPH-DRO	<input checked="" type="checkbox"/> METALS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY
<input type="checkbox"/> OTHER (DESCRIBE):	
<input type="checkbox"/> DIOXIN FURANS	<input type="checkbox"/> LCMSMS PERCHLORATES
<input type="checkbox"/> PCB CONGENERS	<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES	


Section II. Completeness Check							
YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. CHAIN-OF-CUSTODY FORM(S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. RAW/BSS DATA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. CASE NARRATIVE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. QUALITY CONTROL FORMS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. SAMPLE RESULT FORMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. QUANTITATION REPORTS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. SAMPLE CHROMATOGRAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. TICS FORMS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. STANDARD CHROMATOGRAMS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. TICS MASS SPECTRA

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

- In the soil MB, Cr was detected. The Cr results for all samples except samples RE15-10-7980, -7979, -7974, -7969 and -8063 were detects >5X but ≤50X the MB concentration and, thus, were qualified J,I4a. The Cr results for samples -7980, -7979, -7974, -7969 and -8063 were detects >50X the MB concentration and, thus, were not qualified, based on professional judgment.
- In a soil CCB associated with all samples except sample -7957, Zn was detected. In the soil CCBs associated with all samples except samples -7979, -7972, -7957, -7974, -8063 and -8062, Cu was detected. The Cu result for sample -7980 was a detect ≤5X the greatest blank concentration and, thus, was qualified U,I4b. The remaining associated sample results were detects >5X the greatest blank concentration and, thus, were not qualified. In the water CCB, TI was detected. The associated sample result was an ND and, thus, was not qualified.
- In the FR blanks, samples -8083 and -8084 analyzed in RN 10-1512, associated with all soil samples, Mn, K, Na and U were detected. The U result for sample -7974 and the Na results for samples -7979, -7961, -7959, -8061 and -8063 were detects ≤5X the greatest FR blank concentrations and, thus, were qualified U,I4d. The remaining associated sample results were detects >5X the FR blank concentrations and, thus, were not qualified.
- The soil MS %Rs for Al, Mg, K and Fe were > the laboratory's UAL. The associated Mg and K sample results were detects and, thus, were qualified J+,I6b. The QC parent sample results for Al and Fe were detects >4X the spike amounts and, thus, no sample results were qualified, based on professional judgment. The soil MS %Rs for Ca and Se were < the laboratory's LAL but ≥10%. The associated Ca sample results were detects and, thus, were qualified J-,I6a. The associated Se sample results were NDs and, thus, were qualified UJ,I6a.
- The soil duplicate RPD for Cr was >35% and both the parent and duplicate sample results were >5X the PQL. The

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only 

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. Metals interference check sample percent recovery value is $\geq 50\%$ and $< 80\%$	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Metals interference check sample percent recovery value is $> 120\%$.	N/A	J+, I2b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, I4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5X$.	N/A	J, I4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The associated matrix spike recovery was $< 10\%$. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The associated matrix spike recovery was $<$ the LAL but $> 10\%$. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The associated matrix spike recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST


5118-2

Metals Analytical Data Validation Checklist

Records Use only



Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The sample and the duplicate sample results were $\geq 5X$ the RL and the duplicate RPD was $>20\%$ for water samples and $>35\%$ for soil samples.	UJ, I10a	J, I10a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was $<10\%$. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recover was $<$ the LAL but $>10\%$. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	31. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The quantitating IS area count is $<10\%$ for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40. Qualification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB, NQ, NQ
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979001

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7980

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 95.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3980000	ug/Kg		6430	18900	18900	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-36-0	Antimony	729	ug/Kg	J	312	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-38-2	Arsenic	1.51	mg/kg		0.195	0.973	0.973	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-39-3	Barium	46000	ug/Kg		94.6	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-41-7	Beryllium	0.554	mg/kg	*	0.0195	0.0973	0.0973	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-43-9	Cadmium	473	ug/Kg	U	94.6	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-70-2	Calcium J-,16a	1490000	ug/Kg	N	7570	23700	23700	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-47-3	Chromium J,110a	16000	ug/Kg	*	142	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-48-4	Cobalt	3590	ug/Kg		142	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-50-8	Copper U,14b	3610	ug/Kg		284	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-89-6	Iron	11500000	ug/Kg		7570	23700	23700	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-92-1	Lead	7910	ug/Kg		237	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-95-4	Magnesium J+,16b	791000	ug/Kg	N	8040	28400	28400	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-96-5	Manganese	214000	ug/Kg		189	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-97-6	Mercury	16.2	ug/kg		4.26	12.5	12.5	1	AV	JXL1	02/18/10 13:25	021810S1-4	951518
7440-02-0	Nickel	3.79	mg/kg		0.0973	0.389	0.389	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-09-7	Potassium J+,16b	628000	ug/Kg	N	6060	23700	23700	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7782-49-2	Selenium UJ,16a	0.973	mg/kg	UN	0.486	0.973	0.973	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-22-4	Silver	473	ug/Kg	U	94.6	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-23-5	Sodium	244000	ug/Kg		6620	23700	23700	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-28-0	Thallium	0.0949	mg/kg	J	0.0584	0.195	0.195	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-61-1	Uranium	0.641	mg/kg	*N	0.0128	0.0389	0.0389	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-62-2	Vanadium	8750	ug/Kg		94.6	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-66-6	Zinc	42700	ug/Kg		312	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.554	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.539	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.502	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979002

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7958

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10200000	ug/Kg		7800	23000	23000	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-36-0	Antimony	6770	ug/Kg		379	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-38-2	Arsenic	6.14	mg/kg		0.235	1.17	1.17	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-39-3	Barium	121000	ug/Kg		115	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-41-7	Beryllium	4.31	mg/kg	*	0.0235	0.117	0.117	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-43-9	Cadmium	574	ug/Kg	U	115	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-70-2	Calcium J,16a	3530000	ug/Kg	N	9180	28700	28700	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-47-3	Chromium J,14a	13100	ug/Kg	*	172	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-48-4	Cobalt	3400	ug/Kg		172	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-50-8	Copper	622000	ug/Kg		344	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-89-6	Iron	13400000	ug/Kg		9180	28700	28700	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-92-1	Lead	283000	ug/Kg		287	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-95-4	Magnesium J+,16b	1610000	ug/Kg	N	9750	34400	34400	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-96-5	Manganese	172000	ug/Kg		230	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-97-6	Mercury	11.9	ug/kg	J	5.05	14.8	14.8	1	AV	JXL1	02/18/10 14:15	021810S1-4	951518
7440-02-0	Nickel	11.9	mg/kg		0.117	0.469	0.469	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-09-7	Potassium J+,16b	1070000	ug/Kg	N	7340	28700	28700	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.17	mg/kg	UN	0.587	1.17	1.17	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-22-4	Silver	438	ug/Kg	J	115	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-23-5	Sodium	63600	ug/Kg		8030	28700	28700	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-28-0	Thallium	0.262	mg/kg		0.0704	0.235	0.235	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-61-1	Uranium	515	mg/kg	*N	0.0155	0.0469	0.0469	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-62-2	Vanadium	22700	ug/Kg		115	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-66-6	Zinc	91300	ug/Kg		379	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.542	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.53	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.503	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979003

BASIS: Dry Weight

DATE COLLECTED 27-JAN--10

CLIENT ID: RE15-10-7960

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 93.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2560000	ug/Kg		6740	19800	19800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-36-0	Antimony	4100	ug/Kg		327	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-38-2	Arsenic	1.44	mg/kg		0.207	1.03	1.03	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-39-3	Barium	44800	ug/Kg		99.1	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-41-7	Beryllium	4.02	mg/kg	*	0.0207	0.103	0.103	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-43-9	Cadmium	495	ug/Kg	U	99.1	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-70-2	Calcium J-,16a	989000	ug/Kg	N	7920	24800	24800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-47-3	Chromium J,14a	11500	ug/Kg	*	149	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-48-4	Cobalt	16500	ug/Kg		149	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-50-8	Copper	187000	ug/Kg		297	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-89-6	Iron	10800000	ug/Kg		7920	24800	24800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-92-1	Lead	257000	ug/Kg		248	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-95-4	Magnesium J+,16b	452000	ug/Kg	N	8420	29700	29700	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-96-5	Manganese	249000	ug/Kg		198	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-97-6	Mercury	12.5	ug/kg	U	4.25	12.5	12.5	1	AV	JXL1	02/18/10 14:17	021810S1-4	951518
7440-02-0	Nickel	4	mg/kg		0.103	0.414	0.414	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-09-7	Potassium J+,16b	436000	ug/Kg	N	6340	24800	24800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.03	mg/kg	UN	0.517	1.03	1.03	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-22-4	Silver	495	ug/Kg	U	99.1	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-23-5	Sodium	142000	ug/Kg		6930	24800	24800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-28-0	Thallium	0.207	mg/kg	U	0.0621	0.207	0.207	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-61-1	Uranium	143	mg/kg	*N	0.0137	0.0414	0.0414	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-62-2	Vanadium	7130	ug/Kg		99.1	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-66-6	Zinc	53200	ug/Kg		327	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.541	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.518	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.515	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979004

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7979

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4860000	ug/Kg		8090	23800	23800	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-36-0	Antimony	780	ug/Kg	J	393	1190	1190	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-38-2	Arsenic	1.75	mg/kg		0.266	1.33	1.33	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-39-3	Barium	71300	ug/Kg		119	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-41-7	Beryllium	0.793	mg/kg	*	0.0266	0.133	0.133	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-43-9	Cadmium	595	ug/Kg	U	119	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-70-2	Calcium J-,16a	1130000	ug/Kg	N	9520	29700	29700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-47-3	Chromium J,110a	18300	ug/Kg	*	178	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-48-4	Cobalt	4710	ug/Kg		178	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-50-8	Copper	20300	ug/Kg		357	1190	1190	1	P	JWJ	02/21/10 05:21	022010C-2	948764
7439-89-6	Iron	11200000	ug/Kg		9520	29700	29700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7439-92-1	Lead	64200	ug/Kg		297	1190	1190	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7439-95-4	Magnesium J+,16b	1050000	ug/Kg	N	10100	35700	35700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7439-96-5	Manganese	269000	ug/Kg		238	1190	1190	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7439-97-6	Mercury	13.5	ug/kg	U	4.59	13.5	13.5	1	AV	JXL1	02/18/10 14:19	021810S1-4	951518
7440-02-0	Nickel	4.77	mg/kg		0.133	0.531	0.531	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-09-7	Potassium J+,16b	1110000	ug/Kg	N	7610	29700	29700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.33	mg/kg	UN	0.664	1.33	1.33	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-22-4	Silver	595	ug/Kg	U	119	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-23-5	Sodium U,14d	47900	ug/Kg		8330	29700	29700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-28-0	Thallium	0.102	mg/kg	J	0.0797	0.266	0.266	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-61-1	Uranium	11.4	mg/kg	*N	0.0175	0.0531	0.0531	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-62-2	Vanadium	22400	ug/Kg		119	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-66-6	Zinc	27700	ug/Kg		393	1190	1190	1	P	JWJ	02/20/10 03:41	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.567	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.508	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.599	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979005

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7972

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4470000	ug/Kg		7180	21100	21100	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-36-0	Antimony	1060	ug/Kg	U	348	1060	1060	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-38-2	Arsenic	1.76	mg/kg		0.214	1.07	1.07	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-39-3	Barium	52600	ug/Kg		106	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-41-7	Beryllium	0.503	mg/kg	*	0.0214	0.107	0.107	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-43-9	Cadmium	528	ug/Kg	U	106	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-70-2	Calcium J-,16a	952000	ug/Kg	N	8450	26400	26400	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-47-3	Chromium J,14a	9120	ug/Kg	*	158	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-48-4	Cobalt	7200	ug/Kg		158	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-50-8	Copper	6670	ug/Kg		317	1060	1060	1	P	JWJ	02/21/10 05:25	022010C-2	948764
7439-89-6	Iron	10200000	ug/Kg		8450	26400	26400	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7439-92-1	Lead	7570	ug/Kg		264	1060	1060	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7439-95-4	Magnesium J+,16b	691000	ug/Kg	N	8970	31700	31700	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7439-96-5	Manganese	205000	ug/Kg		211	1060	1060	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7439-97-6	Mercury	15.4	ug/kg		4.36	12.8	12.8	1	AV	JXL1	02/18/10 14:21	021810S1-4	951518
7440-02-0	Nickel	4.32	mg/kg		0.107	0.428	0.428	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-09-7	Potassium J+,16b	544000	ug/Kg	N	6760	26400	26400	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.07	mg/kg	UN	0.535	1.07	1.07	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-22-4	Silver	528	ug/Kg	U	106	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-23-5	Sodium	159000	ug/Kg		7390	26400	26400	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-28-0	Thallium	0.214	mg/kg	U	0.0642	0.214	0.214	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-61-1	Uranium	8.19	mg/kg	*N	0.0141	0.0428	0.0428	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-62-2	Vanadium	6720	ug/Kg		106	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-66-6	Zinc	29700	ug/Kg		348	1060	1060	1	P	JWJ	02/20/10 03:44	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.519	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.512	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.513	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979006

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7957

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2540000	ug/Kg		8650	25400	25400	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-36-0	Antimony	7900	ug/Kg		420	1270	1270	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-38-2	Arsenic	1.84	mg/kg		0.234	1.17	1.17	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-39-3	Barium	97900	ug/Kg		127	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-41-7	Beryllium	7.22	mg/kg	*	0.0234	0.117	0.117	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-43-9	Cadmium	636	ug/Kg	U	127	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-70-2	Calcium J-,16a	1880000	ug/Kg	N	10200	31800	31800	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-47-3	Chromium J,14a	11700	ug/Kg	*	191	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-48-4	Cobalt	2690	ug/Kg		191	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-50-8	Copper	3640000	ug/Kg		19100	63600	63600	50	P	JWJ	02/21/10 05:39	022010C-2	948764
7439-89-6	Iron	8340000	ug/Kg		10200	31800	31800	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7439-92-1	Lead	473000	ug/Kg		15900	63600	63600	50	P	JWJ	02/21/10 05:39	022010C-2	948764
7439-95-4	Magnesium J+,16b	707000	ug/Kg	N	10800	38200	38200	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7439-96-5	Manganese	122000	ug/Kg		254	1270	1270	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7439-97-6	Mercury	13.3	ug/kg	U	4.51	13.3	13.3	1	AV	JXL1	02/18/10 14:23	021810S1-4	951518
7440-02-0	Nickel	7.12	mg/kg		0.117	0.468	0.468	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-09-7	Potassium J+,16b	492000	ug/Kg	N	8140	31800	31800	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.17	mg/kg	UN	0.585	1.17	1.17	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-22-4	Silver	6950	ug/Kg		127	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-23-5	Sodium	118000	ug/Kg		8900	31800	31800	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-28-0	Thallium	0.234	mg/kg	U	0.0702	0.234	0.234	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-61-1	Uranium	364	mg/kg	*N	0.0155	0.0468	0.0468	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-62-2	Vanadium	14700	ug/Kg		127	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-66-6	Zinc	1330000	ug/Kg		21000	63600	63600	50	P	JWJ	02/21/10 05:39	022010C-2	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.509	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.553	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.585	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979007

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7974

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 94.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3250000	ug/Kg		6710	19700	19700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-36-0	Antimony	987	ug/Kg	U	326	987	987	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-38-2	Arsenic	2.13	mg/kg		0.201	1	1	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-39-3	Barium	28000	ug/Kg		98.7	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-41-7	Beryllium	0.412	mg/kg	*	0.0201	0.1	0.1	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-43-9	Cadmium	494	ug/Kg	U	98.7	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-70-2	Calcium J-,16a	784000	ug/Kg	N	7900	24700	24700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-47-3	Chromium J,110a	15000	ug/Kg	*	148	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-48-4	Cobalt	3330	ug/Kg		148	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-50-8	Copper	2520	ug/Kg		296	987	987	1	P	JWJ	02/21/10 05:28	022010C-2	948764
7439-89-6	Iron	7760000	ug/Kg		7900	24700	24700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7439-92-1	Lead	4120	ug/Kg		247	987	987	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7439-95-4	Magnesium J+,16b	567000	ug/Kg	N	8390	29600	29600	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7439-96-5	Manganese	224000	ug/Kg		197	987	987	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7439-97-6	Mercury	12.7	ug/kg		4.18	12.3	12.3	1	AV	JXL	02/18/10 14:25	021810S1-4	951518
7440-02-0	Nickel	3.83	mg/kg		0.1	0.402	0.402	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-09-7	Potassium J+,16b	454000	ug/Kg	N	6320	24700	24700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7782-49-2	Selenium U,J,16a	1	mg/kg	UN	0.502	1	1	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-22-4	Silver	494	ug/Kg	U	98.7	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-23-5	Sodium	120000	ug/Kg		6910	24700	24700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-28-0	Thallium	0.201	mg/kg	U	0.0602	0.201	0.201	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-61-1	Uranium U,14d	0.622	mg/kg	*N	0.0133	0.0402	0.0402	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-62-2	Vanadium	6500	ug/Kg		98.7	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-66-6	Zinc	20300	ug/Kg		326	987	987	1	P	JWJ	02/20/10 03:52	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.534	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.525	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.515	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979008

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7961

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3710000	ug/Kg		7310	21500	21500	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-36-0	Antimony	1910	ug/Kg		355	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-38-2	Arsenic	1.78	mg/kg		0.233	1.16	1.16	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-39-3	Barium	46500	ug/Kg		108	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-41-7	Beryllium	1.66	mg/kg	*	0.0233	0.116	0.116	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-43-9	Cadmium	538	ug/Kg	U	108	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-70-2	Calcium J-,16a	1030000	ug/Kg	N	8600	26900	26900	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-47-3	Chromium J,14a	8570	ug/Kg	*	161	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-48-4	Cobalt	4990	ug/Kg		161	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-50-8	Copper	531000	ug/Kg		323	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-89-6	Iron	9470000	ug/Kg		8600	26900	26900	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-92-1	Lead	166000	ug/Kg		269	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-95-4	Magnesium J+,16b	692000	ug/Kg	N	9140	32300	32300	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-96-5	Manganese	199000	ug/Kg		215	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-97-6	Mercury	14.1	ug/kg	U	4.78	14.1	14.1	1	AV	JXL1	02/18/10 14:27	021810S1-4	951518
7440-02-0	Nickel	8.02	mg/kg		0.116	0.465	0.465	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-09-7	Potassium J+,16b	700000	ug/Kg	N	6880	26900	26900	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.16	mg/kg	UN	0.581	1.16	1.16	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-22-4	Silver	129	ug/Kg	J	108	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-23-5	Sodium U,14d	42100	ug/Kg		7530	26900	26900	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-28-0	Thallium	0.0891	mg/kg	J	0.0698	0.233	0.233	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-61-1	Uranium	49.3	mg/kg	*N	0.0153	0.0465	0.0465	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-62-2	Vanadium	14600	ug/Kg		108	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-66-6	Zinc	43600	ug/Kg		355	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.545	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.504	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.5	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979009

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7971

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5600000	ug/Kg		8800	25900	25900	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-36-0	Antimony	1490	ug/Kg		427	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-38-2	Arsenic	1.4	mg/kg		0.264	1.32	1.32	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-39-3	Barium	70500	ug/Kg		129	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-41-7	Beryllium	0.885	mg/kg	*	0.0264	0.132	0.132	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-43-9	Cadmium	647	ug/Kg	U	129	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-70-2	Calcium J-,16a	2010000	ug/Kg	N	10300	32300	32300	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-47-3	Chromium J,14a	9150	ug/Kg	*	194	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-48-4	Cobalt	4270	ug/Kg		194	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-50-8	Copper	1010000	ug/Kg		388	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-89-6	Iron	9970000	ug/Kg		10300	32300	32300	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-92-1	Lead	155000	ug/Kg		323	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-95-4	Magnesium J+,16b	952000	ug/Kg	N	11000	38800	38800	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-96-5	Manganese	246000	ug/Kg		259	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-97-6	Mercury	6.71	ug/kg	J	4.59	13.5	13.5	1	AV	JXL1	02/18/10 14:33	021810S1-4	951518
7440-02-0	Nickel	3.4	mg/kg		0.132	0.528	0.528	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-09-7	Potassium J+,16b	820000	ug/Kg	N	8280	32300	32300	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.32	mg/kg	UN	0.659	1.32	1.32	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-22-4	Silver	313	ug/Kg	J	129	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-23-5	Sodium	64300	ug/Kg		9050	32300	32300	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-28-0	Thallium	0.264	mg/kg	U	0.0791	0.264	0.264	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-61-1	Uranium	45.9	mg/kg	*N	0.0174	0.0528	0.0528	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-62-2	Vanadium	19400	ug/Kg		129	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-66-6	Zinc	42600	ug/Kg		427	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.522	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.512	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.6	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979010

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7966

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1180000	ug/Kg		7150	21000	21000	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-36-0	Antimony	434	ug/Kg	J	347	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-38-2	Arsenic	0.796	mg/kg	J	0.214	1.07	1.07	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-39-3	Barium	20300	ug/Kg		105	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-41-7	Beryllium	1.59	mg/kg	*	0.0214	0.107	0.107	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-43-9	Cadmium	526	ug/Kg	U	105	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-70-2	Calcium J-,16a	395000	ug/Kg	N	8410	26300	26300	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-47-3	Chromium J,14a	8430	ug/Kg	*	158	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-48-4	Cobalt	4860	ug/Kg		158	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-50-8	Copper	1410000	ug/Kg		315	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-89-6	Iron	7360000	ug/Kg		8410	26300	26300	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-92-1	Lead	6660	ug/Kg		263	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-95-4	Magnesium J+,16b	213000	ug/Kg	N	8930	31500	31500	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-96-5	Manganese	205000	ug/Kg		210	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-97-6	Mercury	11.8	ug/kg	U	4.02	11.8	11.8	1	AV	JXL1	02/18/10 14:35	021810S1-4	951518
7440-02-0	Nickel	3.61	mg/kg		0.107	0.428	0.428	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-09-7	Potassium J+,16b	285000	ug/Kg	N	6730	26300	26300	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.07	mg/kg	UN	0.535	1.07	1.07	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-22-4	Silver	526	ug/Kg	U	105	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-23-5	Sodium	166000	ug/Kg		7360	26300	26300	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-28-0	Thallium	0.214	mg/kg	U	0.0642	0.214	0.214	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-61-1	Uranium	11.2	mg/kg	*N	0.0141	0.0428	0.0428	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-62-2	Vanadium	3220	ug/Kg		105	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-66-6	Zinc	39900	ug/Kg		347	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.526	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.517	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.561	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979011

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7959

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4330000	ug/Kg		7730	22700	22700	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-36-0	Antimony	9560	ug/Kg		375	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-38-2	Arsenic	4.42	mg/kg		0.243	1.22	1.22	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-39-3	Barium	56700	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-41-7	Beryllium	7.52	mg/kg	*	0.0243	0.122	0.122	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-43-9	Cadmium	568	ug/Kg	U	114	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-70-2	Calcium J-,16a	1190000	ug/Kg	N	9090	28400	28400	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-47-3	Chromium J,14a	11900	ug/Kg	*	170	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-48-4	Cobalt	3700	ug/Kg		170	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-50-8	Copper	618000	ug/Kg		341	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-89-6	Iron	7080000	ug/Kg		9090	28400	28400	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-92-1	Lead	777000	ug/Kg		284	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-95-4	Magnesium J+,16b	602000	ug/Kg	N	9660	34100	34100	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-96-5	Manganese	156000	ug/Kg		227	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-97-6	Mercury	13.4	ug/kg	U	4.56	13.4	13.4	1	AV	JXL	02/18/10 14:37	021810S1-4	951518
7440-02-0	Nickel	5.5	mg/kg		0.122	0.486	0.486	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-09-7	Potassium J+,16b	499000	ug/Kg	N	7270	28400	28400	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.22	mg/kg	UN	0.608	1.22	1.22	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-22-4	Silver	1050	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-23-5	Sodium U,14d	53700	ug/Kg		7960	28400	28400	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-28-0	Thallium	0.243	mg/kg	U	0.0729	0.243	0.243	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-61-1	Uranium	249	mg/kg	*N	0.016	0.0486	0.0486	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-62-2	Vanadium	11300	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-66-6	Zinc	90600	ug/Kg		375	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.556	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.52	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.565	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979012

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7969

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5250000	ug/Kg		7390	21700	21700	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-36-0	Antimony	1630	ug/Kg		359	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-38-2	Arsenic	1.4	mg/kg		0.196	0.981	0.981	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-39-3	Barium	162000	ug/Kg		109	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-41-7	Beryllium	0.623	mg/kg	*	0.0196	0.0981	0.0981	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-43-9	Cadmium	543	ug/Kg	U	109	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-70-2	Calcium J-,16a	1670000	ug/Kg	N	8690	27200	27200	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-47-3	Chromium J,110a	55800	ug/Kg	*	163	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-48-4	Cobalt	3450	ug/Kg		163	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-50-8	Copper	103000	ug/Kg		326	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-89-6	Iron	9300000	ug/Kg		8690	27200	27200	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-92-1	Lead	406000	ug/Kg		272	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-95-4	Magnesium J+,16b	1260000	ug/Kg	N	9240	32600	32600	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-96-5	Manganese	248000	ug/Kg		217	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-97-6	Mercury	11.4	ug/kg	U	3.89	11.4	11.4	1	AV	JXL1	02/18/10 14:39	021810S1-4	951518
7440-02-0	Nickel	4.41	mg/kg		0.0981	0.392	0.392	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-09-7	Potassium J+,16b	770000	ug/Kg	N	6950	27200	27200	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7782-49-2	Selenium UJ,16a	0.981	mg/kg	UN	0.49	0.981	0.981	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-22-4	Silver	167	ug/Kg	J	109	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-23-5	Sodium	59200	ug/Kg		7610	27200	27200	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-28-0	Thallium	0.0879	mg/kg	J	0.0588	0.196	0.196	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-61-1	Uranium	5.37	mg/kg	*N	0.0129	0.0392	0.0392	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-62-2	Vanadium	15800	ug/Kg		109	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-66-6	Zinc	39000	ug/Kg		359	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.509	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.564	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.58	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979013

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-8061

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7460000	ug/Kg		7730	22700	22700	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-36-0	Antimony	7380	ug/Kg		375	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-38-2	Arsenic	2	mg/kg		0.226	1.13	1.13	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-39-3	Barium	108000	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-41-7	Beryllium	2.99	mg/kg	*	0.0226	0.113	0.113	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-43-9	Cadmium	568	ug/Kg	U	114	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-70-2	Calcium J-,I6a	3270000	ug/Kg	N	9090	28400	28400	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-47-3	Chromium J,I4a	11300	ug/Kg	*	170	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-48-4	Cobalt	2890	ug/Kg		170	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-50-8	Copper	547000	ug/Kg		341	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-89-6	Iron	10600000	ug/Kg		9090	28400	28400	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-92-1	Lead	294000	ug/Kg		284	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-95-4	Magnesium J+,I6b	1250000	ug/Kg	N	9660	34100	34100	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-96-5	Manganese	151000	ug/Kg		227	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-97-6	Mercury	10	ug/kg	J	4.21	12.4	12.4	1	AV	JXL1	02/18/10 14:41	021810S1-4	951518
7440-02-0	Nickel	6.79	mg/kg		0.113	0.452	0.452	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-09-7	Potassium J+,I6b	777000	ug/Kg	N	7270	28400	28400	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7782-49-2	Selenium UJ,I6a	1.13	mg/kg	UN	0.565	1.13	1.13	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-22-4	Silver	513	ug/Kg	J	114	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-23-5	Sodium U,I4d	52200	ug/Kg		7960	28400	28400	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-28-0	Thallium	0.085	mg/kg	J	0.0678	0.226	0.226	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-61-1	Uranium	80.1	mg/kg	*N	0.0149	0.0452	0.0452	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-62-2	Vanadium	18400	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-66-6	Zinc	86900	ug/Kg		375	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.516	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.519	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.569	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979014

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-8063

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5600000	ug/Kg		8070	23700	23700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-36-0	Antimony	1560	ug/Kg		391	1190	1190	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-38-2	Arsenic	2.82	mg/kg		0.232	1.16	1.16	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-39-3	Barium	67500	ug/Kg		119	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-41-7	Beryllium	16.7	mg/kg	*	0.0232	0.116	0.116	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-43-9	Cadmium	593	ug/Kg	U	119	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-70-2	Calcium J-,16a	1350000	ug/Kg	N	9490	29700	29700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-47-3	Chromium J,110a	15200	ug/Kg	*	178	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-48-4	Cobalt	4540	ug/Kg		178	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-50-8	Copper	17600	ug/Kg		356	1190	1190	1	P	JWJ	02/21/10 05:32	022010C-2	948764
7439-89-6	Iron	11300000	ug/Kg		9490	29700	29700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7439-92-1	Lead	158000	ug/Kg		297	1190	1190	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7439-95-4	Magnesium J+,16b	1110000	ug/Kg	N	10100	35600	35600	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7439-96-5	Manganese	265000	ug/Kg		237	1190	1190	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7439-97-6	Mercury	12.8	ug/kg	U	4.34	12.8	12.8	1	AV	JXL1	02/18/10 14:43	021810S1-4	951518
7440-02-0	Nickel	8.57	mg/kg		0.116	0.465	0.465	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-09-7	Potassium J+,16b	978000	ug/Kg	N	7590	29700	29700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.16	mg/kg	UN	0.581	1.16	1.16	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-22-4	Silver	593	ug/Kg	U	119	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-23-5	Sodium U,14d	52300	ug/Kg		8300	29700	29700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-28-0	Thallium	0.0725	mg/kg	J	0.0697	0.232	0.232	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-61-1	Uranium	803	mg/kg	*N	0.0153	0.0465	0.0465	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-62-2	Vanadium	22700	ug/Kg		119	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-66-6	Zinc	24200	ug/Kg		391	1190	1190	1	P	JWJ	02/20/10 04:25	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.517	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.528	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.577	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979015

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-8062

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 90.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1260000	ug/Kg		6960	20500	20500	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-36-0	Antimony	448	ug/Kg	J	338	1020	1020	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-38-2	Arsenic	0.561	mg/kg	J	0.215	1.07	1.07	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-39-3	Barium	21300	ug/Kg		102	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-41-7	Beryllium	0.353	mg/kg	*	0.0215	0.107	0.107	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-43-9	Cadmium	511	ug/Kg	U	102	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-70-2	Calcium J-,16a	640000	ug/Kg	N	8180	25600	25600	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-47-3	Chromium J,14a	11000	ug/Kg	*	153	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-48-4	Cobalt	5860	ug/Kg		153	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-50-8	Copper	6170	ug/Kg		307	1020	1020	1	P	JWJ	02/21/10 05:36	022010C-2	948764
7439-89-6	Iron	9250000	ug/Kg		8180	25600	25600	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7439-92-1	Lead	8280	ug/Kg		256	1020	1020	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7439-95-4	Magnesium J+,16b	238000	ug/Kg	N	8690	30700	30700	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7439-96-5	Manganese	226000	ug/Kg		205	1020	1020	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7439-97-6	Mercury	12.1	ug/kg	U	4.1	12.1	12.1	1	AV	JXL1	02/18/10 14:45	021810S1-4	951518
7440-02-0	Nickel	3.04	mg/kg		0.107	0.43	0.43	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-09-7	Potassium J+,16b	310000	ug/Kg	N	6550	25600	25600	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7782-49-2	Selenium UJ,16a	1.07	mg/kg	UN	0.537	1.07	1.07	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-22-4	Silver	511	ug/Kg	U	102	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-23-5	Sodium	180000	ug/Kg		7160	25600	25600	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-28-0	Thallium	0.215	mg/kg	U	0.0645	0.215	0.215	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-61-1	Uranium	6.98	mg/kg	*N	0.0142	0.043	0.043	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-62-2	Vanadium	3700	ug/Kg		102	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-66-6	Zinc	45900	ug/Kg		338	1020	1020	1	P	JWJ	02/20/10 04:29	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.54	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.514	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.55	g	30	mL	02/17/10	TXB3

LT 3/17/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245981001

BASIS: As Received

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-8083

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/25/10 04:51	100224-2	948740
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/25/10 15:34	100225-3	948740
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/25/10 04:51	100224-2	948740
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:03	021110B-1	948737
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/11/10 20:03	021110B-1	948737
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	02/25/10 15:34	100225-3	948740
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:03	021110B-1	948737
7439-96-5	Manganese	1	ug/L	J	1	5	5	1	MS	BAJ	02/25/10 15:34	100225-3	948740
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL	02/05/10 10:05	020510W1-6	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-09-7	Potassium	194	ug/L		50	150	150	1	P	HSC	02/11/10 20:03	021110B-1	948737
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-23-5	Sodium	103	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/28/10 14:36	100228-5	948740
7440-61-1	Uranium	0.640	ug/L		0.05	0.2	0.2	1	MS	BAJ	02/25/10 16:27	100225-4	948740
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:03	021110B-1	948737

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948737	948730	SW846 3005A	50	mL	50	mL	02/10/10	FGA
948740	948739	SW846 3005A	50	mL	50	mL	02/10/10	FGA
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3

LT 3/17/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1514 VALIDATION DATE: 3/17/10 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input checked="" type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): <u>Total Cyanide only</u> | | | |


Section II. Completeness Check

- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |


Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):

- Total cyanide was detected in the soil CCBs. The associated results for samples RE15-10-7958, -7957 and -8061 were detects $\leq 5X$ the greatest blank concentration and, thus, were qualified U,14b. The remaining associated sample results were NDs and, thus, were not qualified.
- It should be noted that the water matrix QC was performed on a sample from another LANL RN. No sample data were qualified as a result.


Reviewed by: ETMLevel: 1Date: 3/17/10VALIDATOR'S SIGNATURE: *Linda Thal*DATE: 3/17/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only 

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, R, I7	J, I7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.	UJ, I7a	J, I7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only 

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31. Qualification of data via data validation does not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ (no qualification)

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7980
Sample ID: 245979001
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 4.62%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	71.3	262	ug/kg	1	AXC2	02/10/10	1537	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7958
Sample ID: 245979002
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 19.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	114	U,14b	75.5	278	ug/kg	1	AXC2	02/10/10	1619	948610 1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7960
Sample ID: 245979003
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 6.69%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RI	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2	02/10/10	1548	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7979
Sample ID: 245979004
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 25.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	91.7	337	ug/kg	1	AXC2	02/10/10	1549	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7972
Sample ID: 245979005
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 8.75%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	67.7	249	ug/kg	1	AXC2	02/10/10	1550	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7957
Sample ID: 245979006
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 22.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	J	139	U,lab	84.7	311	ug/kg	1	AXC2	02/10/10	1551	948610	1
----------------	---	-----	-------	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7974
Sample ID: 245979007
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 5.14%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	61.8	227	ug/kg	1	AXC2	02/10/10	1552	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7961
Sample ID: 245979008
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 14.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2	02/10/10	1553	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7971
Sample ID: 245979009
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 25.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	91.8	338	ug/kg	1	AXC2	02/10/10	1554	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7966
Sample ID: 245979010
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 9.56%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	73.7	271	ug/kg	1	AXC2	02/10/10	1554	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7959
Sample ID: 245979011
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 20.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	75.4	277	ug/kg	1	AXC2	02/10/10	1555	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7969
Sample ID: 245979012
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 9.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	72.3	266	ug/kg	1	AXC2	02/10/10	1600	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-8061
Sample ID: 245979013
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 14.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	J	101	U,14b	75.2	277	ug/kg	1	AXC2	02/10/10	1601	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-8063
Sample ID: 245979014
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 18.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	80.2	295	ug/kg	1	AXC2	02/10/10	1602	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-8062
Sample ID: 245979015
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 9.48%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	69.6	256	ug/kg	1	AXC2	02/10/10	1603	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 12, 2010

Client SDG: 10-1514-1

Client Sample ID: RE15-10-8083
Sample ID: 245981001
Matrix: W
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/08/10	1459	948940	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1408	948939

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

LT 3/17/10

DATA VALIDATION COVER SHEET

5119-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1514 VALIDATION DATE: 3/17/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Linda Thal ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> TPH-GRO | <input type="checkbox"/> HIGH EXPLOSIVES | <input type="checkbox"/> DIOXIN FURANS | <input type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input checked="" type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): _____ | | | |

Section II. Completeness Check


- | YES | NO | N/A | (CHECK ONE) | YES | NO | N/A | (CHECK ONE) |
|-------------------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. CHAIN-OF-CUSTODY FORM(S) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. RAW/BSS DATA |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. CASE NARRATIVE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. QUALITY CONTROL FORMS |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. SAMPLE RESULT FORMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |

Comments/problems noted (include information about requests for further information submitted to the contract laboratory and agreed-upon date of resolution and contract laboratory point of contact):


1. An MS was not performed for the tritium analysis. The LCS met laboratory acceptance criteria and, thus, no sample results were qualified.
2. The matrix QC analysis was performed on a sample from another LANL RN. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 3/17/10


VALIDATOR'S SIGNATURE: L. Thal DATE: 3/17/10

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only 

Yes No N/A (Choose One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, R9	J-, R9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, R9a	J-, R9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the MDC.	U, R5	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The analyte should be regarded as rejected because spectral interferences prevent positive identification of the analytes.	R, R5a	R, R5a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. The MDC and/or TPU documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R5b	J-, R5b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3X the 1 sigma TPU.	U, R11	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, R4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, R4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, R4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R4e	R, R4e
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The tracer is <10%R. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3	R, R3

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The tracer is < the Lower Acceptance Level (LAL) but $\geq 10\%R$. Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	UJ, R3a	J-, R3a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. The Tracer%R value is > the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package. Tracer%R is not applicable for Gamma Spectroscopy.	N/A	J+, R3b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. Required tracer information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. Tracer%R is not applicable for Gamma Spectroscopy.	R, R3d	R, R3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, R12	R, R12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, R12a	J-, R12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, R12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R12c	R, R12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Associated duplicate sample has DER or RER > the analytical laboratory's acceptance limits.	R, R10	J, J10
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, R6	R, R6

RAD ANALYTICAL DATA VALIDATION CHECKLIST	
5119-2 Rad Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	21. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6	R, R6
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6a	J-, R6a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23. The associated matrix spike recovery was above the UAL. Follow the external laboratory limits. MS/MSD is not applicable to Gamma Spectroscopy.	UJ, R6b	J+, R6b
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not Reject. Qualify data based on LCS information. MS/MSD is not applicable to Gamma Spectroscopy.	R, R6c	R, R6c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. Duplicate, dilution, or reanalysis.	UJ, R88	J, R88
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, R19	J, R, R19
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27. Quantification of data via data validation did not occur based on Quality Control requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.	U, U_LAB	J, J_LAB NQ, NQ

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 23, 2010

Client Sample ID: RE15-10-8062
Sample ID: 245979015
Matrix: R
Collect Date: 27-JAN-10
Receive Date: 02-FEB-10
Collector: Client
Moisture: 9.48%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
<i>"As Received"</i>												
Rad Liquid Scintillation Analysis												
<i>H3 "As Received"</i>												
Tritium		7980	195	+/-571	250	pCi/L		KXK2	02/14/10	0913	950495	2

The following Analytical Methods were performed

Method	Description
1	ASTM D 2216 (Modified)
2	GL-RAD-A-002

Notes:

TPU is calculated at the 67% confidence level (1-sigma).

The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
 - BD Results are either below the MDC or tracer recovery is low
 - C Analyte has been confirmed by GC/MS analysis
 - D Results are reported from a diluted aliquot of the sample
 - E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
 - E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
 - E Organics--Concentration of the target analyte exceeds the instrument calibration range
 - F Estimated Value
 - H Analytical holding time was exceeded
 - J Value is estimated
 - M M if above MDC and less than LLD
 - M Matrix Related Failure
 - N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC).
- Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit

LT 3/17/10

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1514C

LOS ALAMOS

REQUEST NUMBER: 10-1514

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245979, 245981²!

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7980	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7980	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7958	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7958	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7960	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7960	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7979	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7979	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7972	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7972	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7957	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7957	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7974	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7974	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7961	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7961	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7971	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7971	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7966	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7966	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7959	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7959	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7969	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7969	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8061	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8061	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8063	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8063	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8062	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8062	1	POLY	H3	Ice	R
RE15-10-8062	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8088	1	POLY	METALS+U-GEL	Nitric Acid	W

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1514C

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
-----------	------	-----------	-------	---------	--------

RE15-10-8083	1	POLY	SW-846:8850	Ice	W
--------------	---	------	-------------	-----	---

RE15-10-8083	1	POLY	TCN	Sodium Hydroxide	W
--------------	---	------	-----	------------------	---

Relinquished By:

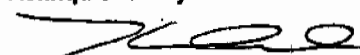
Date

Time

Received By:

Date

Time



2/1/10

3:00

Patricia Dover-Dent

P.H. Dent 2-2-10 09:10

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Monday, February 01, 2010
LOS ALAMOS
 NATIONAL LABORATORY


ATTN: Valerie Davis
 General Engineering Laboratories, Inc., Charleston, SC.
 2040 Savage Rd
 Charleston, SC 29407

Please analyse the enclosed samples
 according to the schedule indicated:

SHIP DATE: 2/1/2010
 TURNAROUND/REPORT DUE: 3/3/2010
 TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
 LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

Page 1 of 4
 REQUEST NUMBER: 10-1514

These Samples are on:
 LANL Request Number: 10-1514
 Per Agreement Number: 126310011
 Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:906.0	1	RE15-10-8062	R	1/27/2010	
	SW-846:6020	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	

Monday, February 01, 2010

Page 2 of 4

REQUEST NUMBER: 10-1514

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8020	1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-8083	W	1/27/2010	
	SW-846:8850	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7874	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8083	R	1/27/2010	
		1	RE15-10-8083	W	1/27/2010	
	SW-846:7470A	1	RE15-10-8083	W	1/27/2010	
	SW-846:7471A	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	

Monday, February 01, 2010

Page 3 of 4

REQUEST NUMBER: 10-1514

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.7471A	1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
	SW-846.8082	1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
	SW-846.8321A_MOD	1	RE15-10-8061	R	1/27/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8321A_MOD	1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
	SW-846-9012A	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-8083	W	1/27/2010	

Final Page of REQUEST NUMBER 10-1514



February 04, 2010

www.gel.com

Ms. Joylene Valdez
Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER Project
Work Orders: 245979 245981
SDG: 10-1514

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 02, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1514
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 245979 and 245981
SDG: 10-1514

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Miscellaneous	1478
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Raw Data	1594
Miscellaneous	1911
General Chemistry Analysis	1958
Case Narrative	1959
Sample Data Summary	1964
Quality Control Summary	1981
Instrument QC Data Summary	1984
Cyanide, Total	1986
Miscellaneous	2001
General Chemistry Analysis	2003
Case Narrative	2004
Sample Data Summary	2009
Quality Control Summary	2012
Instrument QC Data Summary	2015
Cyanide, Total	2017
Radiological Analysis	2031
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Quality Control Data	2041
Raw Data	2044
Background and Efficiency Data	2074
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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 245979 and 245981
SDG # : 10-1514**

February 04, 2010

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 02, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

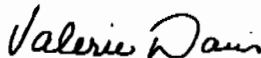
<u>Laboratory ID</u>	<u>Client ID</u>
245979001	RE15-10-7980
245979002	RE15-10-7958
245979003	RE15-10-7960
245979004	RE15-10-7979
245979005	RE15-10-7972
245979006	RE15-10-7957
245979007	RE15-10-7974
245979008	RE15-10-7961
245979009	RE15-10-7971
245979010	RE15-10-7966
245979011	RE15-10-7959
245979012	RE15-10-7969
245979013	RE15-10-8061
245979014	RE15-10-8063
245979015	RE15-10-8062
245981001	RE15-10-8083

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Explosives by LCMSMS, GC Semivolatile PCB, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.



Valerie Davis

Project Manager

List of current GEL Certifications as of 04 February 2010

State	Certification
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California - NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida - NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois - NELAP	200029
Indiana	C-SC-01
Kansas - NELAP	E-10332
Kentucky	90129
Louisiana - NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey - NELAP	SC002
New Mexico	FL NELAP E87156
New York - NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania - NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas - NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah - NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1514C

LOS ALAMOS

REQUEST NUMBER: 10-1514

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/3/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245979, 245981²!

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7980	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7980	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7958	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7958	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7960	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7960	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7979	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7979	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7972	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7972	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7957	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7957	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7974	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7974	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7961	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7961	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7971	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7971	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7966	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7966	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7959	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7959	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7969	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7969	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8061	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8061	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8063	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8063	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8062	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-8062	1	POLY	H3	Ice	R
RE15-10-8062	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8088	1	POLY	METALS+U-GEL	Nitric Acid	W

Monday, February 01, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1514C

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
-----------	------	-----------	-------	---------	--------

RE15-10-8083	1	POLY	SW-846:6850	Ice	W
--------------	---	------	-------------	-----	---

RE15-10-8083	1	POLY	TCN	Sodium Hydroxide	W
--------------	---	------	-----	------------------	---

Relinquished By:

Date

Time

Received By:

Date

Time

	2/1/10	3:00		P.N. Vent	2-2-10 09:10
Printed Name	Signature		Printed Name	Signature	

Printed Name	Signature
--------------	-----------

Printed Name	Signature
--------------	-----------

Printed Name	Signature
--------------	-----------

Printed Name	Signature
--------------	-----------

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name	Signature
--------------	-----------

Monday, February 01, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston, SC 29407

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/1/2010
TURNAROUND/REPORT DUE: 3/3/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANLER SMO CONTACT:

Signature:



These Samples are on:
LANL Request Number: 10-1514
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Page 1 of 4
REQUEST NUMBER: 10-1514

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	EPA:906.0	1	RE15-10-8062	R	1/27/2010	
	SW-846-6020	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	

Monday, February 01, 2010

Page 2 of 4

REQUEST NUMBER: 10-1514

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-8083	W	1/27/2010	
	SW-846:6850	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-8083	W	1/27/2010	
	SW-846:7470A	1	RE15-10-8083	W	1/27/2010	
	SW-846:7471A	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	

Monday, February 01, 2010

REQUEST NUMBER: 10-1514

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:7471A	1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
	SW-846:8082	1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
	SW-846:8321A_MOD	1	RE15-10-7957	R	1/27/2010	
		1	RE15-10-7958	R	1/27/2010	
		1	RE15-10-7959	R	1/27/2010	
		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
		1	RE15-10-7969	R	1/27/2010	
		1	RE15-10-7971	R	1/27/2010	
		1	RE15-10-7972	R	1/27/2010	
		1	RE15-10-7974	R	1/27/2010	
		1	RE15-10-7979	R	1/27/2010	
		1	RE15-10-7980	R	1/27/2010	
		1	RE15-10-8061	R	1/27/2010	

Monday, February 01, 2010

Page 4 of 4

REQUEST NUMBER: 10-1514

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
	SW-846:9012A	1	RE15-10-7957	R	1/27/2010	
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		1	RE15-10-7960	R	1/27/2010	
		1	RE15-10-7961	R	1/27/2010	
		1	RE15-10-7966	R	1/27/2010	
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		1	RE15-10-8061	R	1/27/2010	
		1	RE15-10-8062	R	1/27/2010	
		1	RE15-10-8063	R	1/27/2010	
		1	RE15-10-8083	W	1/27/2010	

Final Page of REQUEST NUMBER 10-1514



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCOC/Work Order: 10-1514		
Received By: Patricia Dover-Dent			Date Received: February 2, 2009		
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.		
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 80 CPM		
Classified Radioactive II by RSO?		X			
COC/Samples marked containing PCBs?		X			
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:		
Samples identified as Foreign Soil?		X			

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other (describe) 0-5 13-15&19C
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5 Samples requiring chemical preservation at proper pH?	X			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?			X	Sample ID's affected: time written on containers, not on COC
11 Number of containers received match number indicated on COC?	X			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?	X			

Comments: FEDEX#S

7209 7849 7978 0C	7209 7849 7842 1C	7209 7849 7809 2C	7209 7849 7717 14C
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7209 7849 7934 1C	7209 7849 7901 2C	7209 7849 7967 3C	7209 7849 7740 15C
7209 7849 7831 1C	7209 7849 7853 2C	7209 7849 7945 4C	7209 7849 7739 19C
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LOS ALAMOS, NM 87545
UNITED STATES US

CAO: 0014176/CAFE2449

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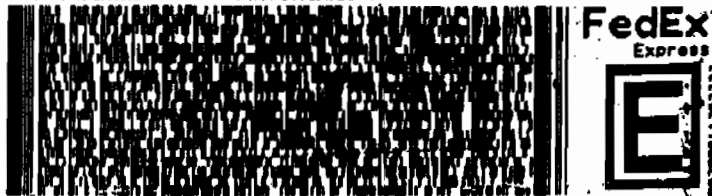
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

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TRKH 7209 7849 7978
0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



Pen # 156148-034 NRT V3 09-08

ORIGIN ID: SAFA (505) 665-9988
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 51.0 LB MAN
CAO: 0014176/CAFE2449

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VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR1A015AGML0

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TUE - 02FEB A1
PRIORITY OVERNIGHT

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SC-US
CHS

XX CHSA

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTWGT: 51.0 LB MAN
CAO: 0014176/CAFE2449

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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VRO0

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2 of 2
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TUE - 02FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

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Pen # 156148-034 NRT V3 04-05

ORIGIN ID: SAFA (505) 665-9988
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

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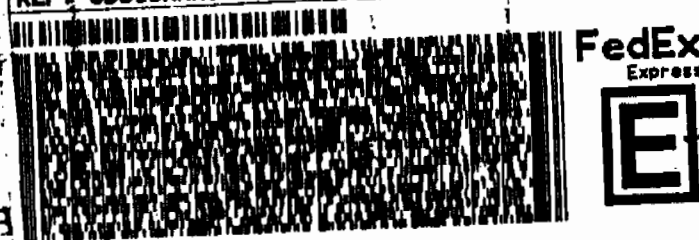
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CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A052VRO0

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1 of 2
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TUE - 02FEB A1
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SC-US
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ORIGIN ID: SAFA (506) 665-0068
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
ACTMGT: 61.0 LB MAN
CAD: 0014176/CAFE2449

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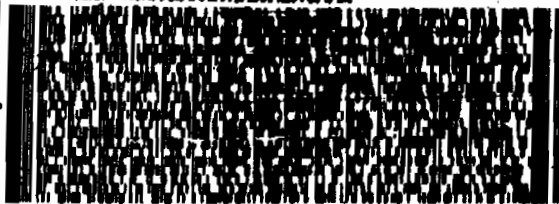
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2040 SAVAGE RD

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REF: 6B010AMR1A015AGNKO



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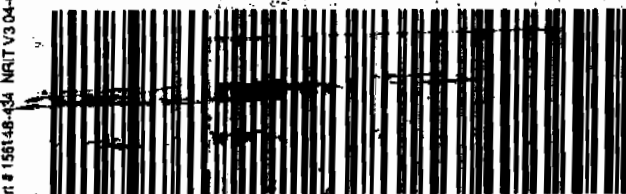
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TUE - 02FEB A1
PRIORITY OVERNIGHT

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29407
SC-US
CHS



ORIGIN ID: SAFA (506) 665-0068
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
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LOS ALAMOS, NM 87545
UNITED STATES US

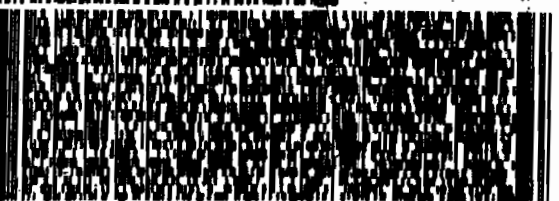
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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171
REF: 6B010AMR1A015AGNKO



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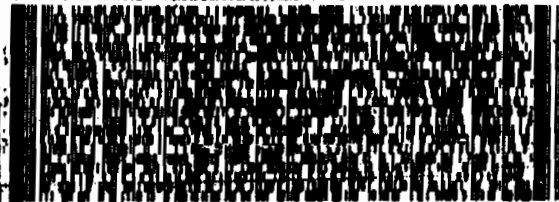
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REF: 6B010AMR1A015AGNKO



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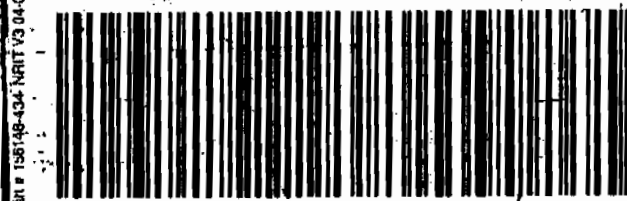
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CHS



ORIGIN ID: SAFA (506) 665-0068
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LOS ALAMOS, NM 87545
UNITED STATES US

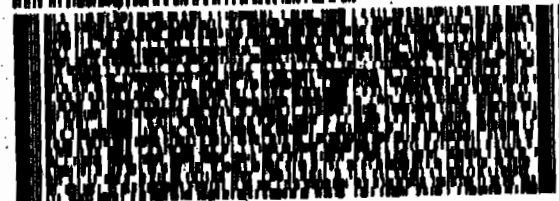
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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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1 of 2
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TUE - 02FEB A1
PRIORITY OVERNIGHT

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Page 5 of 5

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LOS ALAMOS, NM 87545
UNITED STATES US
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
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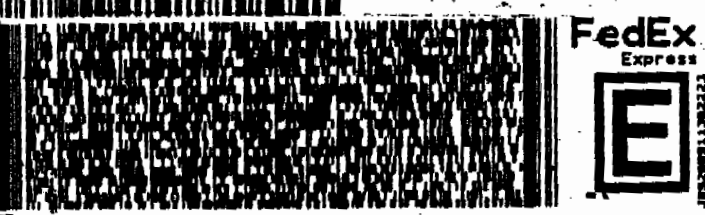
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Emp# 133990 01FEB10 SAFA

ORIGIN ID: SAFA (505) 605-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
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LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 01FEB10
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GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
(843) 556-8171
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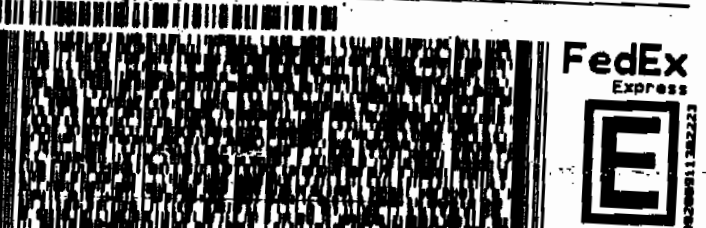
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UNITED STATES US
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGML0

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PRIORITY OVERNIGHT
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SC-US
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XX CHSA
Part # 156148-434 NRT V3 09-09

ORIGIN ID: SAFA (505) 605-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 01FEB10
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD
CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR1A015AGML0

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
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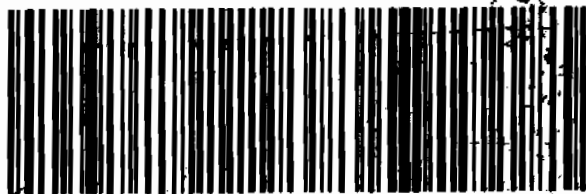
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Part 1 50143-434 NRTV3 04-08

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REF: 68010AMR2A0515BYDO

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MatrN 7209 7849 7740 0201

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Part 1 50143-434 NRTV3 04-08

ORIGIN ID: SAFA (505) 555-9958
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
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(843) 556-8171

REF: 68010AMR2A0515BYDO

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ORIGIN ID: SAFA (505) 555-9958
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 01FEB10
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 68010AMR2A0515BYDO

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2 of 2
MPSH 7209 7849 7739
0263

MatrN 7209 7849 7728 0201

TUE - 02FEB A1
PRIORITY OVERNIGHT

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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier Explanation

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL

A The TIC is a suspected aldol-condensation product

B Target analyte was detected in the associated blank

B Metals-Either presence of analyte detected in the associated blank, or
MDL/IDL < sample value < PQL

BD Results are either below the MDC or tracer recovery is low

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

d 5-day BOD-The 2:1 depletion requirement was not met for this sample

E Organics-Concentration of the target analyte exceeds the instrument calibration range

E Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria

H Analytical holding time was exceeded

h Preparation or preservation holding time was exceeded

J Value is estimated

N Metals-The Matrix spike sample recovery is not within specified control limits

N Organics-Presumptive evidence based on mass spectral library search to make a tentative
identification of the analyte (TIC). Quantitation is based on nearest internal standard
response factor

N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration
by 4X or more

ND Analyte concentration is not detected above the reporting limit

UI Gamma Spectroscopy-Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1514**

Method/Analysis Information

Procedure: **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**

Analytical Method: SW846 6850 Modified

Prep Method: SW846 6850 Modified

Analytical Batch Number: 950063

Prep Batch Number: 950062

Sample Analysis

Sample ID	Client ID
245979001	RE15-10-7980
245979002	RE15-10-7958
245979003	RE15-10-7960
245979004	RE15-10-7979
245979005	RE15-10-7972
245979006	RE15-10-7957
245979007	RE15-10-7974
245979008	RE15-10-7961
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245979010	RE15-10-7966
245979011	RE15-10-7959
245979012	RE15-10-7969
245979013	RE15-10-8061
245979014	RE15-10-8063

10-1514-PERLCMS

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245979015	RE15-10-8062
1202035650	Interference Check Sample (ICS)
1202035646	Method Blank (MB)
1202035647	Laboratory Control Sample (LCS)
1202035648	245979001(RE15-10-7980) Matrix Spike (MS)
1202035649	245979001(RE15-10-7980) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCV Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements

All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CCV Requirements

All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements

All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)

The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

10-1514-PERLCMS

Page 2 of 4

QC Sample Designation

Sample 245979001 (RE15-10-7980) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance

The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time

During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

Technical Information**Holding Time Specifications**

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information**Data Exception (DER) Documentation**

Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Manual Integrations

Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

10-1514-PERLCMS

Page 3 of 4

Method Comments

The samples in this SDG were not originally analyzed using EPA Method 314.0.

Additional Comments

The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio

The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: _____

Heather M. Moore Date: *02/28/10*

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Page 4 of 4

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7980

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979001

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 95.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	1.38	ug/kg	J	1	23-FEB-10 14:27	per0223015a
	Perchlorate Isotope Ratio			3.46			1	23-FEB-10 14:27	per0223015a
14797-73-0	Perchlorate-101	.524	2.1	1.28	ug/kg	J	1	23-FEB-10 14:27	per0223015a
	Perchlorate-O(18)			5.20	ug/kg		1	23-FEB-10 14:27	per0223015a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 250062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7958
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979002
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 80

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.622	2.49	0.622	ug/kg	U	1	23-FEB-10 14:51	per0223018a
	Perchlorate Isotope Ratio						1	23-FEB-10 14:51	per0223018a
14797-73-0	Perchlorate-101	.622	2.49	0.622	ug/kg	U	1	23-FEB-10 14:51	per0223018a
	Perchlorate-O(18)			5.77	ug/kg		1	23-FEB-10 14:51	per0223018a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 250062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7960
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979003
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 93.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.14	0.536	ug/kg	U	1	23-FEB-10 14:59	per0223019a
	Perchlorate Isotope Ratio						1	23-FEB-10 14:59	per0223019a
14797-73-0	Perchlorate-101	.536	2.14	0.536	ug/kg	U	1	23-FEB-10 14:59	per0223019a
	Perchlorate-O(18)			5.04	ug/kg		1	23-FEB-10 14:59	per0223019a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 250062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7979
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979004
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 74

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 15:07	per0223020a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:07	per0223020a
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 15:07	per0223020a
	Perchlorate-O(18)			6.30	ug/kg		1	23-FEB-10 15:07	per0223020a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7972
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979005
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 91.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 15:15	per0223021a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:15	per0223021a
14797-73-0	Perchlorate-101	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 15:15	per0223021a
	Perchlorate-O(18)			5.20	ug/kg		1	23-FEB-10 15:15	per0223021a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 250062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7957
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979006
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 17

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	23-FEB-10 15:47	per0223025a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:47	per0223025a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	23-FEB-10 15:47	per0223025a
	Perchlorate-O(18)			6.09	ug/kg		1	23-FEB-10 15:47	per0223025a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7974

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979007

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 94.9

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.527	2.11	0.527	ug/kg	U	1	23-FEB-10 15:55	per0223026a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:55	per0223026a
14797-73-0	Perchlorate-101	.527	2.11	0.527	ug/kg	U	1	23-FEB-10 15:55	per0223026a
	Perchlorate-O(18)			5.14	ug/kg		1	23-FEB-10 15:55	per0223026a

^a When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7961

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979008

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.34	0.586	ug/kg	U	1	23-FEB-10 16:03	per0223027a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:03	per0223027a
14797-73-0	Perchlorate-101	.586	2.34	0.586	ug/kg	U	1	23-FEB-10 16:03	per0223027a
	Perchlorate-O(18)			5.44	ug/kg		1	23-FEB-10 16:03	per0223027a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950062
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-7971
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979009
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 % Solids: 74

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 16:11	per0223028a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:11	per0223028a
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 16:11	per0223028a
	Perchlorate-O(18)			6.68	ug/kg		1	23-FEB-10 16:11	per0223028a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 250062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7966
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979010
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 90.4

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:20	per0223029a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:20	per0223029a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:20	per0223029a
	Perchlorate-O(18)			5.12	ug/kg		1	23-FEB-10 16:20	per0223029a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 250062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7959
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979011
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 % Solids: 79

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.632	2.53	0.632	ug/kg	U	1	23-FEB-10 16:28	per0223030a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:28	per0223030a
14797-73-0	Perchlorate-101	.632	2.53	0.632	ug/kg	U	1	23-FEB-10 16:28	per0223030a
	Perchlorate-O(18)			6.06	ug/kg		1	23-FEB-10 16:28	per0223030a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7969

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979012

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 90.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:36	per0223031a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:36	per0223031a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:36	per0223031a
	Perchlorate-O(18)			5.05	ug/kg		1	23-FEB-10 16:36	per0223031a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8061

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979013

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.35	0.586	ug/kg	U	1	23-FEB-10 16:44	per0223032a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:44	per0223032a
14797-73-0	Perchlorate-101	.586	2.35	0.586	ug/kg	U	1	23-FEB-10 16:44	per0223032a
	Perchlorate-O(18)			5.64	ug/kg		1	23-FEB-10 16:44	per0223032a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8063

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979014

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.613	2.45	0.613	ug/kg	U	1	23-FEB-10 16:52	per0223033a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:52	per0223033a
14797-73-0	Perchlorate-101	.613	2.45	0.613	ug/kg	U	1	23-FEB-10 16:52	per0223033a
	Perchlorate-O(18)			5.93	ug/kg		1	23-FEB-10 16:52	per0223033a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 250062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8062
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979015
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 90.5

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.552	ug/kg	U	1	23-FEB-10 17:00	per0223034a
	Perchlorate Isotope Ratio						1	23-FEB-10 17:00	per0223034a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	23-FEB-10 17:00	per0223034a
	Perchlorate-O(18)			5.12	ug/kg		1	23-FEB-10 17:00	per0223034a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1514

Extract Batch Code: 250062

Date Filtered: 18-FEB-10

Matrix: SOIL

Sample ID: 1202035647

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.04	ug/kg	102		70 - 130
Perchlorate Isotope Ratio		3.25				-
Perchlorate-101	2.00	2.01	ug/kg	101		70 - 130
Perchlorate-O(18)		4.69	ug/kg			-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG):

10-1514

Extract Batch Code: 950062

Date Filtered:

18-FEB-10

Matrix:

SOIL

Sample ID:

1202035650

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.09	ug/kg	105		70 - 130
Perchlorate Isotope Ratio		3.25				
Perchlorate-101	2.00	2.06	ug/kg	103		70 - 130
Perchlorate-O(18)		4.79	ug/kg			

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223014a

Sample Date: 23-Feb-2010

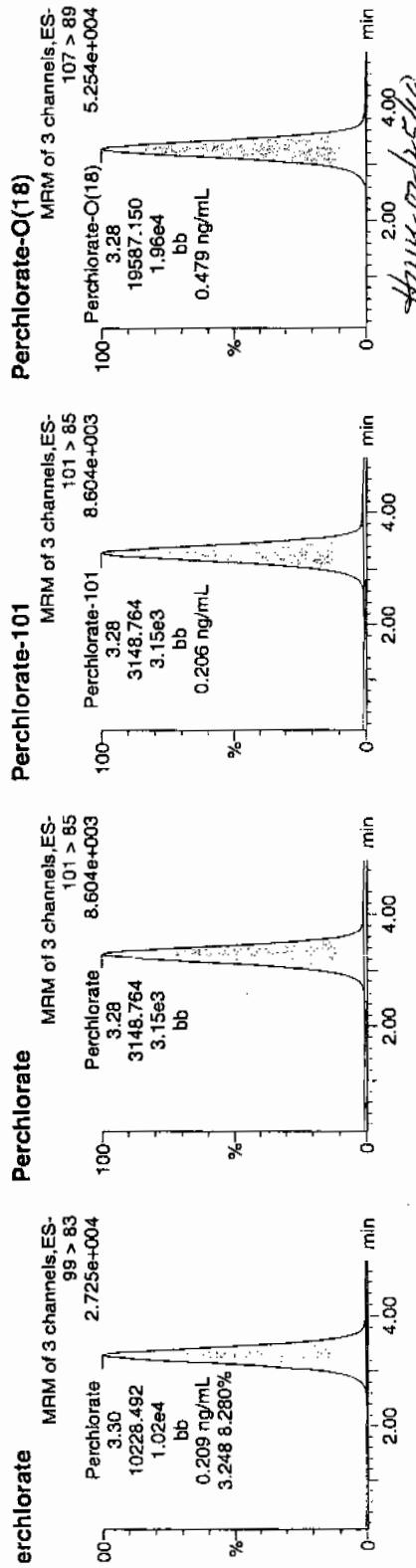
Sample Time: 14:19:19

Sample ID: 1202035650

Sample Label: 1:3,C

02-24-10

1202035650 | 5025 | 7.5 | 1.1



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202035650 Perchlorate	99 > 83	3.30	10228.492	10228.492	bb			0.2092	104.58	4.58	1730.3...	3.25
202035650 Perchlorate-101	101 > 85	3.28	3148.764	3148.764	bb			0.2064	103.22	3.22	1109.1...	
202035650 Perchlorate-O(18)	107 > 89	3.28	19587.150	19587.150	bb			0.4787	95.74	-4.26	7276.9...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 950062

GEL MS/PS ID: 1202035648

GEL MSD/PSD ID: 1202035649

GEL Job No (SDG): 10-1514

Date Extracted: 18-FEB-10

Client ID: RE15-10-7980

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.10	1.38	ug/kg	3.72	111		3.61	106		2.88		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.16			3.22			0			-
Perchlorate-101	2.10	1.28	ug/kg	3.77	118		3.59	110		4.77		30	75 - 125
Perchlorate-O(18)	0	5.20	ug/kg	5.26			5.34			1.58			-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

Form 4

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1514

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	23-FEB-10	per0223001a	IPB001
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223001a	IPB001
Perchlorate	0.00	0	NA	23-FEB-10	per0223002a	IPB001
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223002a	IPB001

Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charlers W. Wilson

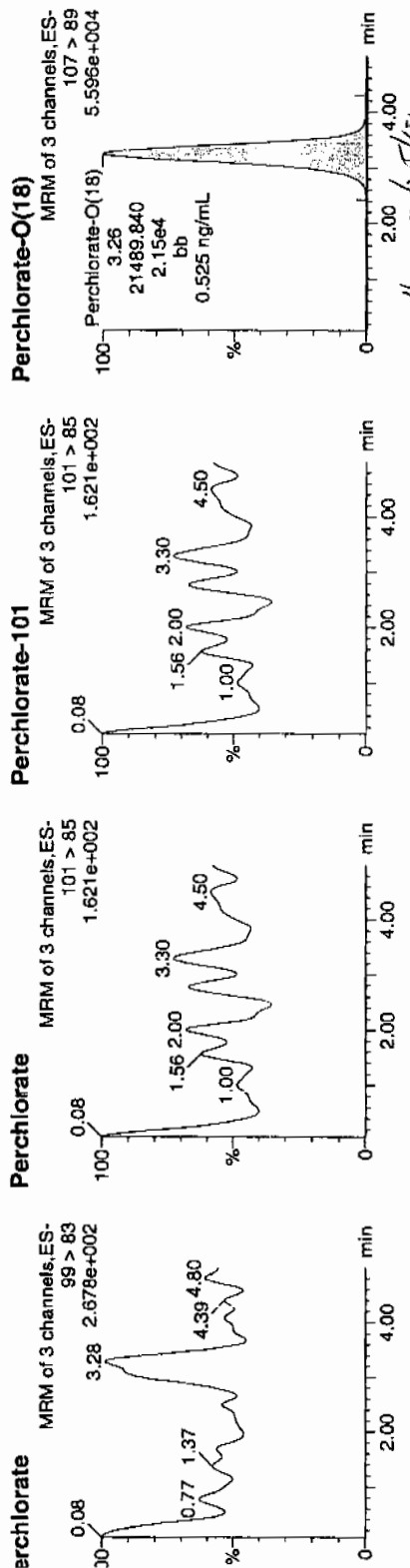
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per022310a.mdb 24 Feb 2010 09:36:48
 Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per022310a.cdb 24 Feb 2010 09:37:11

Sample Name: per0223001a
 Date: 23-Feb-2010
 Time: 12:33:48
 Operator: IPB001
 Label: 1:1,A

0224-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001	Perchlorate	99 > 83										0.00
B001	Perchlorate-101	101 > 85										
B001	Perchlorate-O(18)	107 > 89	3.26	21489.840	bb	21489.840		0.5252	105.04	5.04	7285.2...	

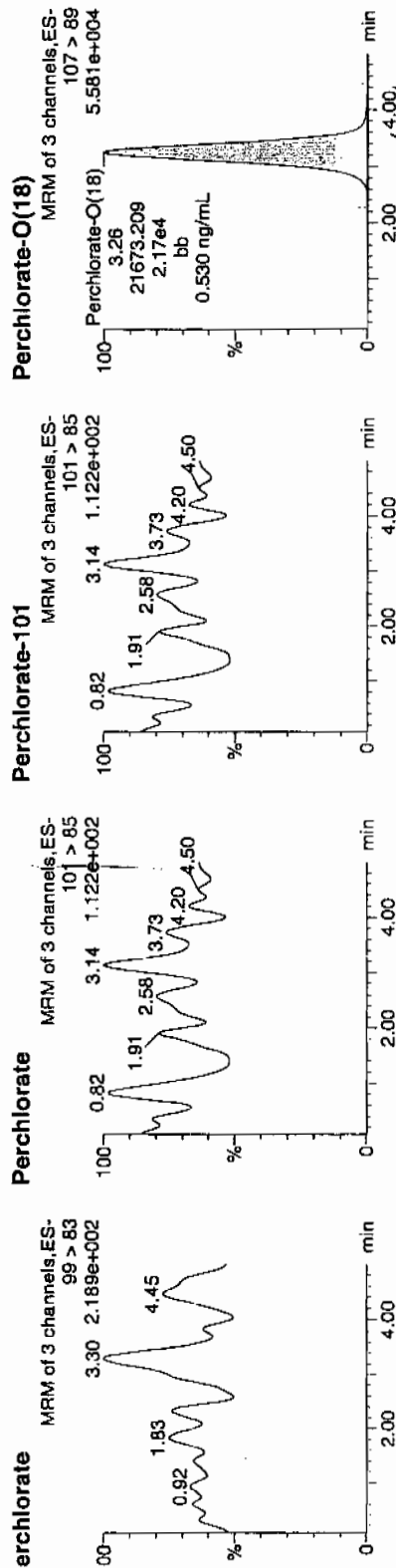
Quantify Sample Report MassLynx 4.0 SP4
 he GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223002a
 Date: 23-Feb-2010
 Time: 12:42:00
 ID: IPB001
 Label: 1:1,A

0224-10



Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B001 Perchlorate	99 > 83											0.00
B001 Perchlorate-101	101 > 85											
B001 Perchlorate-O(18)	107 > 89	3.26	21673.209	21673.209	bb			0.5297	105.93	5.93	1580.2...	

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	23-FEB-10	per0223008a	IPB002
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223008a	IPB002
Perchlorate	0.00	0	NA	23-FEB-10	per0223010a	IPB003
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223010a	IPB003
Perchlorate	0.00	0	NA	23-FEB-10	per0223023a	IPB004
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223023a	IPB004
Perchlorate	0.00	0	NA	23-FEB-10	per0223036a	IPB005
Perchlorate-101	0.00	0	NA	23-FEB-10	per0223036a	IPB005

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223008a

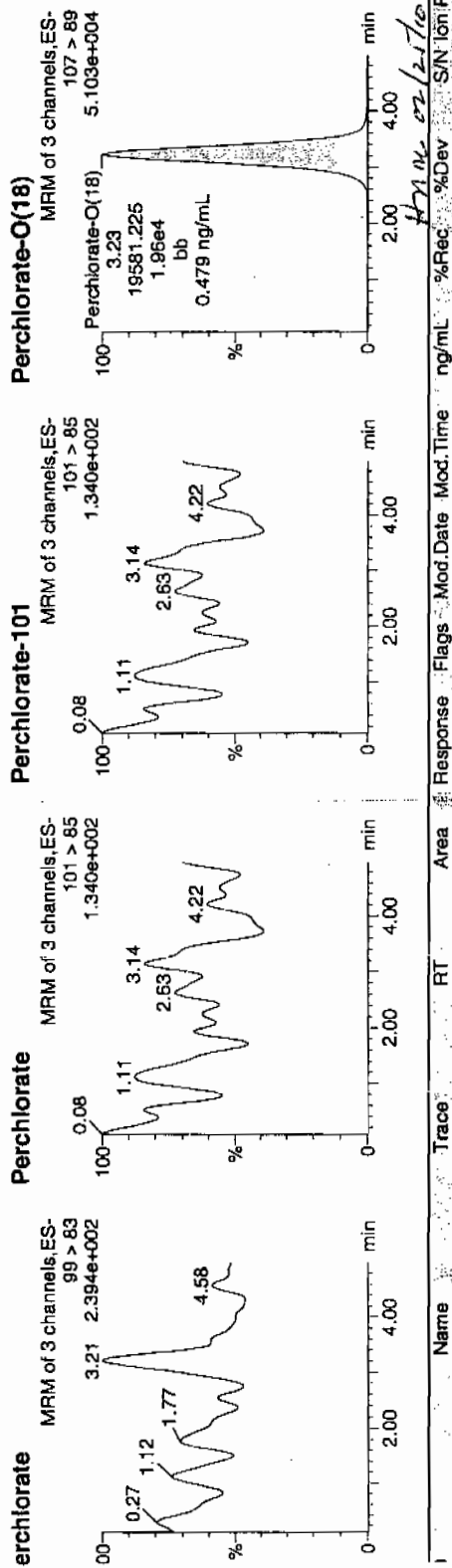
Sample Date: 23-Feb-2010

Sample Time: 13:30:32

Sample ID: IPB002

Sample Label: 1:1,A

02-24-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
Perchlorate	99 > 83											0.00
Perchlorate-101	101 > 85											
Perchlorate-O(18)	107 > 89	3.23	19581.225	19581.225	bb			0.4785	95.71	-4.29	7325.9...	

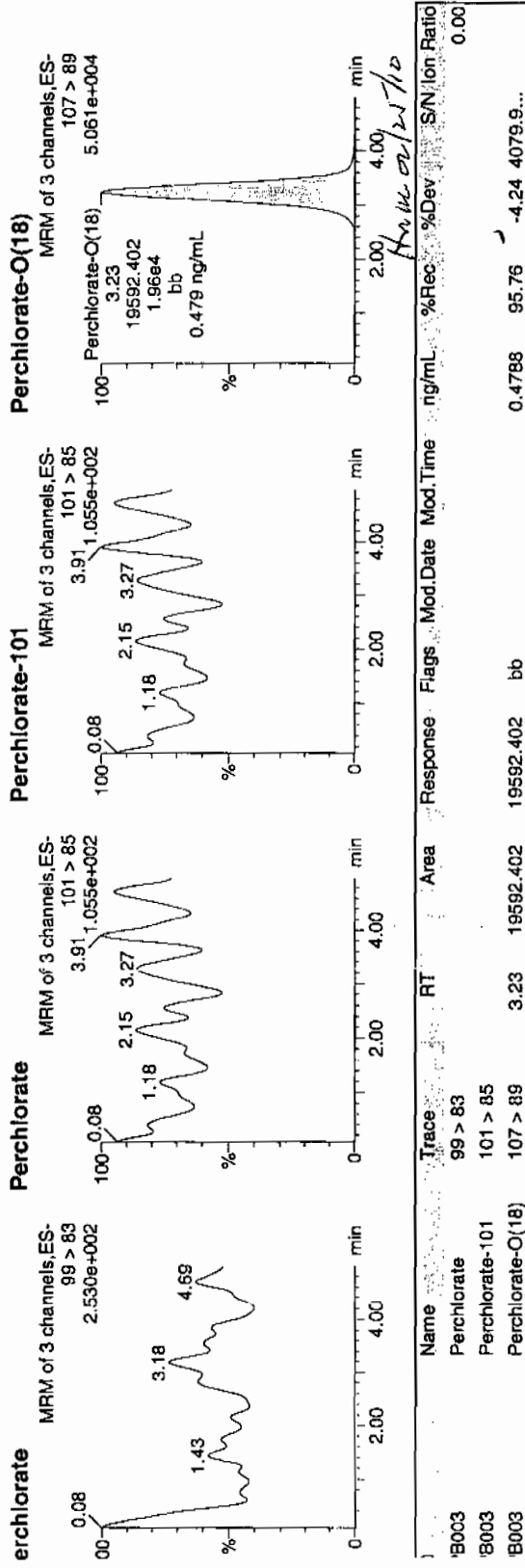
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223010a
Date: 23-Feb-2010
Time: 13:46:52
Operator: IPB003
Label: 1:1,A

02-24-10



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223023a

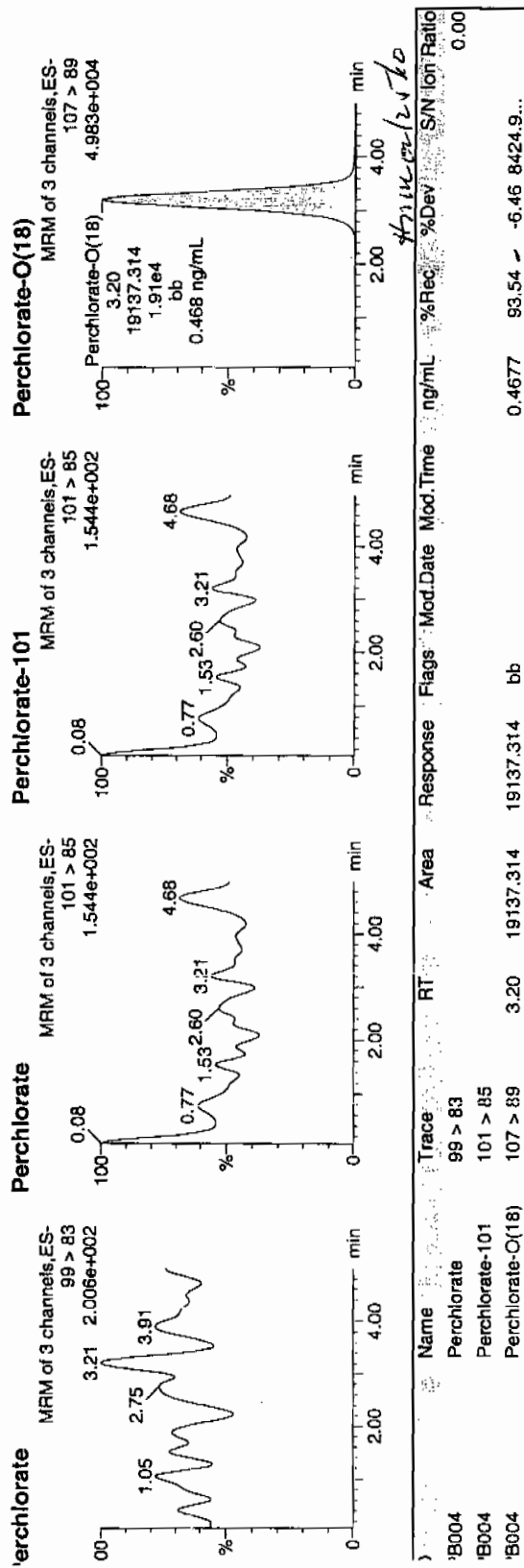
Date: 23-Feb-2010

Time: 15:31:45

ID: IPB004

Label: 1:1,A

02-24-10



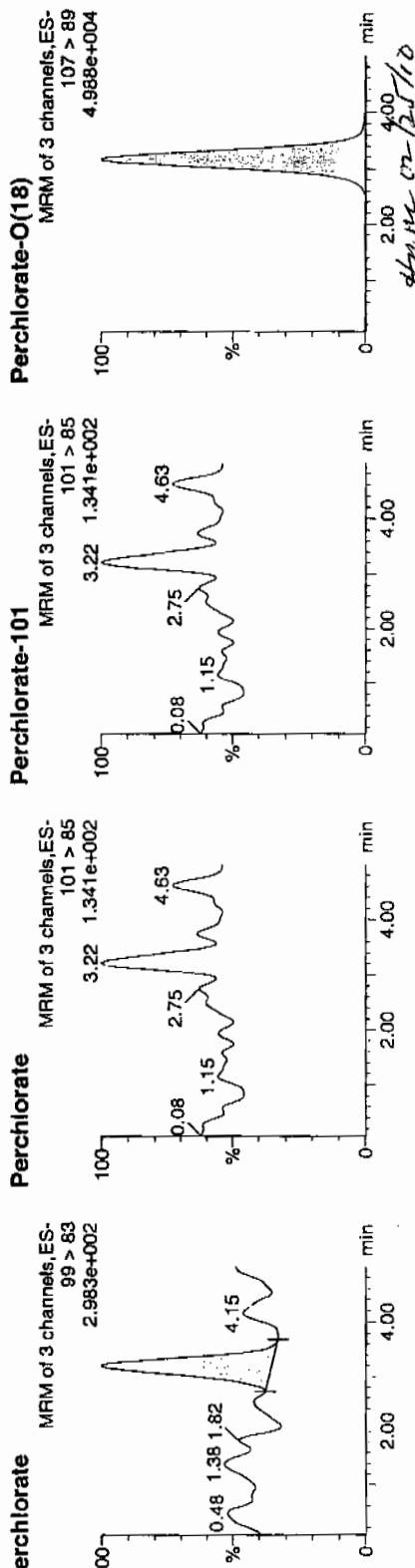
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223036a
Date: 23-Feb-2010
Time: 17:16:21
D: IPB005
File: 1:1,A

0.24-10



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B005 Perchlorate	99 > 83	3.20	71.064	71.064	bb			0.0015			8.434	0.00
B005 Perchlorate-101	101 > 85											
B005 Perchlorate-O(18)	107 > 89	3.17	18894.705	18894.705	bb			0.4618	92.35	-7.65	2125.4...	

Nairb.ref

; Positive ion monoisotopic and average masses from solution
 ; of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
 ; Most useful general purpose calibrant for all low
 ; MW applications, including MS/MS work.
 ; At high resolution, readily covers from m/z 50-2000.
 ; At reduced resolution, can be used to over m/z 3000.
 ; NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.

Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

QUATRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

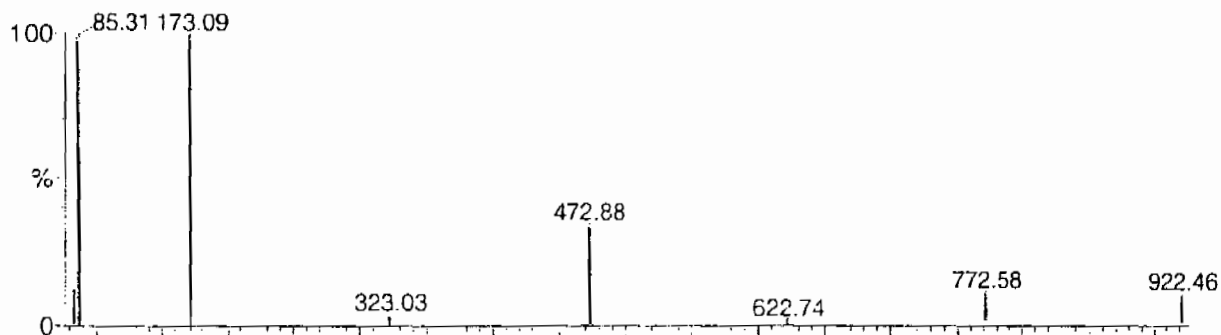
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

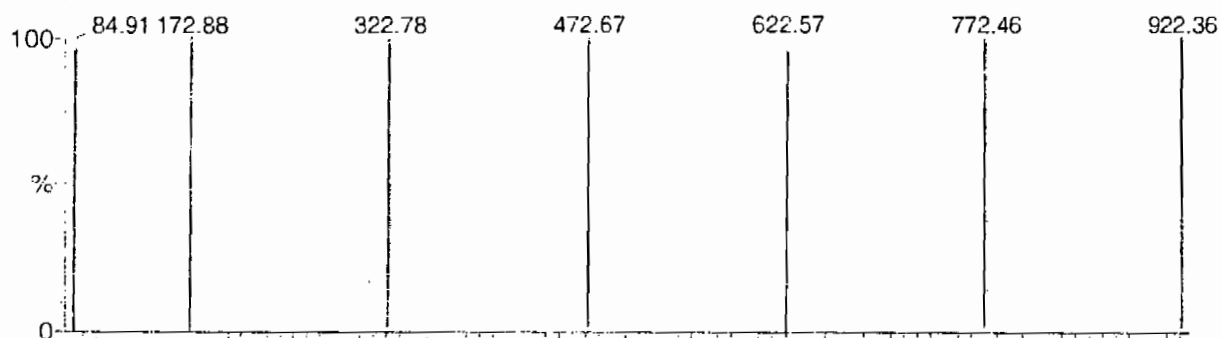
DATA HIGHLIGHTED BY CURS 01-08-08

Data file: STATMS1 - Uncalibrated

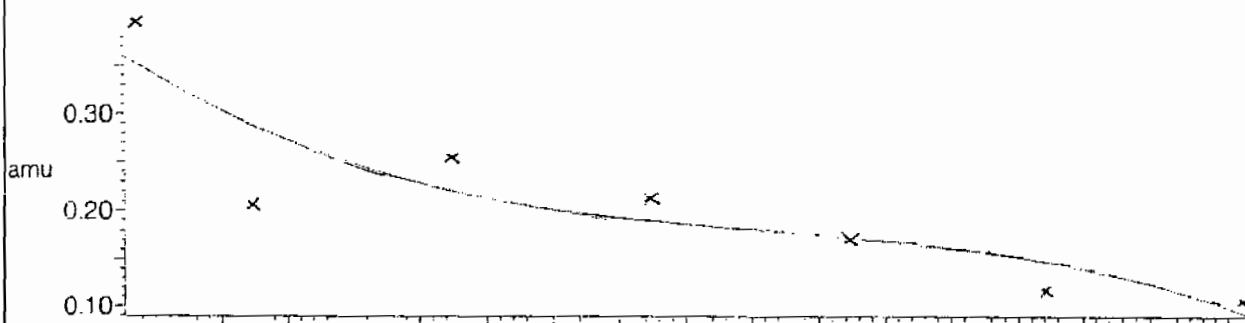
7 matches of 7 tested references



Reference file: Nairb

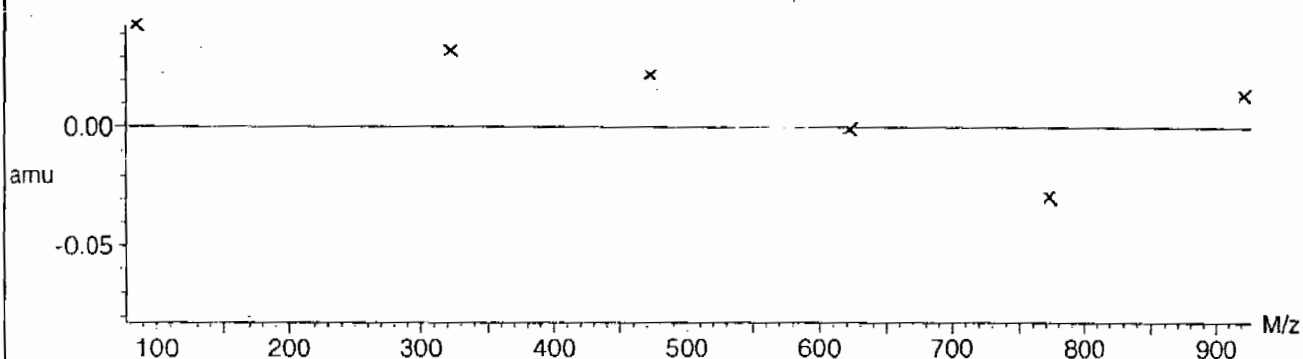


Mass difference (Raw - Ref mass)



Residuals

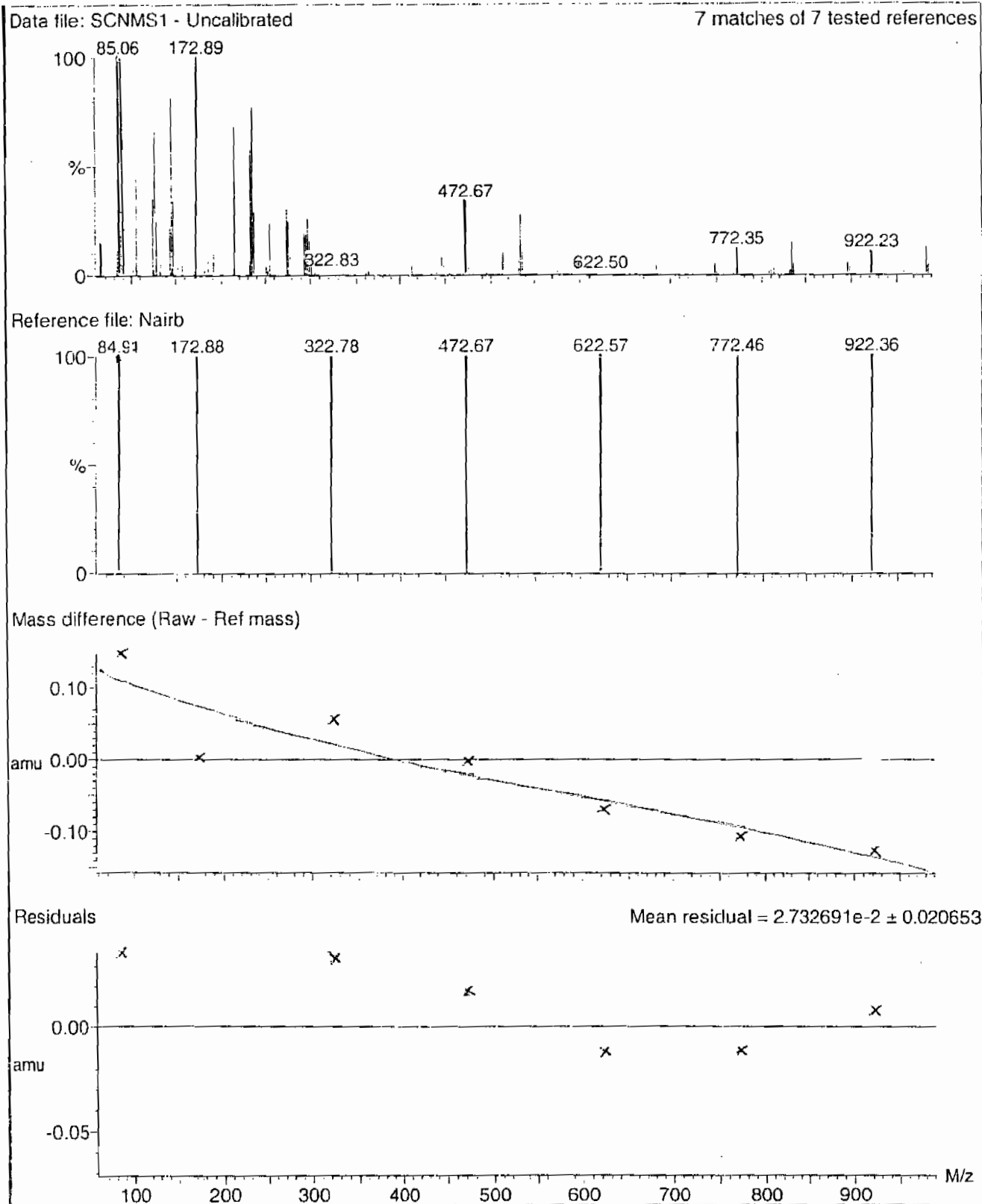
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:20:09 2008

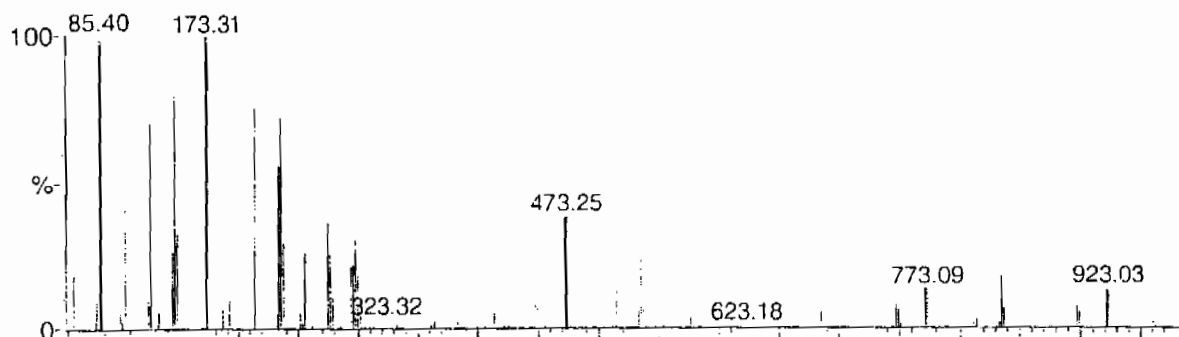


Calibration Report - MS1 Scan Speed Compensation

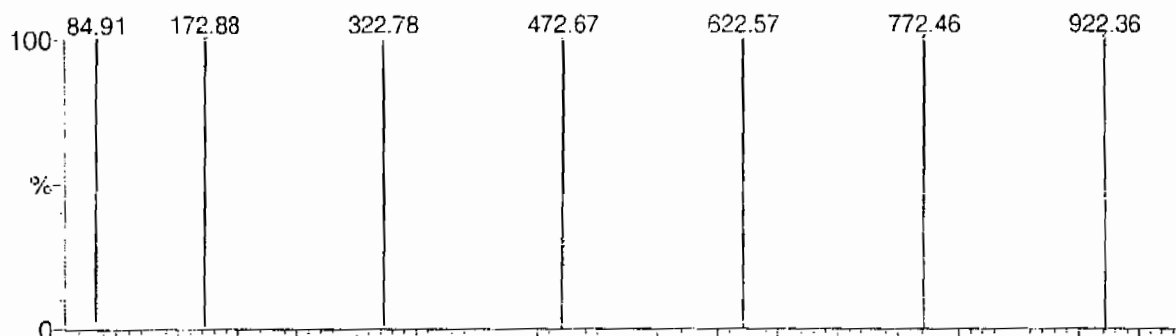
Page 1 of 1

Printed: Tue Jan 08 12:21:04 2008

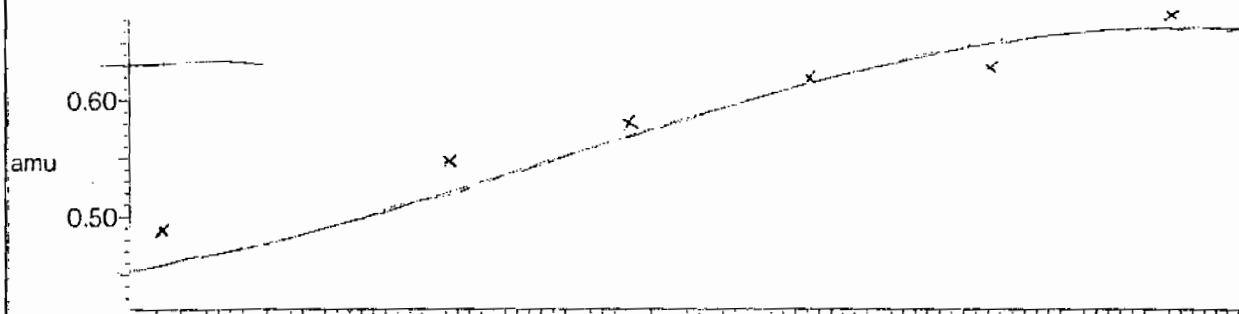
Data file: FASTMS1 - Uncalibrated 7 matches of 7 tested references



Reference file: Nairb

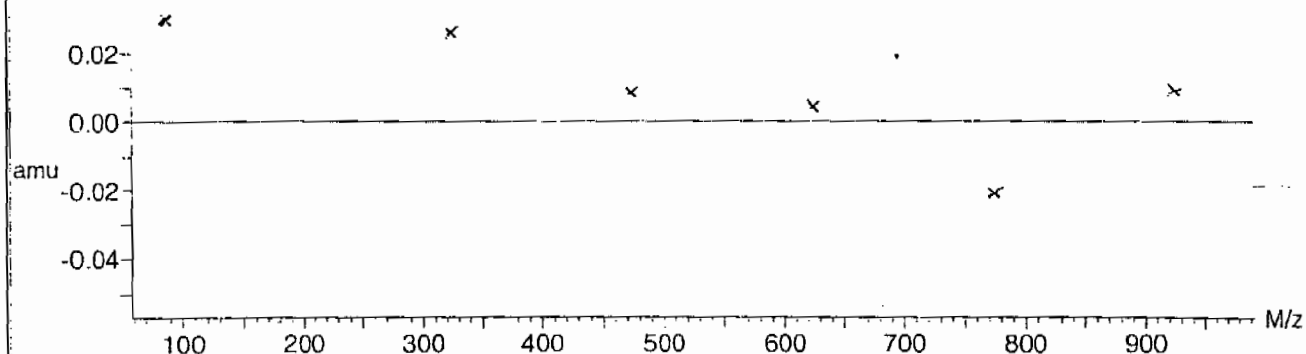


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.224580 \times 10^{-2} \pm 0.016544$



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

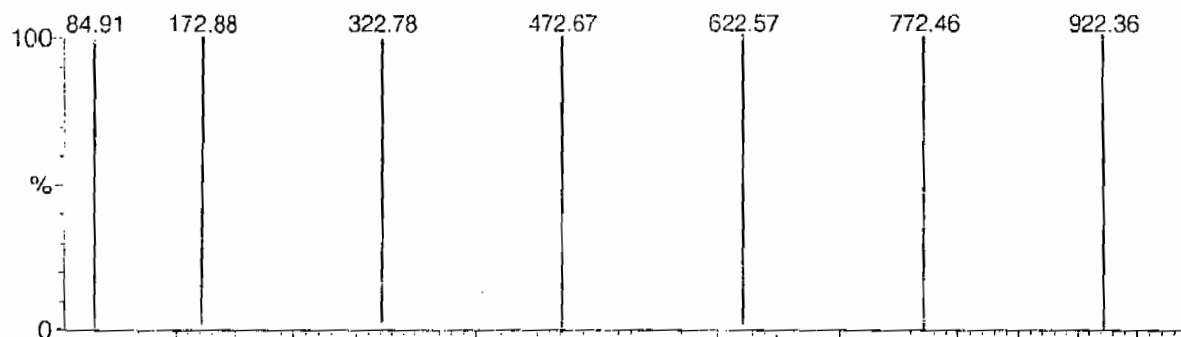
Printed: Tue Jan 08 12:23:51 2008

Data file: FASTMS2 - Uncalibrated

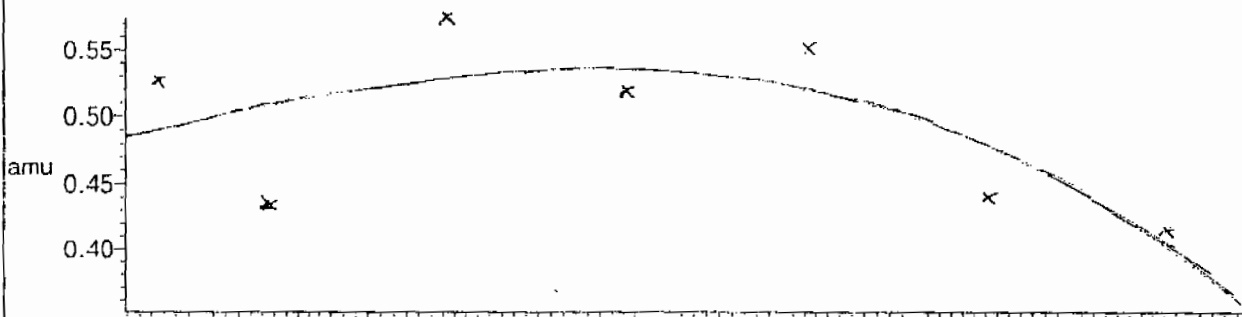
7 matches of 7 tested references



Reference file: Nairb

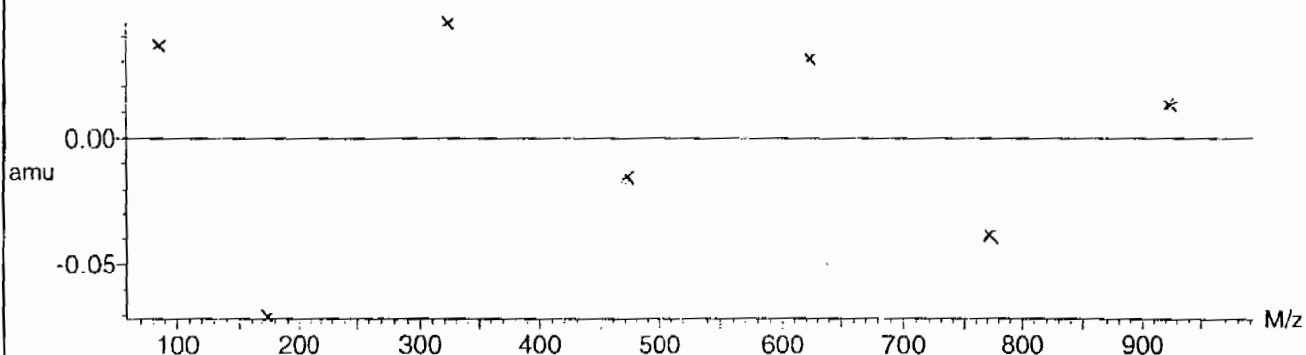


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.598289 \times 10^{-2} \pm 0.017899$



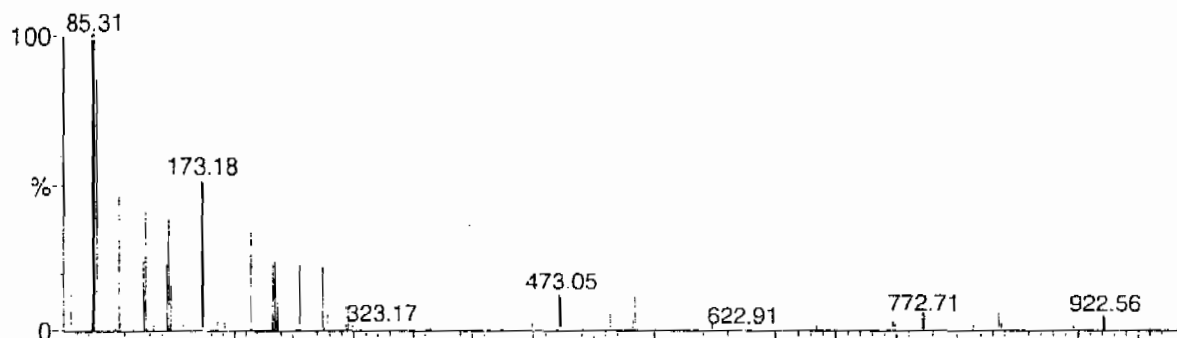
Calibration Report - MS2 Scanning

Page 1 of 1

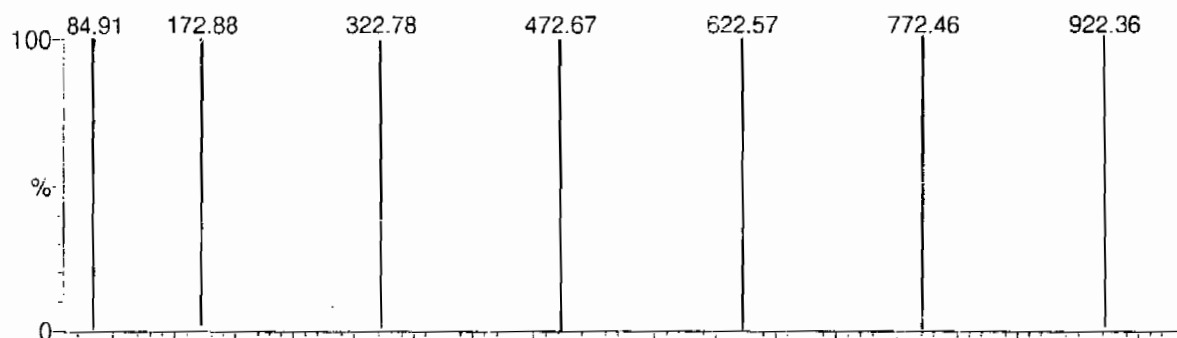
Printed: Tue Jan 08 12:22:56 2008

Data file: SCNMS2 - Uncalibrated

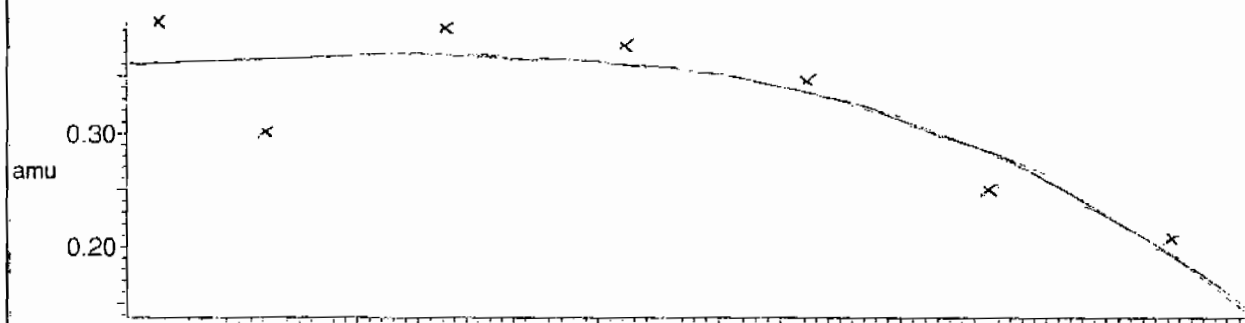
7 matches of 7 tested references



Reference file: Nairb

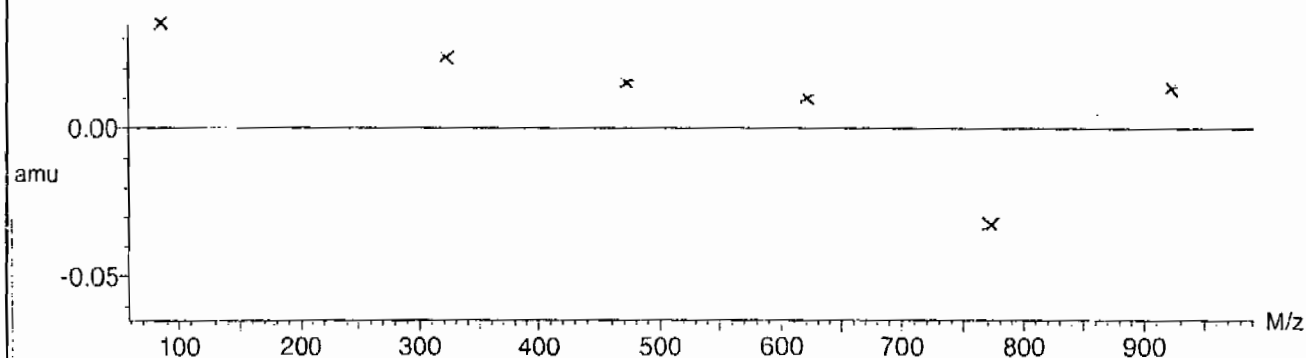


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.782494 \times 10^{-2} \pm 0.017442$



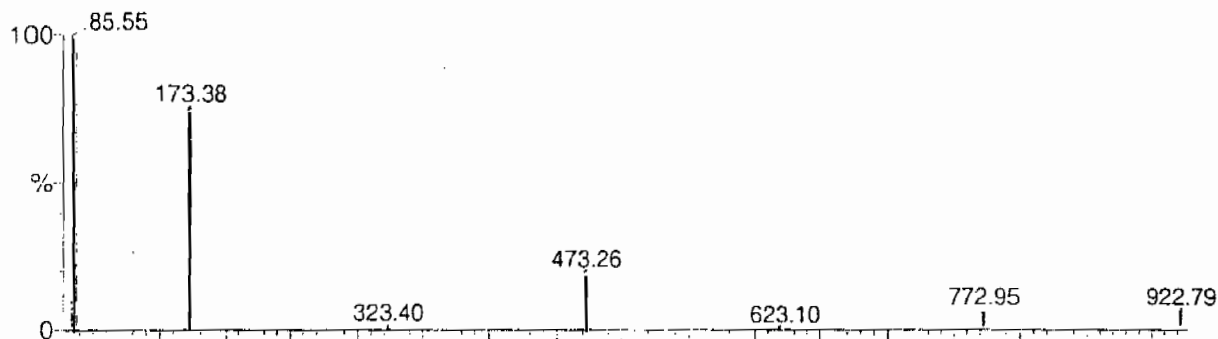
Calibration Report - MS2 Static

Page 1 of 1

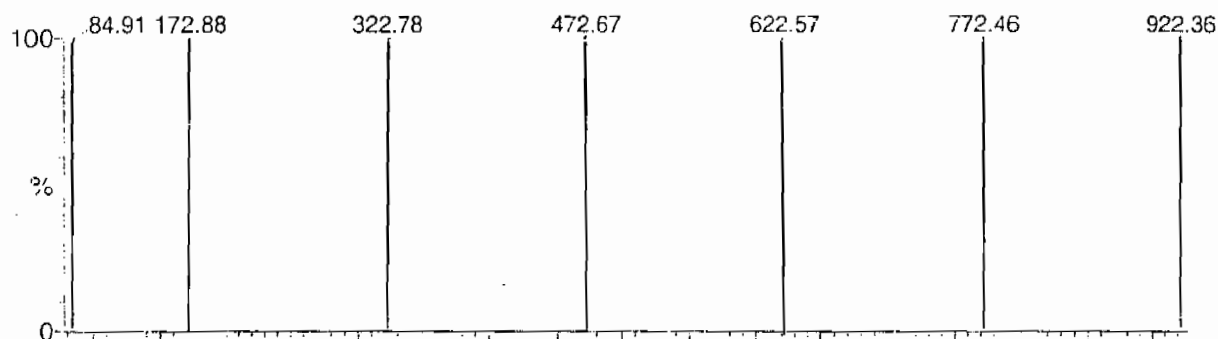
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

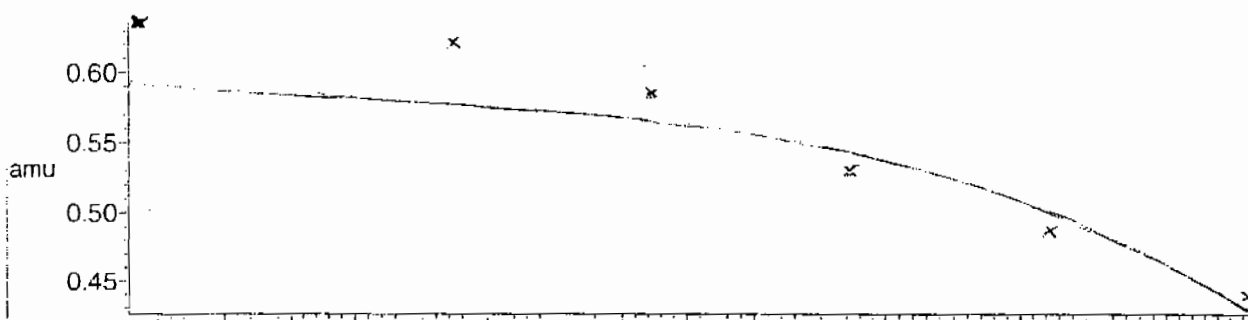
7 matches of 7 tested references



Reference file: Nairb

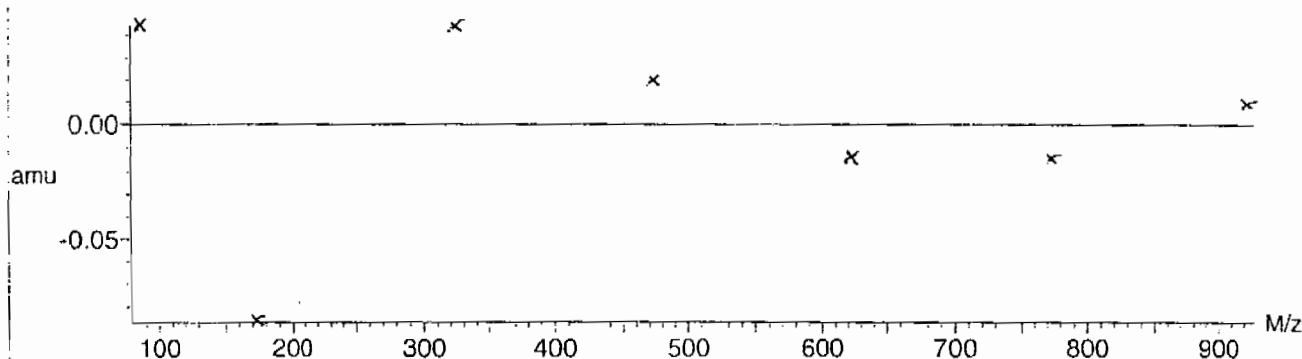


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.295980 \times 10^{-2} \pm 0.025603$



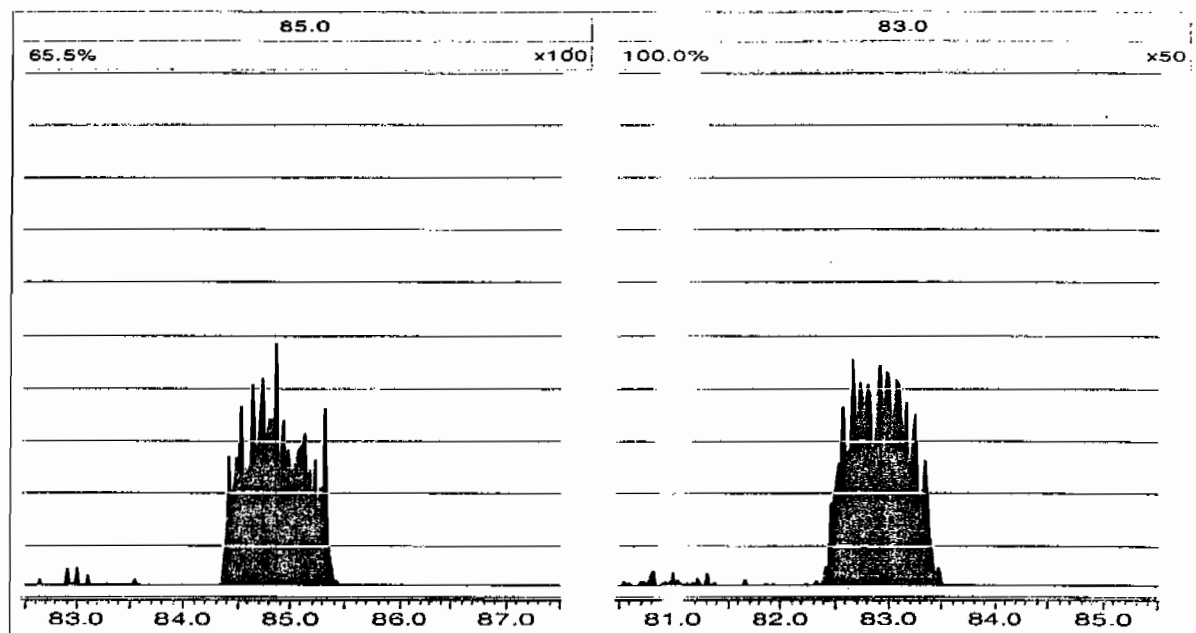
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Tuesday, February 23, 2010 10:32:55 Eastern Standard Time



Perchlorate RT And Area Summary

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1514

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0223006a	23-FEB-10	18832.2				
Lower Area Limit			9416.1				
Upper Area Limit			37664.4				
1202035646	per0223012a	23-FEB-10 14:03	19334.2	3.23	3.24692	1.005	
1202035647	per0223013a	23-FEB-10 14:11	19182.6	3.23	3.24692	1.005	
1202035650	per0223014a	23-FEB-10 14:19	19587.2	3.28	3.29643	1.005	
245979001	per0223015a	23-FEB-10 14:27	20280.1	3.21	3.23435	1.008	
1202035648	per0223016a	23-FEB-10 14:35	20514.8	3.2	3.20958	1.003	
1202035649	per0223017a	23-FEB-10 14:43	20842.3	3.21	3.2219	1.004	
245979002	per0223018a	23-FEB-10 14:51	18991.1	3.22	3.23443	1.004	
245979003	per0223019a	23-FEB-10 14:59	19236.7	3.21	3.23438	1.008	

Perchlorate RT And Area Summary

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: General Engineering Laboratories
 Lab Code: GEL
 Instrument ID: LCMSMS
 HPLC Column: Phenomenex Ion Pac AG-16.2 X 50 mm

GEL Job No.(SDG): 10-1514

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0223006a	23-FEB-10	18832.2				
Lower Area Limit			9416.1				
Upper Area Limit			37664.4				
245979004	per0223020a	23-FEB-10 15:07	19096.9	3.21	3.20958	1	
245979005	per0223021a	23-FEB-10 15:15	19421.2	3.2	3.22195	1.007	
245979006	per0223025a	23-FEB-10 15:47	19247.5	3.21	3.2096	1	
245979007	per0223026a	23-FEB-10 15:55	19945.3	3.2	3.19712	.999	
245979008	per0223027a	23-FEB-10 16:03	18996	3.2	3.20962	1.003	
245979009	per0223028a	23-FEB-10 16:11	20241.5	3.18	3.19712	1.005	
245979010	per0223029a	23-FEB-10 16:20	18952.5	3.18	3.22192	1.013	
245979011	per0223030a	23-FEB-10 16:28	19616.7	3.18	3.2096	1.009	

Perchlorate RT And Area Summary

GEL Job No.(SDG): 10-1514

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0223006a	23-FEB-10	18832.2				
Lower Area Limit			9416.1				
Upper Area Limit			37664.4				
245979012	per0223031a	23-FEB-10 16:36	18688.6	3.18	3.19712	1.005	
245979013	per0223032a	23-FEB-10 16:44	19675.5	3.18	3.19715	1.005	
245979014	per0223033a	23-FEB-10 16:52	19788.1	3.17	3.19713	1.009	
245979015	per0223034a	23-FEB-10 17:00	18952.5	3.17	3.19713	1.009	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7980

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Date Received: 02-FEB-10

Method: SW846.6850 Modified

GEL Job No (SDG): 10-1514

Matrix: SOIL

GEL Sample ID: 24S979001

Extraction Batch ID: 950062

Date Filtered: 18-FEB-10

Extraction Type: Solid Prep

Injection Volume (uL): 20

%Solids: 95.4

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	1.38	ug/kg	J	1	23-FEB-10 14:27	per0223015a
	Perchlorate Isotope Ratio			3.46			1	23-FEB-10 14:27	per0223015a
14797-73-0	Perchlorate-101	.524	2.1	1.28	ug/kg	J	1	23-FEB-10 14:27	per0223015a
	Perchlorate-O(18)			5.20	ug/kg		1	23-FEB-10 14:27	per0223015a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

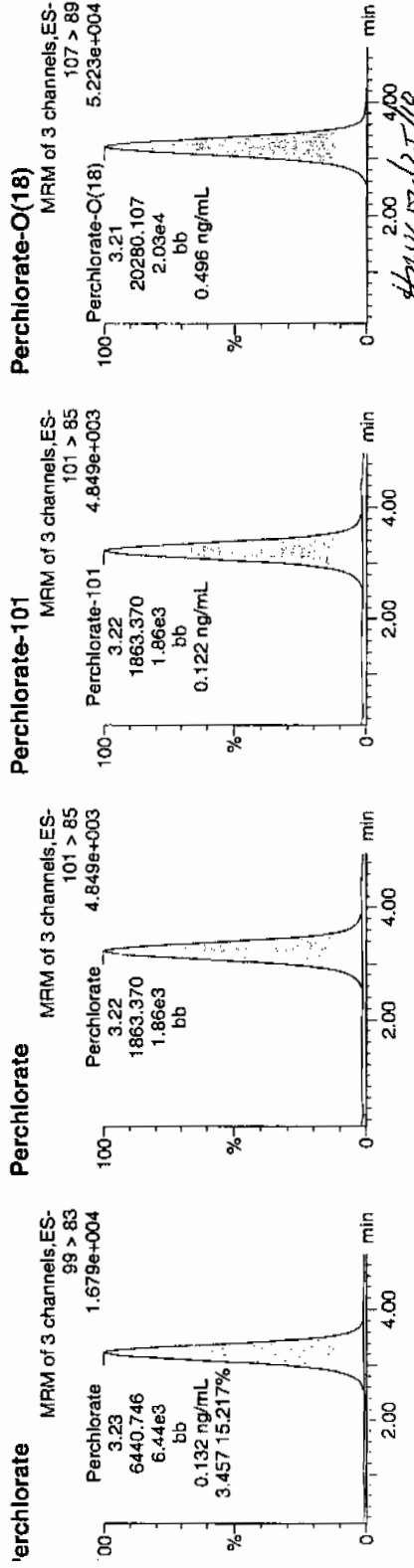
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample Name: per0223015a
Date: 23-Feb-2010
Time: 14:27:21
ID: 245979001
File: 1:3,D



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
45979001	Perchlorate	3.23	6440.746	6440.746	bb			0.1317			587.810	3.46
45979001	Perchlorate-101	3.22	1863.370	1863.370	bb			0.1222			381.924	
45979001	Perchlorate-O(18)	3.21	20280.107	20280.107	bb			0.4956	99.12	-0.88	1061.6...	

6440.746 / 10 = 100 ✓
428901.4 / 95.38 = 1.38 ✓

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7958

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979002

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 80

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.622	2.49	0.622	ug/kg	U	1	23-FEB-10 14:51	per0223018a
	Perchlorate Isotope Ratio						1	23-FEB-10 14:51	per0223018a
14797-73-0	Perchlorate-101	.622	2.49	0.622	ug/kg	U	1	23-FEB-10 14:51	per0223018a
	Perchlorate-O(18)			5.77	ug/kg		1	23-FEB-10 14:51	per0223018a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223018a

Date: 23-Feb-2010

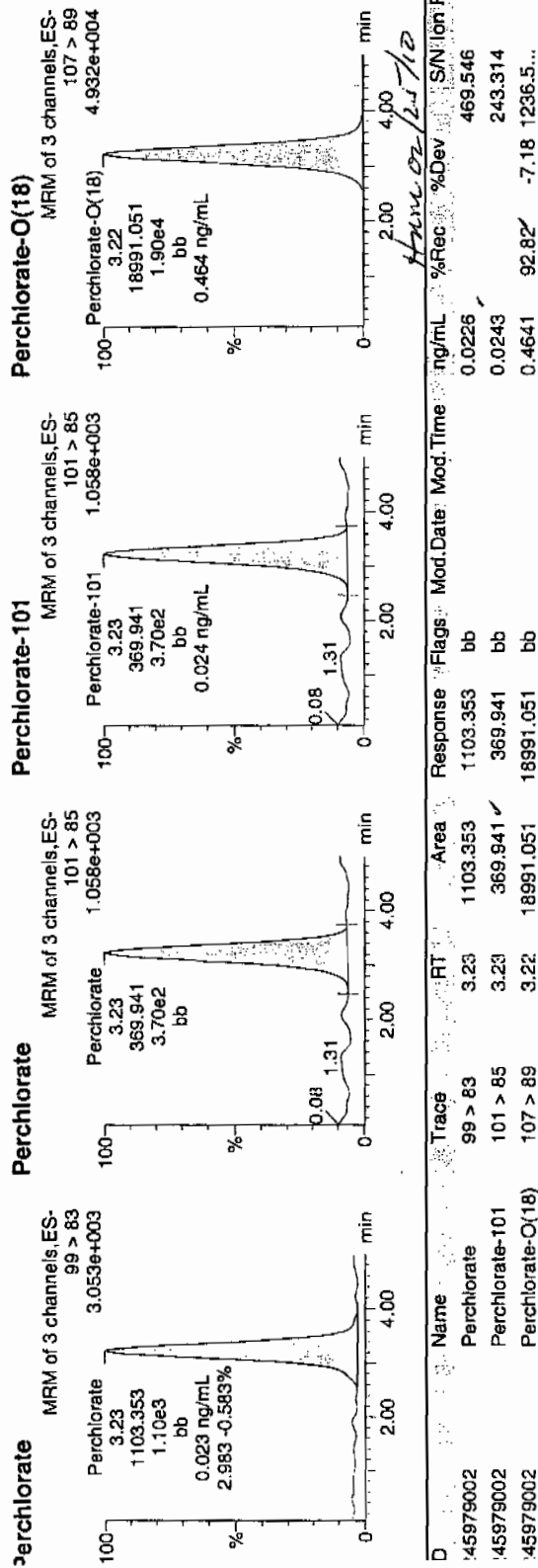
Time: 14:51:25

D: 245979002

Vial: 1:4,A

02-24-10

1200 | 950000 | 50000 | 11



Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 950062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7960
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979003
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 93.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.536	2.14	0.536	ug/kg	U	1	23-FEB-10 14:59	per0223019a
	Perchlorate Isotope Ratio						1	23-FEB-10 14:59	per0223019a
14797-73-0	Perchlorate-101	.536	2.14	0.536	ug/kg	U	1	23-FEB-10 14:59	per0223019a
	Perchlorate-O(18)			5.04	ug/kg		1	23-FEB-10 14:59	per0223019a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223019a

Date: 23-Feb-2010

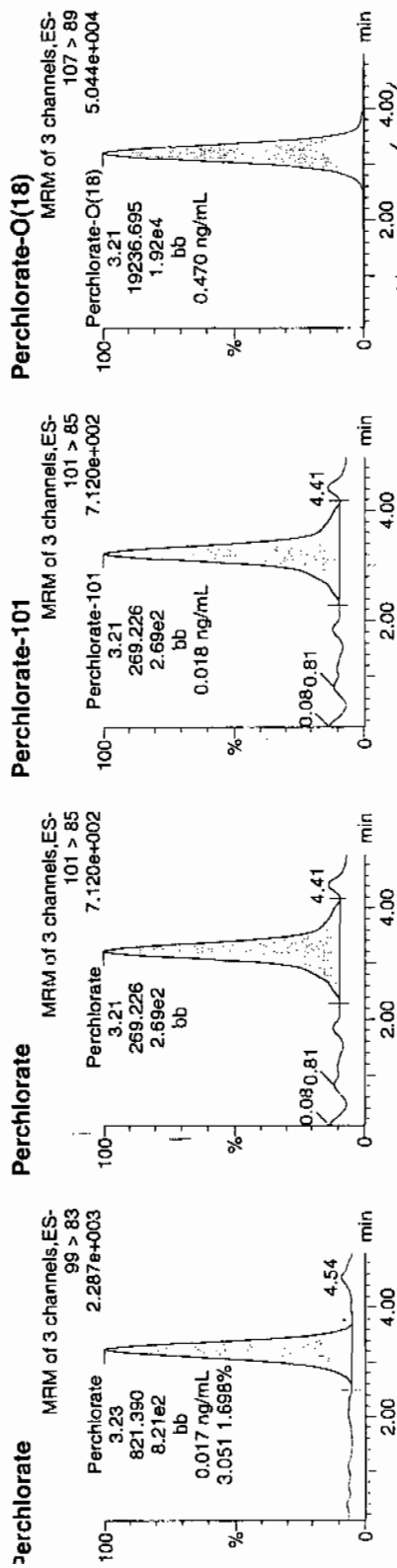
Time: 14:59:28

D: 245979003

Vial: 1:4,B

0224-10

14200 | 950063 | 5020 | 11



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979003	Perchlorate	99 > 83	3.23	821.390	821.390	bb			0.0168			127.403	3.05
245979003	Perchlorate-101	101 > 85	3.21	269.226	269.226	bb			0.0177			120.363	
245979003	Perchlorate-O(18)	107 > 89	3.21	19236.695	19236.695	bb			0.4701	94.02	-5.98	7562.9...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 250062
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-7979
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514
 GEL Sample ID: 245979004
 Date Filtered: 18-FEB-10
 Injection Volume (uL): 20
 %Solids: 74

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 15:07	per0223020a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 15:07	per0223020a
	Perchlorate-O(18)			6.30	ug/kg		1	23-FEB-10 15:07	per0223020a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223020a

Date: 23-Feb-2010

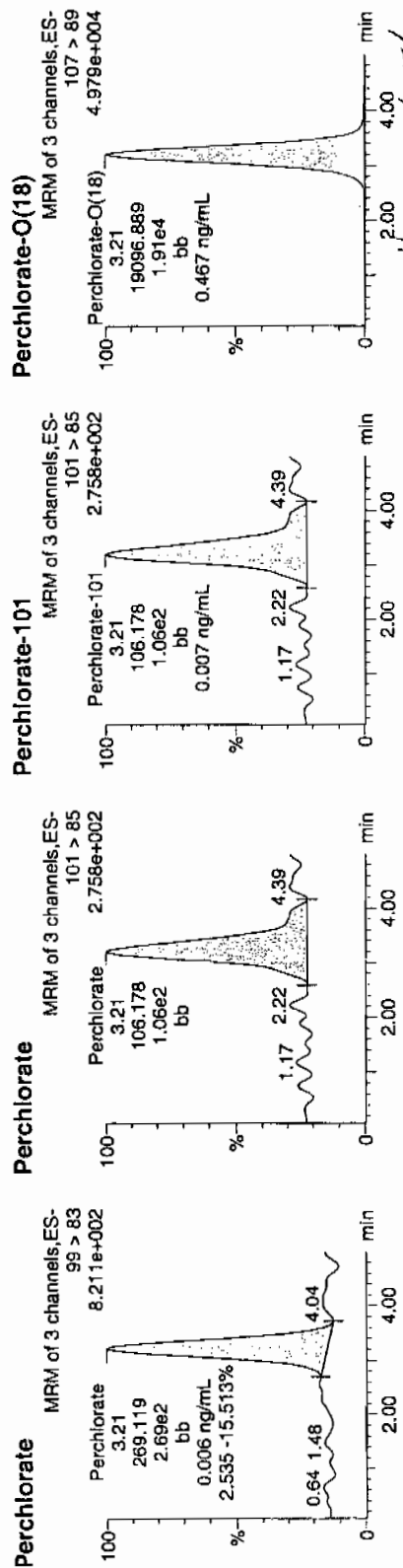
Time: 15:07:30

ID: 245979004

Vial: 1:4,C

02-24-10

1722 | 950003 | 5020 | 11



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979004	Perchlorate	99 > 83	3.21	269.119	269.119	bb			0.0055	-	84.772	2.53	
245979004	Perchlorate-101	101 > 85	3.21	106.178	106.178	bb			0.0070		38.462		
245979004	Perchlorate-O(18)	107 > 89	3.21	19096.889	19096.889	bb			0.4667	93.34	-6.66	3024.8...	

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7972

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979005

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 91.3

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 15:15	per0223021a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:15	per0223021a
14797-73-0	Perchlorate-101	.548	2.19	0.548	ug/kg	U	1	23-FEB-10 15:15	per0223021a
	Perchlorate-O(18)			5.20	ug/kg		1	23-FEB-10 15:15	per0223021a

^a When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Sample: per0223021a

Date: 23-Feb-2010

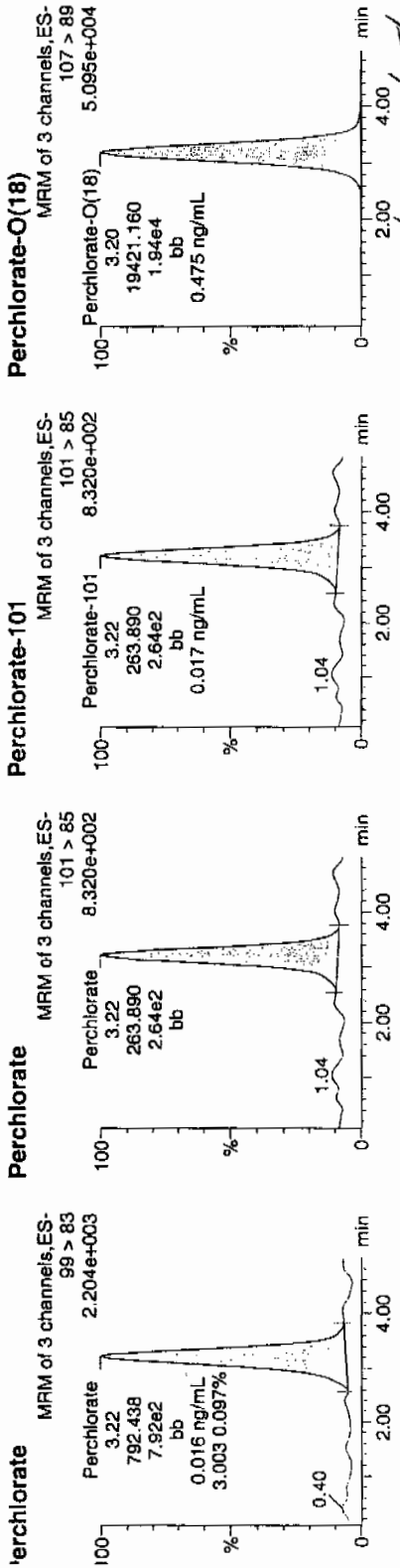
Time: 15:15:33

ID: 245979005

Vial: 1:4,D

02-24-10

19.00 | 950003 | 5000 | 11



Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
45979005 Perchlorate	99 > 83	3.22	792.438	792.438	bb			0.0162		61.795		3.00
45979005 Perchlorate-101	101 > 85	3.22	263.890	263.890	bb			0.0173		77.202		
45979005 Perchlorate-O(18)	107 > 89	3.20	19421.160	19421.160	bb			0.4746	94.93	-5.07	9547.7...	

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7957

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979006

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 77

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.647	2.59	0.647	ug/kg	U	1	23-FEB-10 15:47	per0223025a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:47	per0223025a
14797-73-0	Perchlorate-101	.647	2.59	0.647	ug/kg	U	1	23-FEB-10 15:47	per0223025a
	Perchlorate-O(18)			6.09	ug/kg		1	23-FEB-10 15:47	per0223025a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

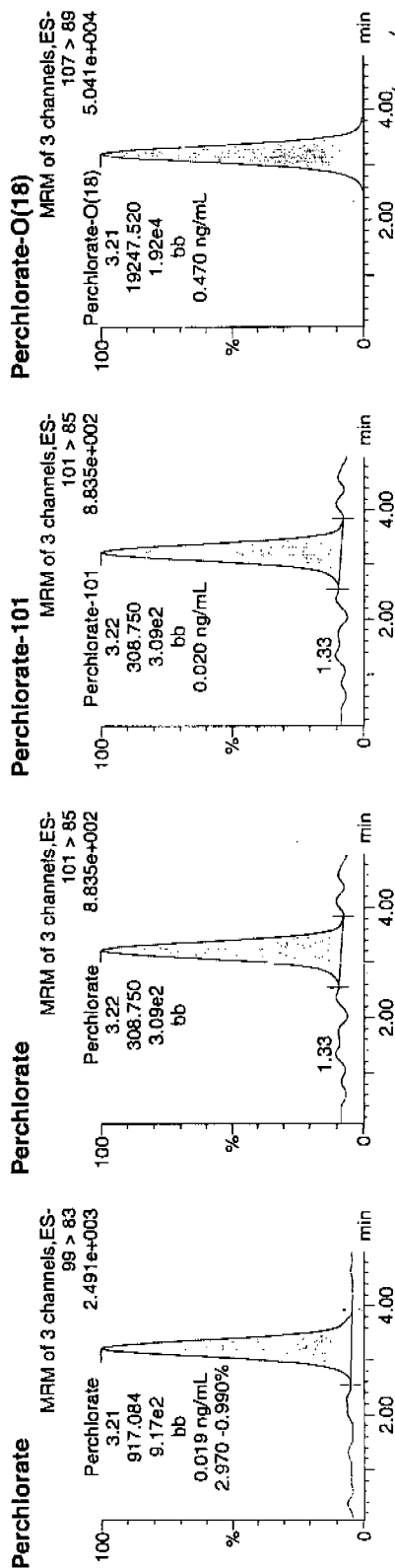
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Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223025a
Date: 23-Feb-2010
Time: 15:47:50
ID: 245979006
Vial: 1:4,E

02-24-10

1620-1950003 | 3020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979006	Perchlorate	99 > 83	3.21	917.084	917.084	bb			0.0188			278.303	2.97
245979006	Perchlorate-101	101 > 85	3.22	308.750	308.750	bb			0.0202			94.886	
245979006	Perchlorate-O(18)	107 > 89	3.21	19247.520	19247.520	bb			0.4704	94.08	-5.92	10826...	

Handwritten: 02/25/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7974

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979007

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 24.9

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.527	2.11	0.527	ug/kg	U	1	23-FEB-10 15:55	per0223026a
	Perchlorate Isotope Ratio						1	23-FEB-10 15:55	per0223026a
14797-73-0	Perchlorate-101	.527	2.11	0.527	ug/kg	U	1	23-FEB-10 15:55	per0223026a
	Perchlorate-O(18)			5.14	ug/kg		1	23-FEB-10 15:55	per0223026a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223026a

Date: 23-Feb-2010

Time: 15:55:51

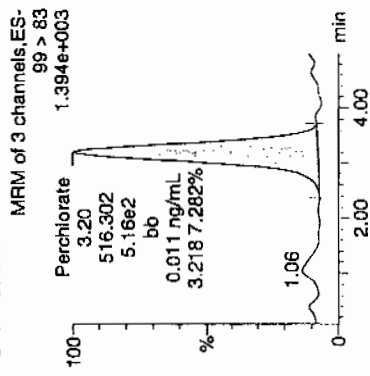
ID: 245979007

Vial: 1:4.F

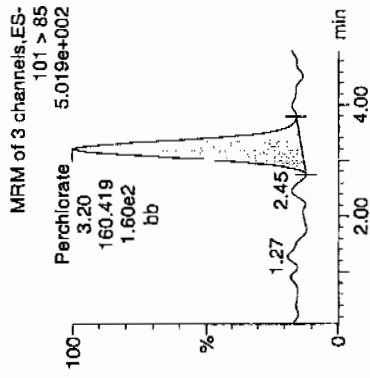
02-24-10

LAN-950063 | 3070 | 11

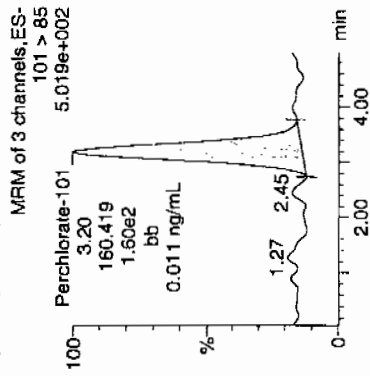
Perchlorate



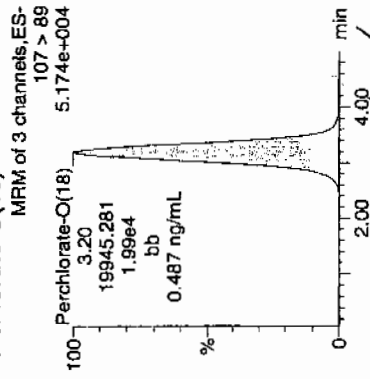
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979007	Perchlorate	99 > 83	3.20	516.302	516.302	bb			0.0106			46.287	3.22
245979007	Perchlorate-101	101 > 85	3.20	160.419	160.419	bb			0.0105			46.284	
245979007	Perchlorate-O(18)	107 > 88	3.20	19945.281	19945.281	bb			0.4874	97.49	-2.51	4458.4...	

3.20 min or 12.5% / 10

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7961

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 02-FEB-10

Instrument: LCMSMS

GEL Job No (SDG): 10-1514

Method: SW846 6850 Modified

GEL Sample ID: 245979008

Matrix: SOIL

Date Filtered: 18-FEB-10

Extraction Batch ID: 950062

Injection Volume (uL): 20

Extraction Type: Solid Prep

%Solids: 85

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.34	0.586	ug/kg	U	1	23-FEB-10 16:03	per0223027a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:03	per0223027a
14797-73-0	Perchlorate-101	.586	2.34	0.586	ug/kg	U	1	23-FEB-10 16:03	per0223027a
	Perchlorate-O(18)			5.44	ug/kg		1	23-FEB-10 16:03	per0223027a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

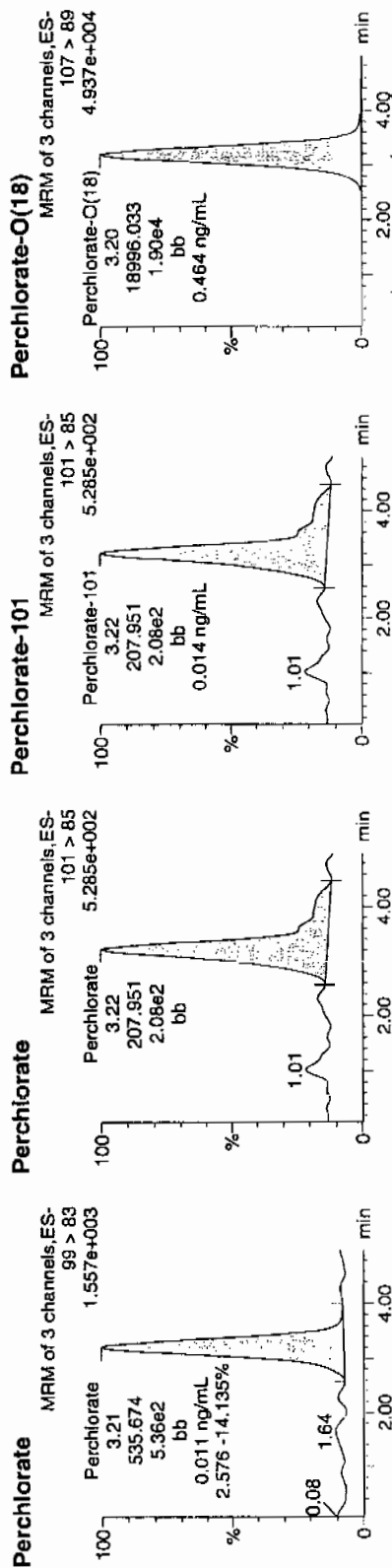
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Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223027a
Date: 23-Feb-2010
Time: 16:03:52
ID: 245979008
Vial: 1:5,A

02-24-10

16220 | 950003 | 5020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
245979008	Perchlorate	99 > 83	3.21	535.674	535.674	bb			0.0110			104.541	2.58
245979008	Perchlorate-101	101 > 85	3.22	207.951	207.951	bb			0.0136			48.051	
245979008	Perchlorate-O(18)	107 > 89	3.20	18996.033	18996.033	bb			0.4642	92.85	-7.15	12965...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Client Sample No.

RE15-10-7971

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979009

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 74

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 16:11	per0223028a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:11	per0223028a
14797-73-0	Perchlorate-101	.675	2.7	0.675	ug/kg	U	1	23-FEB-10 16:11	per0223028a
	Perchlorate-O(18)			6.68	ug/kg		1	23-FEB-10 16:11	per0223028a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223028a

Date: 23-Feb-2010

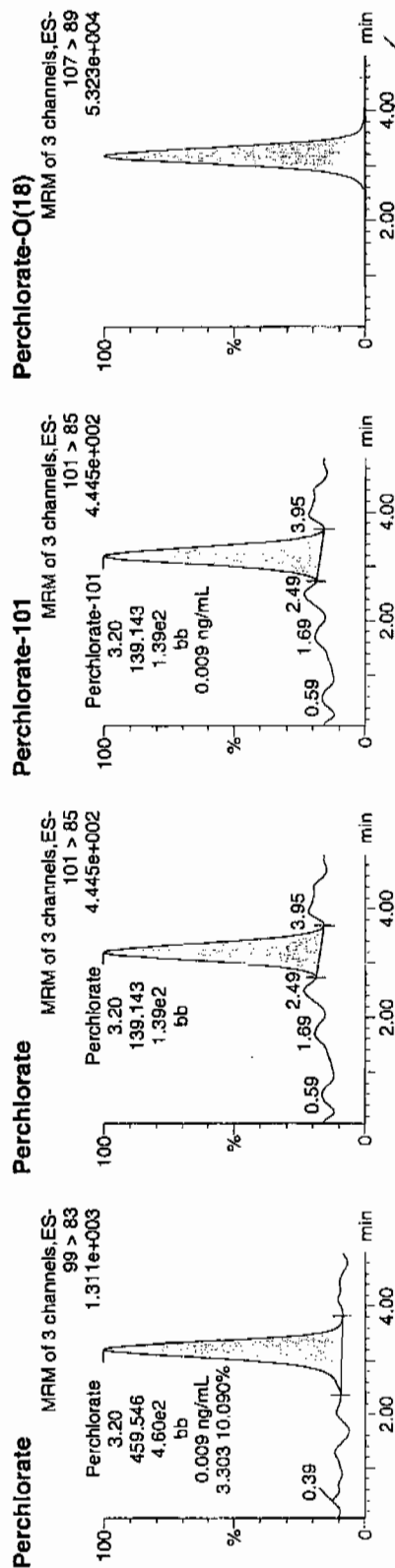
Time: 16:11:56

ID: 245979009

Vial: 1:5.B

02-24-10

LANC | 950063 | 5070 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979009	Perchlorate	99 > 83	3.20	459.546	459.546	bb			0.0094			123.123	3.30
245979009	Perchlorate-101	101 > 85	3.20	139.143	139.143	bb			0.0091			123.087	
245979009	Perchlorate-O(18)	107 > 89	3.18	20241.541	20241.541	bb			0.4947	98.94	-1.06	6320.3...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7966

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979010

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 20.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:20	per0223029a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:20	per0223029a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:20	per0223029a
	Perchlorate-O(18)			5.12	ug/kg		1	23-FEB-10 16:20	per0223029a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

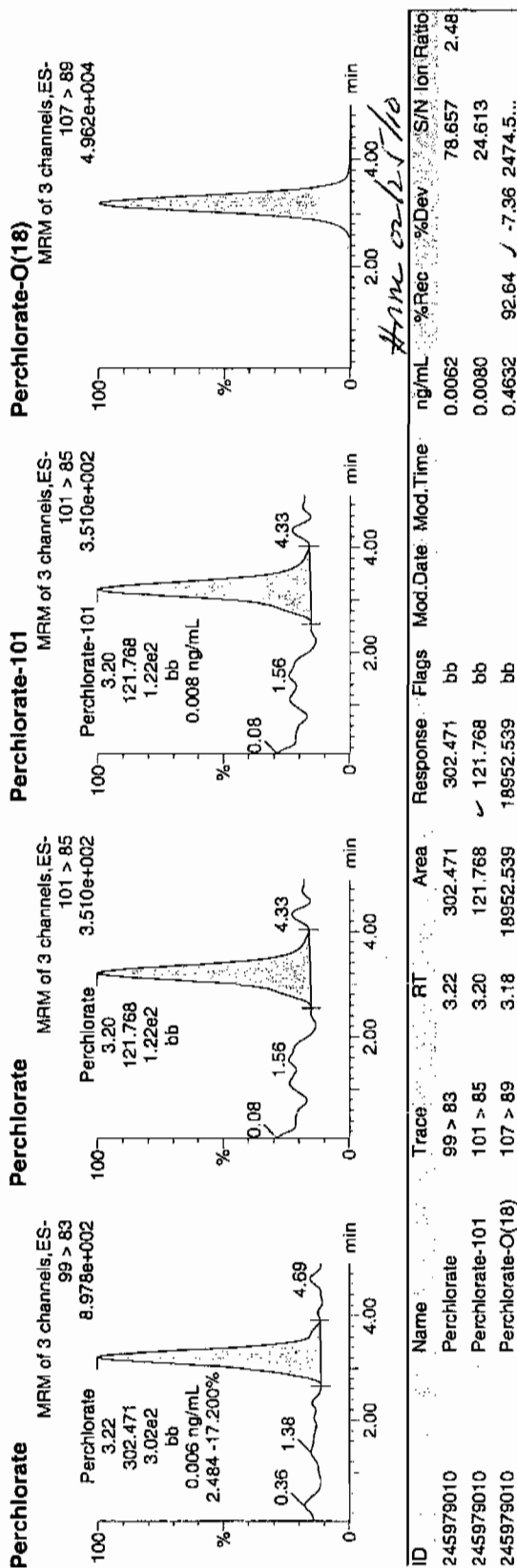
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Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223029a
Date: 23-Feb-2010
Time: 16:20:00
ID: 245979010
Vial: 1:5,C

62410

1792 | 95063 | 5020 | 11



Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE15-10-7959

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 02-FEB-10

Instrument: LCMSMS

GEL Job No (SDG): 10-1514

Method: SW846 6850 Modified

GEL Sample ID: 245979011

Matrix: SOIL

Date Filtered: 18-FEB-10

Extraction Batch ID: 250062

Injection Volume (uL): 20

Extraction Type: Solid Prep

%Solids: 79

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.632	2.53	0.632	ug/kg	U	1	23-FEB-10 16:28	per0223030a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:28	per0223030a
14797-73-0	Perchlorate-101	.632	2.53	0.632	ug/kg	U	1	23-FEB-10 16:28	per0223030a
	Perchlorate-O(18)			6.06	ug/kg		1	23-FEB-10 16:28	per0223030a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223030a

Date: 23-Feb-2010

Time: 16:28:03

D: 245979011

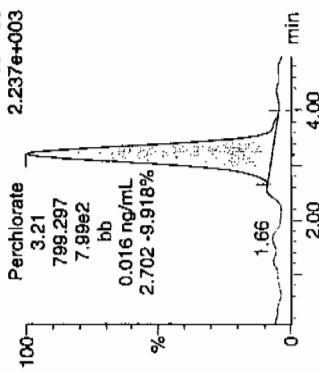
/lali: 1:5,D

662
02-24-10

1920 | 950063 | 5020 | 11

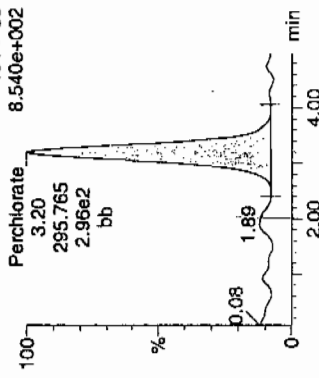
Perchlorate

MRM of 3 channels, ES-
99 > 83



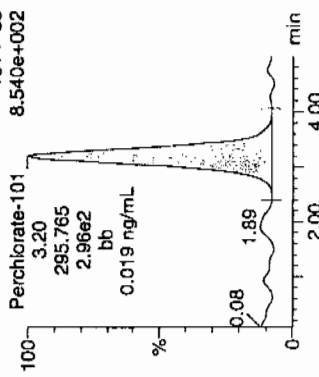
Perchlorate

MRM of 3 channels, ES-
101 > 85



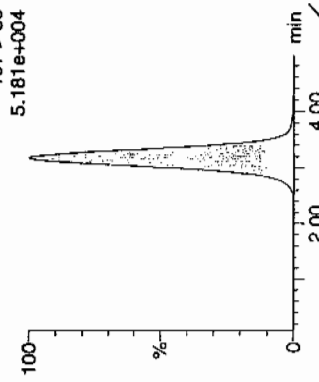
Perchlorate-101

MRM of 3 channels, ES-
101 > 85



Perchlorate-O(18)

MRM of 3 channels, ES-
107 > 89



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979011	Perchlorate	99 > 83	3.21	799.297	799.297	bb			0.0163			111.839	2.70
245979011	Perchlorate-101	101 > 85	3.20	295.765	295.765	bb			0.0194			175.196	
245979011	Perchlorate-O(18)	107 > 89	3.18	19616.748	19616.748	bb			0.4794	95.88	-4.12	1607.3...	

Perchlorate Analysis Data Sheet

Client Sample No.
RE15-10-7969

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979012

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 90.4

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:36	per0223031a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:36	per0223031a
14797-73-0	Perchlorate-101	.553	2.21	0.553	ug/kg	U	1	23-FEB-10 16:36	per0223031a
	Perchlorate-O(18)			5.05	ug/kg		1	23-FEB-10 16:36	per0223031a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

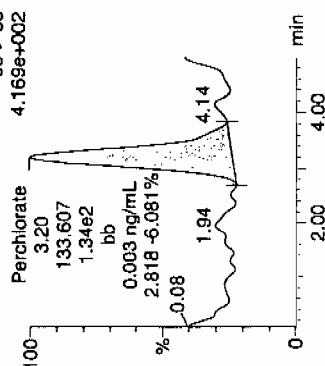
Name: per0223031a
Date: 23-Feb-2010
Time: 16:36:05
ID: 245979012
Vial: 1:5,E

02.24.10

LANL 950063 | 3050 | 11

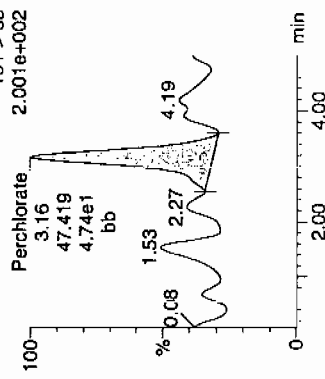
Perchlorate

MRM of 3 channels.ES-
99 > 83



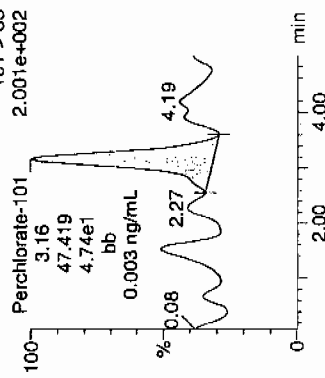
Perchlorate

MRM of 3 channels.ES-
101 > 85



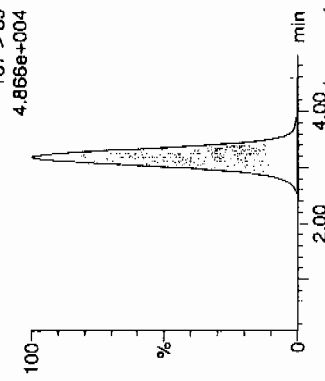
Perchlorate-101

MRM of 3 channels.ES-
101 > 85



Perchlorate-O(18)

MRM of 3 channels.ES-
107 > 89



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979012	Perchlorate	99 > 83	3.20	133.607	133.607	bb			0.0027			33.792	2.82
245979012	Perchlorate-101	101 > 85	3.16	47.419	47.419	bb			0.0031			28.961	
245979012	Perchlorate-O(18)	107 > 89	3.18	18688.551	18688.551	bb			0.4567	91.35	-8.65	2739.7...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8061

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979013

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 85

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.586	2.35	0.586	ug/kg	U	1	23-FEB-10 16:44	per0223032a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:44	per0223032a
14797-73-0	Perchlorate-101	.586	2.35	0.586	ug/kg	U	1	23-FEB-10 16:44	per0223032a
	Perchlorate-O(18)			5.64	ug/kg		1	23-FEB-10 16:44	per0223032a

^a When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

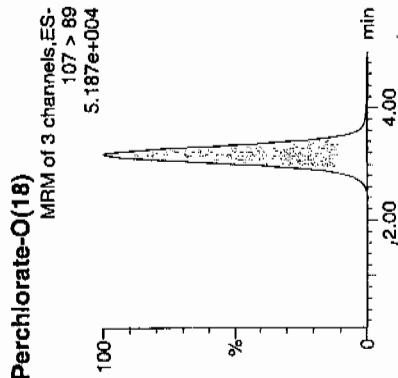
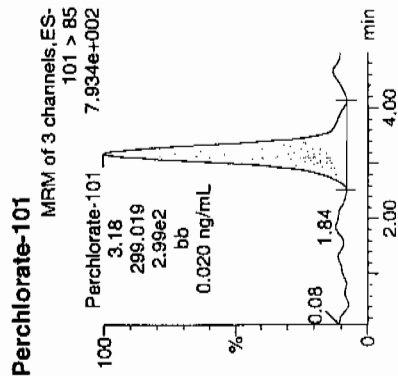
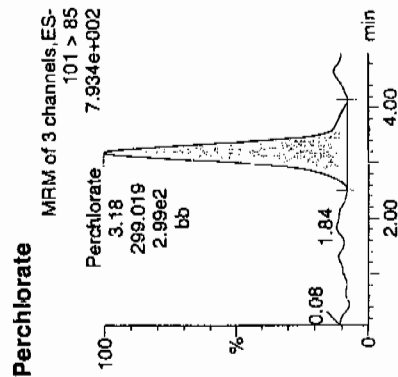
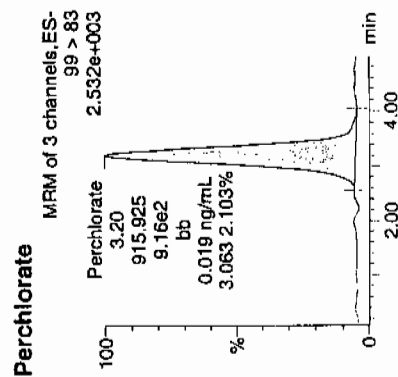
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Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223032a
Date: 23-Feb-2010
Time: 16:44:08
ID: 245979013
Vial: 1:5,F

19202 | 950063 | 9070 | 11

02-24-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979013	Perchlorate	99 > 83	3.20	915.925	915.925	bb			0.0187			222.674	3.06
245979013	Perchlorate-101	101 > 85	3.18	299.019	299.019	bb			0.0196			75.200	
245979013	Perchlorate-O(18)	107 > 89	3.18	19675.496	19675.496	bb			0.4808	96.17	-3.83	7911.4...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8063

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979014

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.613	2.45	0.613	ug/kg	U	1	23-FEB-10 16:52	per0223033a
	Perchlorate Isotope Ratio						1	23-FEB-10 16:52	per0223033a
14797-73-0	Perchlorate-101	.613	2.45	0.613	ug/kg	U	1	23-FEB-10 16:52	per0223033a
	Perchlorate-O(18)			5.93	ug/kg		1	23-FEB-10 16:52	per0223033a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223033a

Date: 23-Feb-2010

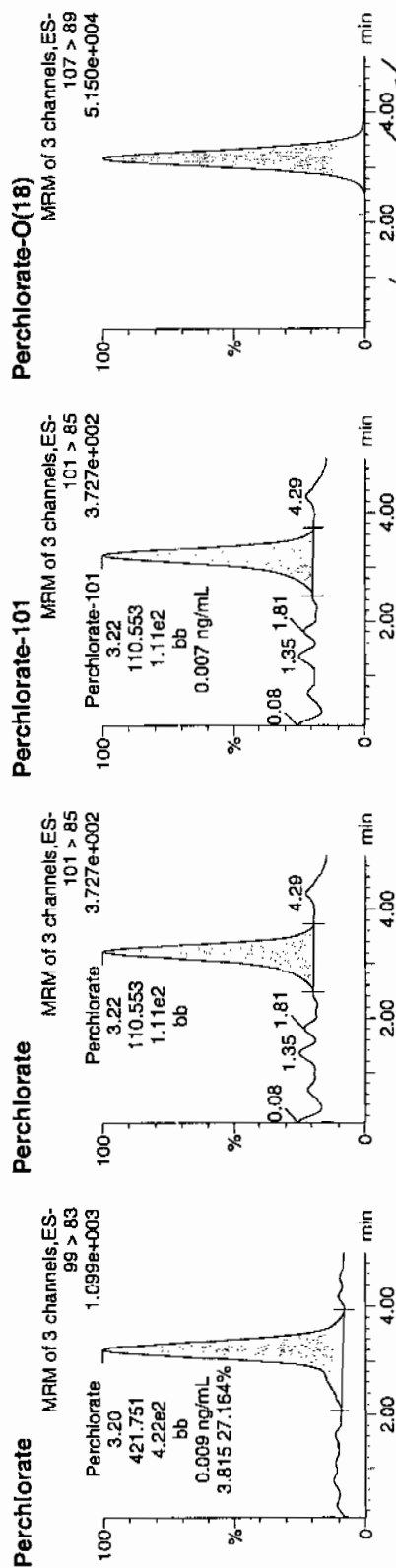
Time: 16:52:10

ID: 245979014

Vial: 1:6,A

1022-1450003 | 3020 | 11

02-24-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979014	Perchlorate	99 > 83	3.20	421,751	421,751	bb			0.0086	-		237,682	3.81
245979014	Perchlorate-101	101 > 85	3.22	110,553	110,553	bb			0.0072	-		12,166	
245979014	Perchlorate-O(18)	107 > 89	3.17	19788,131	19788,131	bb			0.4836	96.72	-3.28	9967.0...	

Handwritten note: 421.751 - 02-24-10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8062

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 245979015

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 90.5

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.552	2.21	0.552	ug/kg	U	1	23-FEB-10 17:00	per0223034a
	Perchlorate Isotope Ratio						1	23-FEB-10 17:00	per0223034a
14797-73-0	Perchlorate-101	.552	2.21	0.552	ug/kg	U	1	23-FEB-10 17:00	per0223034a
	Perchlorate-O(18)			5.12	ug/kg		1	23-FEB-10 17:00	per0223034a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

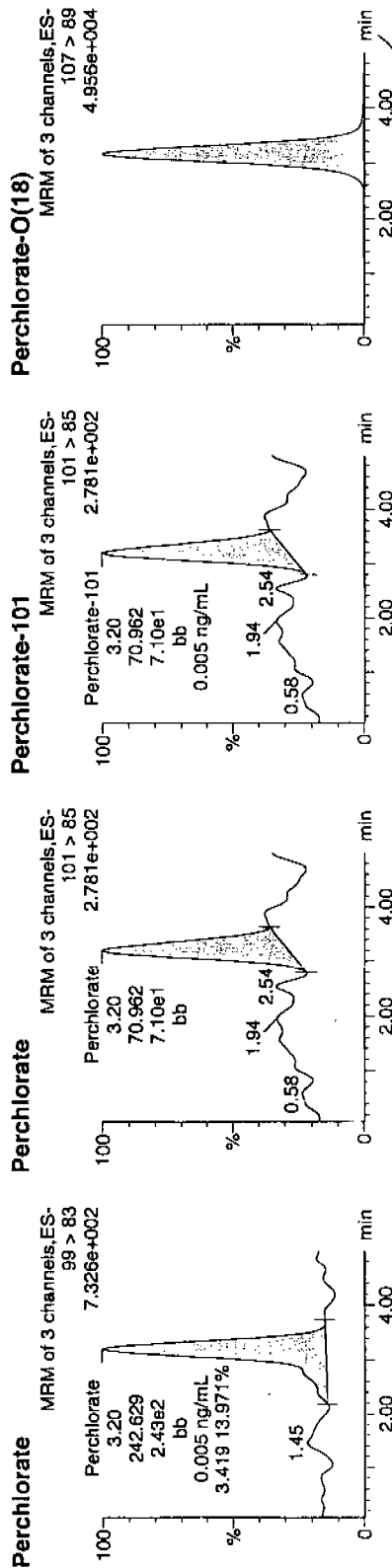
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Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223034a
Date: 23-Feb-2010
Time: 17:00:15
ID: 245979015
Vial: 1:6,B

08/24/10

1A2W-1950003 | 5070 | 1.1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245979015	Perchlorate	99 > 83	3.20	242.629	242.629	bb			0.0050			38.530	3.42
245979015	Perchlorate-101	101 > 85	3.20	70.962	70.962	bb			0.0047			38.724	
245979015	Perchlorate-O(18)	107 > 89	3.17	18952.547	18952.547	bb			0.4632	92.64	-7.36	5316.4...	

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1514

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 23-FEB-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 48901.36

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1514

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 23-FEB-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Paramname Perchlorate-I01

Coefficient of Determination:

Calibration Curve: 15252.16

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4

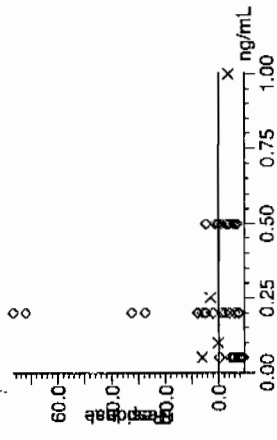
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

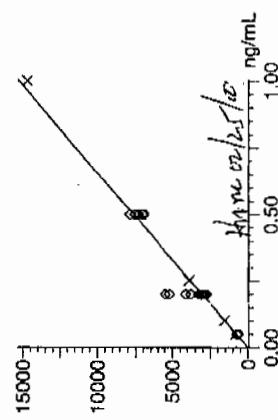
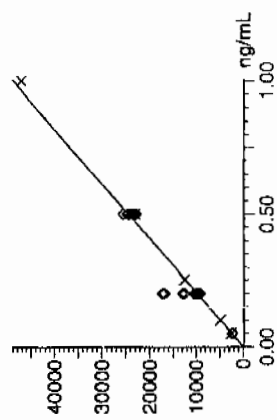
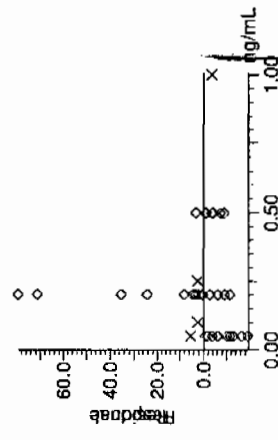
Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
 Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per022310a.mdb 24 Feb 2010 09:36:48
 Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per022310a.cdb 24 Feb 2010 09:37:11

Compound name: Perchlorate
 Response Factor: 48901.4
 RF SD: 2330.99, % Relative SD: 4.76673
 Response type: External Std, Area
 Curve type: RF



Compound name: Perchlorate-101
 Response Factor: 15252.2
 RF SD: 748.661, % Relative SD: 4.90856
 Response type: External Std, Area
 Curve type: RF



Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charles W. Wilson

Page 2 of 2

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qid

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

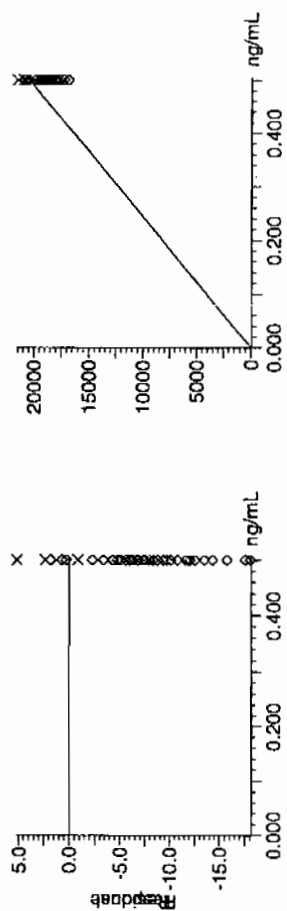
Compound name: Perchlorate-O⁻(18)

Response Factor: 40918.6

RF SD: 2026.62, % Relative SD: 4.9528 ✓

Response type: External Std, Area

Curve type: RF ✓



02-24-10

Form 3

Perchlorate Initial Calibration Verification

GEL Job No.(SDG): 10-1514

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.93	23-FEB-10 13:38	per0223009a
Perchlorate Isotope Ratio		3.22		23-FEB-10 13:38	per0223009a
Perchlorate-101	.5	.5	99.45	23-FEB-10 13:38	per0223009a

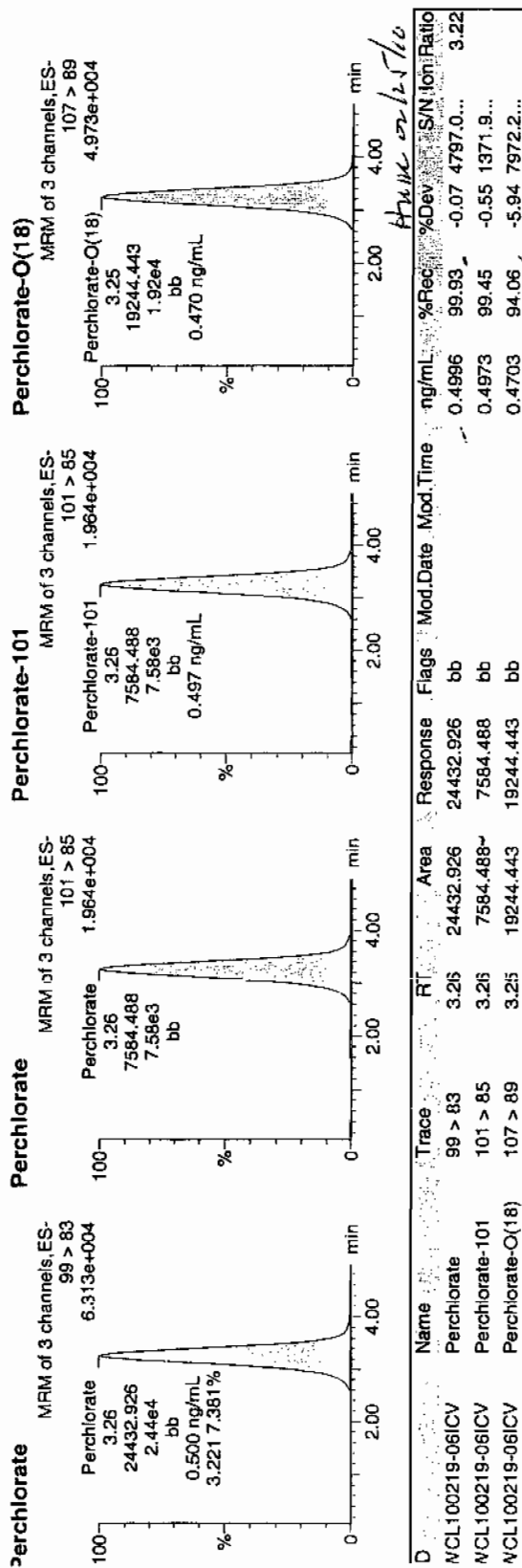
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223009a
Date: 23-Feb-2010
Time: 13:38:42
ID: WCL100219-06ICV
Vial: 1:2,A

*Per
and
ratio*



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
	Perchlorate	99 > 83	3.25	24432.926	24432.926	bb			0.4996	99.93	-0.07	4797.0...	3.22
	Perchlorate-101	101 > 85	3.25	7584.488	7584.488	bb			0.4973	99.45	-0.55	1371.9...	
	Perchlorate-O(18)	107 > 89	3.25	19244.443	19244.443	bb			0.4703	94.06	-5.94	7972.2...	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.18	23-FEB-10 15:23	per0223022a
Perchlorate Isotope Ratio		3.26		23-FEB-10 15:23	per0223022a
Perchlorate-101	.5	.5	99.37	23-FEB-10 15:23	per0223022a
Perchlorate	.5	.52	104.6	23-FEB-10 17:08	per0223035a
Perchlorate Isotope Ratio		3.25		23-FEB-10 17:08	per0223035a
Perchlorate-101	.5	.52	103.03	23-FEB-10 17:08	per0223035a

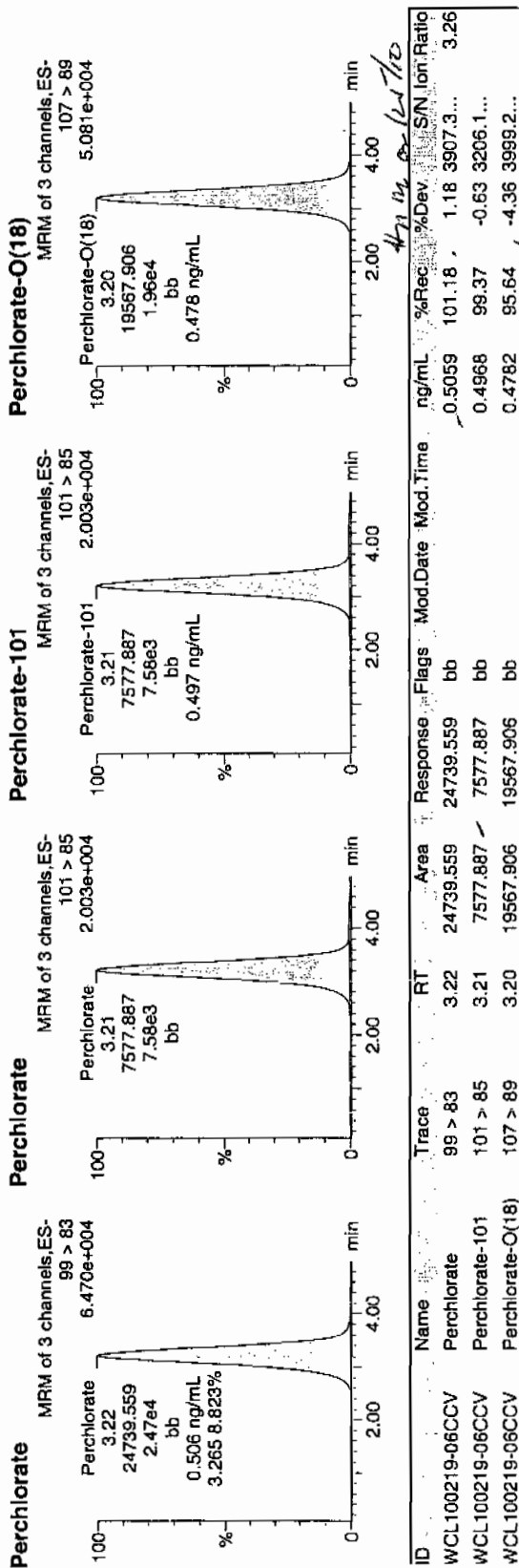
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223022a
Date: 23-Feb-2010
Time: 15:23:34
ID: WCL100219-06CCV
Vial: 1:2,A

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and
02.24.10*



Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223035a

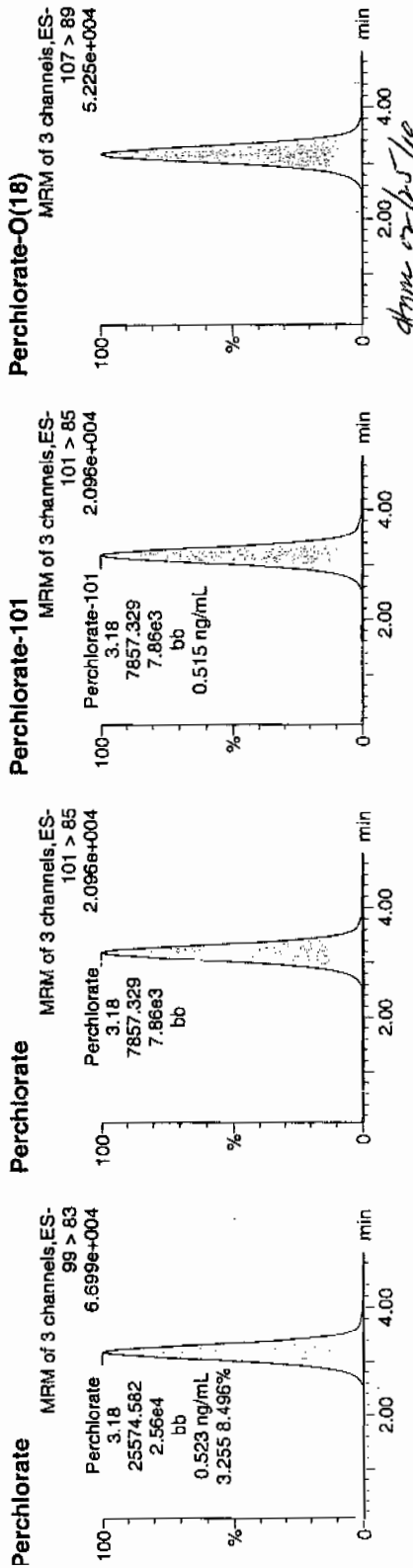
Date: 23-Feb-2010

Time: 17:08:18

ID: WCL100219-06CCV

Vial: 1:2,A

Pure
ans
02.24-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
✓	VCL100219-06CCV	Perchlorate	99 > 83	3.18	25574.582	25574.582	bb		0.5230	104.60	4.60	5650.3...	3.25
✓	VCL100219-06CCV	Perchlorate-101	101 > 85	3.18	7857.329	7857.329	bb		0.5152	103.03	3.03	775.250	
✓	VCL100219-06CCV	Perchlorate-O(18)	107 > 89	3.17	20000.623	20000.623	bb		0.4888	97.76	-2.24	9648.1...	

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.65	23-FEB-10 13:55	per0223011a
Perchlorate Isotope Ratio		3.41		23-FEB-10 13:55	per0223011a
Perchlorate-101	.05	.05	93.69	23-FEB-10 13:55	per0223011a
Perchlorate	.05	.05	94.13	23-FEB-10 15:39	per0223024a
Perchlorate Isotope Ratio		3.07		23-FEB-10 15:39	per0223024a
Perchlorate-101	.05	.05	98.19	23-FEB-10 15:39	per0223024a
Perchlorate	.05	.05	95.66	23-FEB-10 17:24	per0223037a
Perchlorate Isotope Ratio		3.19		23-FEB-10 17:24	per0223037a
Perchlorate-101	.05	.05	96.29	23-FEB-10 17:24	per0223037a

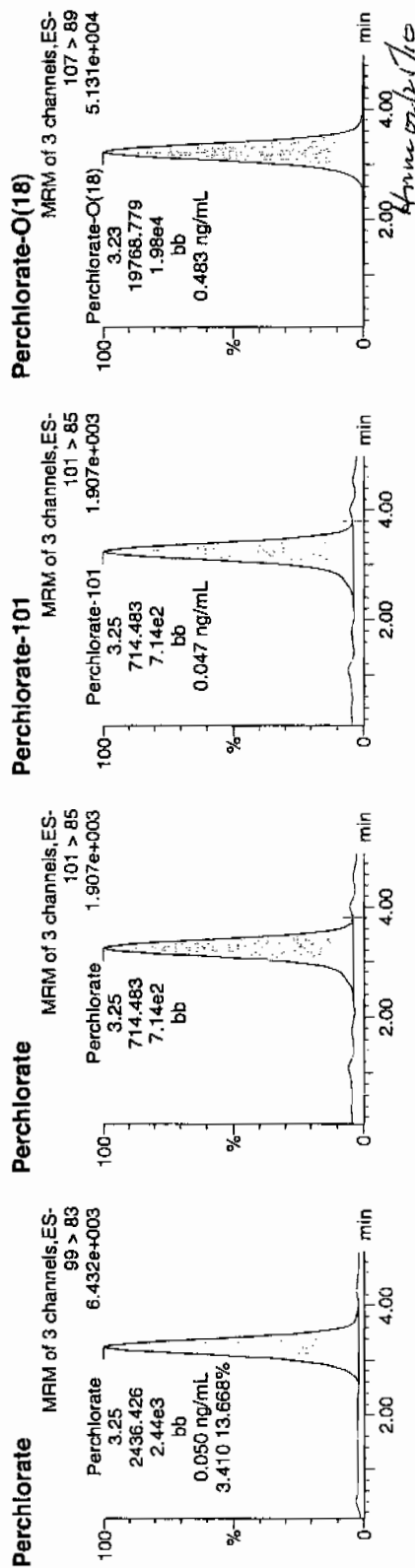
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223011a
Date: 23-Feb-2010
Time: 13:55:02
ID: WCL100219-07CRI
Vial: 1:2,B

*Run
and
02-24-10*



D	Name	Trace	RT	Area	Response	Flags	ng/mL	%Rec	%Dev	SN	Ion Ratio
	Perchlorate	99 > 83	3.25	2436.426	2436.426	bb	0.0498	99.65	-0.35	752.514	3.41
	Perchlorate-101	101 > 85	3.25	714.483	714.483	bb	0.0468	93.69	-6.31	197.166	
	Perchlorate-O(18)	107 > 89	3.23	19768.779	19768.779	bb	0.4831	96.63	-3.37	3562.3...	

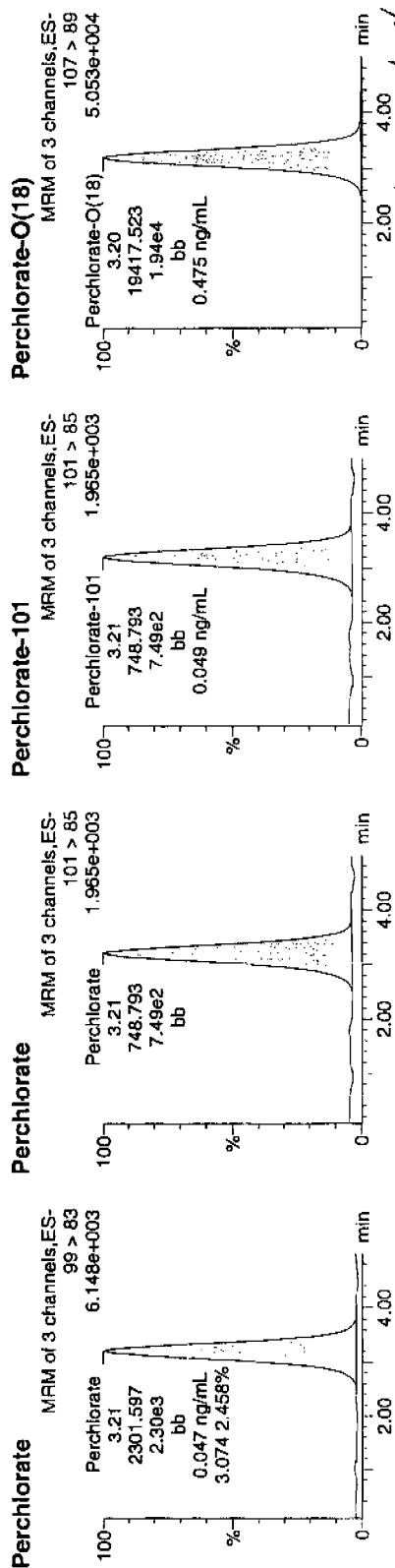
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223024a
Date: 23-Feb-2010
Time: 15:39:48
ID: WCL100219-07CRI
Vial: 1:2,B

Per
02-24-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	3.21	2301.597	2301.597	bb			0.0471	94.13	-5.87	345.822	3.07
WCL100219-07CRI	Perchlorate-101	101 > 85	3.21	748.793	748.793	bb			0.0491	98.19	-1.81	179.800	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	3.20	19417.523	19417.523	bb			0.4745	94.91	-5.09	8390.9...	

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223037a

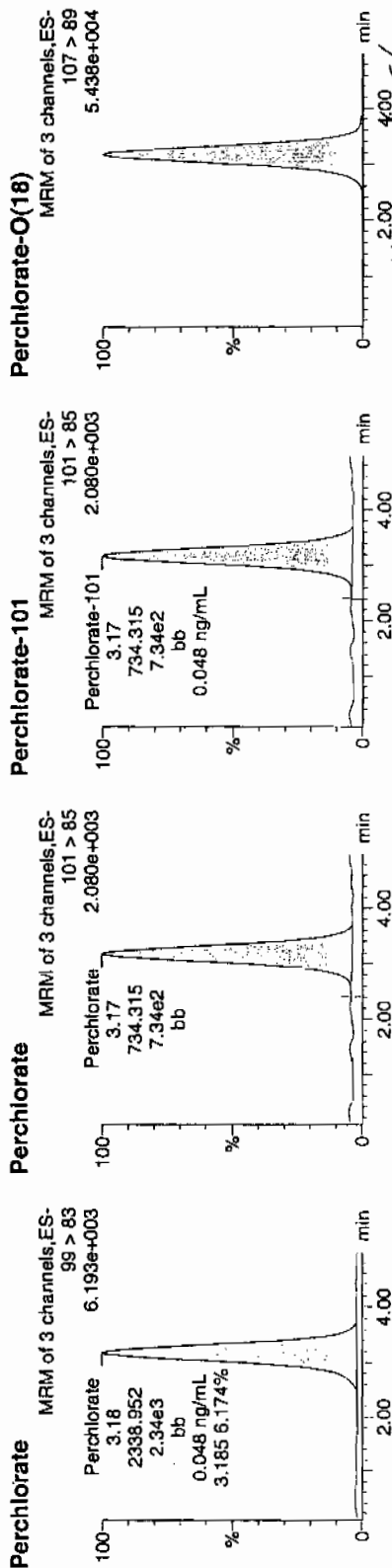
Date: 23-Feb-2010

Time: 17:24:23

ID: WCL100219-07CRI

Vial: 1:2,B

Per
0224-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100219-07CRI	Perchlorate	99 > 83	3.18	2338.952	2338.952	bb			0.0478	95.66	-4.34	575.341	3.19
WCL100219-07CRI	Perchlorate-101	101 > 85	3.17	734.315	734.315	bb			0.0481	96.29	-3.71	259.348	
WCL100219-07CRI	Perchlorate-O(18)	107 > 89	3.17	20606.650	20606.650	bb			0.5036	100.72	0.72	10983...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Client Sample No.

MB

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 1202035646

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 100

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	23-FEB-10 14:03	per0223012a
	Perchlorate Isotope Ratio						1	23-FEB-10 14:03	per0223012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	23-FEB-10 14:03	per0223012a
	Perchlorate-O(18)			4.73	ug/kg		1	23-FEB-10 14:03	per0223012a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

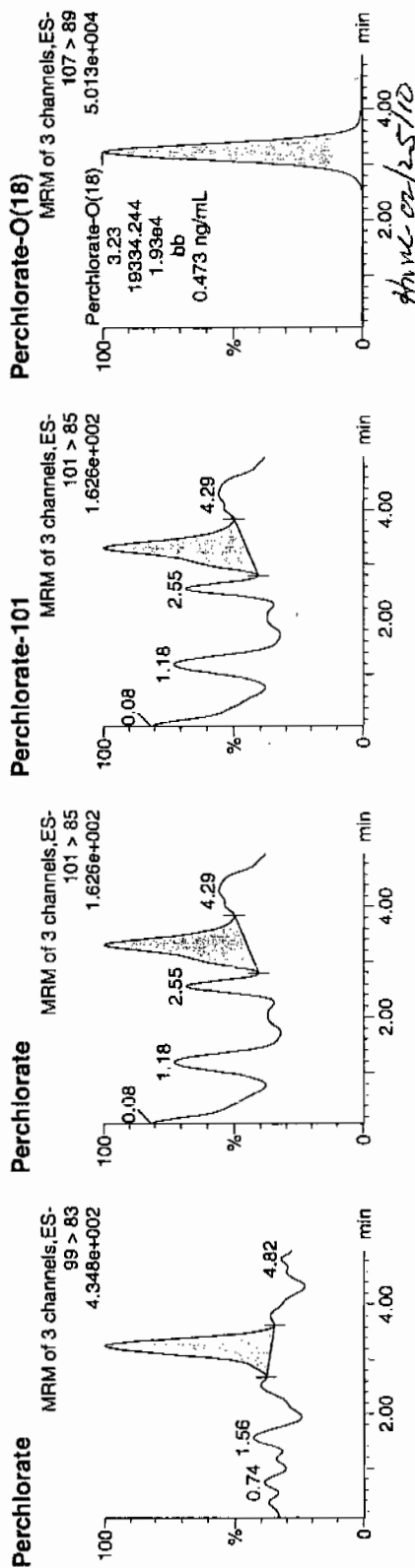
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223012a
Date: 23-Feb-2010
Time: 14:03:14
ID: 1202035646
Vial: 1:3,A

02.24.10

1202035646 | 1202035646 | 1202035646



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035646	Perchlorate	99 > 83	3.25	100.583	100.583	bb			0.0021			14.146	2.73
1202035646	Perchlorate-101	101 > 85	3.30	36.782	36.782	bb			0.0024			13.612	
1202035646	Perchlorate-O(18)	107 > 89	3.23	19334.244	19334.244	bb			0.4725	94.50	-5.50	3007.4...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Client Sample No.

LCS

Date Received: 18-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 1202035647

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 100

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.04	ug/kg		1	23-FEB-10 14:11	per0223013a
	Perchlorate Isotope Ratio			3.25			1	23-FEB-10 14:11	per0223013a
14797-73-0	Perchlorate-101	.5	2	2.01	ug/kg		1	23-FEB-10 14:11	per0223013a
	Perchlorate-O(18)			4.69	ug/kg		1	23-FEB-10 14:11	per0223013a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

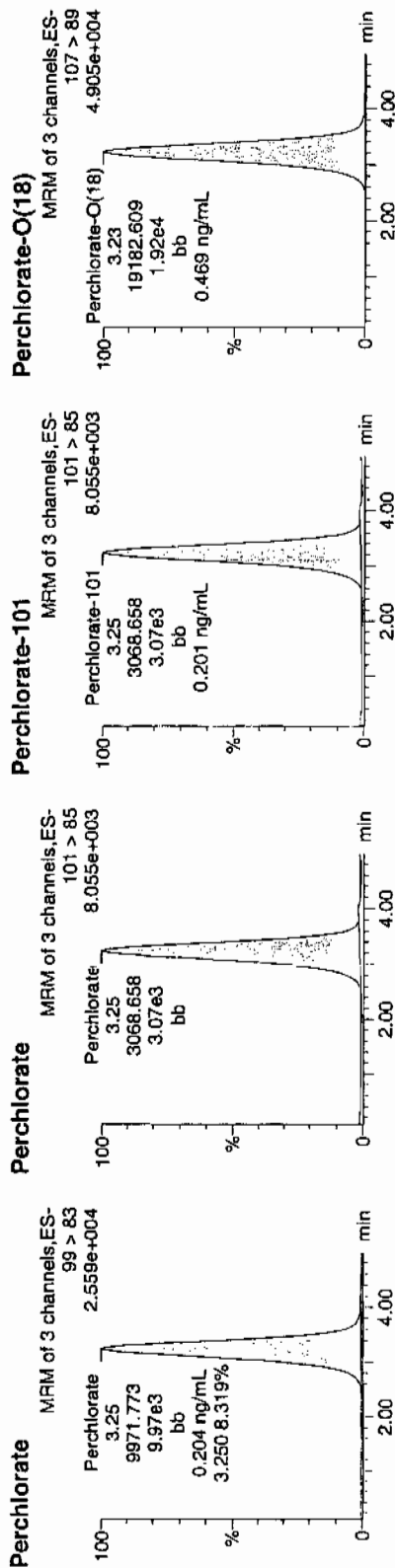
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223013a
Date: 23-Feb-2010
Time: 14:11:16
ID: 1202035647
Vial: 1:3,B

622
02-24-10

1202035647 | 5020 | 4.5 | 1 |



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035647	Perchlorate	99 > 83	3.25	9971.773	9971.773	bb			0.2039	101.96	1.96	792.525	3.25
1202035647	Perchlorate-101	101 > 85	3.25	3068.658	3068.658	bb			0.2012	100.60	0.60	343.515	
1202035647	Perchlorate-O(18)	107 > 89	3.23	19182.609	19182.609	bb			0.4688	93.76	-6.24	6211.8...	

$$\frac{9971.773}{48901.4} = 0.2039$$

48901.4 = 0.2039

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 250062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7980MS

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 1202035648

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 95.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	3.72	ug/kg		1	23-FEB-10 14:35	per0223016a
	Perchlorate Isotope Ratio			3.16			1	23-FEB-10 14:35	per0223016a
14797-73-0	Perchlorate-101	.524	2.1	3.77	ug/kg		1	23-FEB-10 14:35	per0223016a
	Perchlorate-O(18)			5.26	ug/kg		1	23-FEB-10 14:35	per0223016a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223016a

Date: 23-Feb-2010

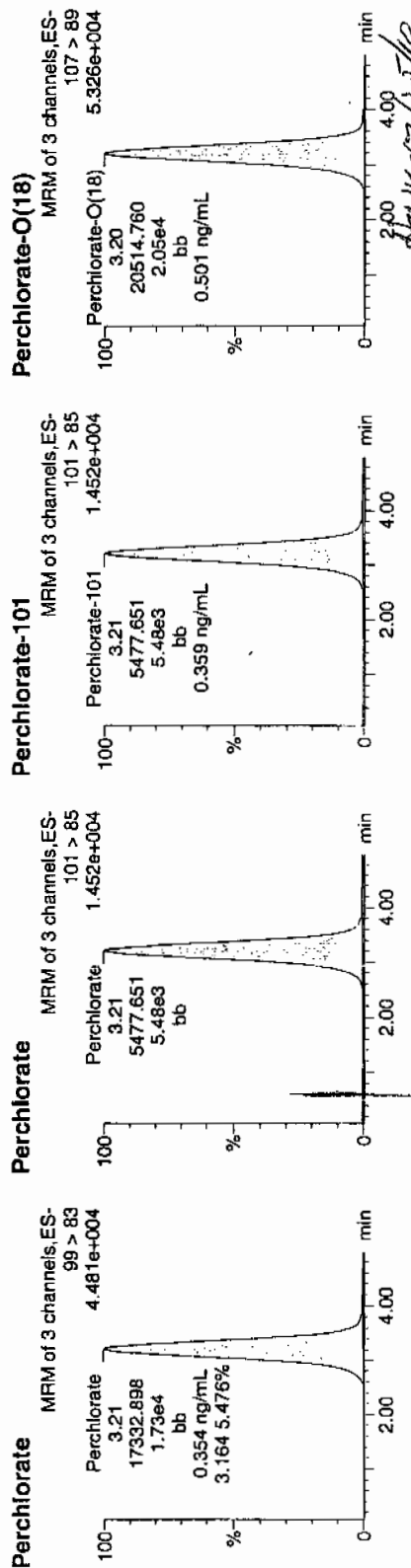
Time: 14:35:22

ID: 1202035648

Vial: 1:3,E

02-24-10

1202035648 | 5000 | MS | 1



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035648	Perchlorate	99 > 83	3.21	17332.898	17332.898	bb			0.3544	177.22	77.22	1576.6...	3.16
1202035648	Perchlorate-101	101 > 85	3.21	5477.651	5477.651	bb			0.3591	179.57	79.57	4850.9...	
1202035648	Perchlorate-O(18)	107 > 89	3.20	20514.760	20514.760	bb			0.5014	100.27	0.27	4758.9...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 950062

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-7980MSD

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514

GEL Sample ID: 1202035649

Date Filtered: 18-FEB-10

Injection Volume (uL): 20

%Solids: 95.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.524	2.1	3.61	ug/kg		1	23-FEB-10 14:43	per0223017a
	Perchlorate Isotope Ratio			3.22			1	23-FEB-10 14:43	per0223017a
14797-73-0	Perchlorate-101	.524	2.1	3.59	ug/kg		1	23-FEB-10 14:43	per0223017a
	Perchlorate-O(18)			5.34	ug/kg		1	23-FEB-10 14:43	per0223017a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

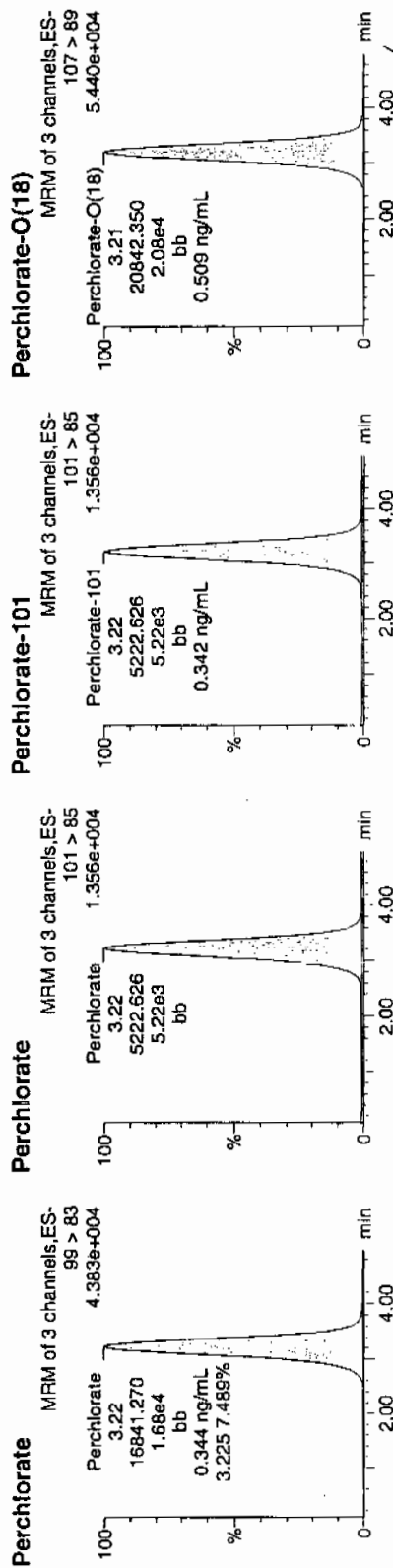
Dataset: C:\MassLynx\Perchlorate.PRO\per022310a.qld

Last Altered: Wednesday, February 24, 2010 9:37:13 AM Eastern Standard Time
Printed: Wednesday, February 24, 2010 9:52:21 AM Eastern Standard Time

Name: per0223017a
Date: 23-Feb-2010
Time: 14:43:24
ID: 1202035649
Vial: 1:3.F

0224-10

15200000 | 3000 | 150 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035649	Perchlorate	99 > 83	3.22	16841.270	16841.270	bb			0.3444	172.20	72.20	6674.3...	3.22
1202035649	Perchlorate-101	101 > 85	3.22	5222.626	5222.626	bb			0.3424	171.21	71.21	3469.7...	
1202035649	Perchlorate-O(18)	107 > 89	3.21	20842.350	20842.350	bb			0.5094	101.87	1.87	3957.5...	

02/21/10

MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 950062 Verified by: _____ Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Charles Wilson Instrument: MicroMass Quattro Ultima
 Method: SW846 6850 Modified

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202035646 MB	18-FEB-2010 11:31:00	2	20	10
1202035647 LCS	18-FEB-2010 11:31:00	2	20	10
245979001	18-FEB-2010 11:31:00	2	20	10
1202035648 MS (245979001)	18-FEB-2010 11:31:00	2	20	10
1202035649 MSD (245979001)	18-FEB-2010 11:31:00	2	20	10
245979002	18-FEB-2010 11:31:00	2	20	10
245979003	18-FEB-2010 11:31:00	2	20	10
245979004	18-FEB-2010 11:31:00	2	20	10
245979005	18-FEB-2010 11:31:00	2	20	10
245979006	18-FEB-2010 11:31:00	2	20	10
245979007	18-FEB-2010 11:31:00	2	20	10
245979008	18-FEB-2010 11:31:00	2	20	10
245979009	18-FEB-2010 11:31:00	2	20	10
245979010	18-FEB-2010 11:31:00	2	20	10
245979011	18-FEB-2010 11:31:00	2	20	10
245979012	18-FEB-2010 11:31:00	2	20	10
245979013	18-FEB-2010 11:31:00	2	20	10
245979014	18-FEB-2010 11:31:00	2	20	10
245979015	18-FEB-2010 11:31:00	2	20	10
1202035650 ICS	18-FEB-2010 11:31:00	2	20	10

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202035650	10 ug/L ICV/CCV Second Source	UCL100126-02.2	.4	mL
LCS	1202035647	10 ug/L ICV/CCV Second Source	UCL100126-02.2	.4	mL
MS	1202035648	10 ug/L ICV/CCV Second Source	UCL100126-02.2	.4	mL
MSD	1202035649	10 ug/L ICV/CCV Second Source	UCL100126-02.2	.4	mL

Desalting cartridges used: 091120-1-Ba & 100112-1-H

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/23/10
 Extr. Injection Volume: 20uL
 Sequence Number: per022310a
 Initial Calibration Date: 02/23/10

Method: EPA 6850-Modified
 Int. Std.: UCL100126-01
 Mobile Phase Lot#: 1269535, 1261217
 Standard-Samp Reagent Lot#: 1261217

Reviewed BY: *HWK*
 Date: *02/23/10*
 SOP: GL-OA-E-067 Rev.6
 Alt Check Std. ID: WCL100219-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0223001a	IPB001	CWW	2/23/2010 12:33			1		USE	B
per0223002a	IPB001	CWW	2/23/2010 12:42			1		USE	B
per0223003a	WCLICAL-01	CWW	2/23/2010 12:50			1		USE	I
per0223004a	WCLICAL-02	CWW	2/23/2010 12:58			1		USE	I
per0223005a	WCLICAL-03	CWW	2/23/2010 13:06			1		USE	I
per0223006a	WCLICAL-04	CWW	2/23/2010 13:14			1		USE	I
per0223007a	WCLICAL-05	CWW	2/23/2010 13:22			1		USE	I
per0223008a	IPB002	CWW	2/23/2010 13:30			1		USE	B
per0223009a	WCLICV	CWW	2/23/2010 13:38			1		USE	C
per0223010a	IPB003	CWW	2/23/2010 13:46			1		USE	B
per0223011a	WCLCRI	CWW	2/23/2010 13:55			1		USE	C
per0223012a	1202035646	CWW	2/23/2010 14:03	950063	10-1514	1	LANL	USE	S
per0223013a	1202035647	CWW	2/23/2010 14:11	950063	10-1514	1	LANL	USE	S
per0223014a	1202035650	CWW	2/23/2010 14:19	950063	10-1514	1	LANL	USE	S
per0223015a	245979001	CWW	2/23/2010 14:27	950063	10-1514	1	LANL	USE	S
per0223016a	1202035648	CWW	2/23/2010 14:35	950063	10-1514	1	LANL	USE	S
per0223017a	1202035649	CWW	2/23/2010 14:43	950063	10-1514	1	LANL	USE	S
per0223018a	245979002	CWW	2/23/2010 14:51	950063	10-1514	1	LANL	USE	S
per0223019a	245979003	CWW	2/23/2010 14:59	950063	10-1514	1	LANL	USE	S
per0223020a	245979004	CWW	2/23/2010 15:07	950063	10-1514	1	LANL	USE	S
per0223021a	245979005	CWW	2/23/2010 15:15	950063	10-1514	1	LANL	USE	S
per0223022a	WCLCCV	CWW	2/23/2010 15:23			1		USE	C
per0223023a	IPB004	CWW	2/23/2010 15:31			1		USE	B
per0223024a	WCLCRI	CWW	2/23/2010 15:39			1		USE	C
per0223025a	245979006	CWW	2/23/2010 15:47	950063	10-1514	1	LANL	USE	S
per0223026a	245979007	CWW	2/23/2010 15:55	950063	10-1514	1	LANL	USE	S
per0223027a	245979008	CWW	2/23/2010 16:03	950063	10-1514	1	LANL	USE	S
per0223028a	245979009	CWW	2/23/2010 16:11	950063	10-1514	1	LANL	USE	S
per0223029a	245979010	CWW	2/23/2010 16:20	950063	10-1514	1	LANL	USE	S

per0223030a	245979011	CWW	2/23/2010 16:28	950063	10-1514	1	LANL	USE	S
per0223031a	245979012	CWW	2/23/2010 16:36	950063	10-1514	1	LANL	USE	S
per0223032a	245979013	CWW	2/23/2010 16:44	950063	10-1514	1	LANL	USE	S
per0223033a	245979014	CWW	2/23/2010 16:52	950063	10-1514	1	LANL	USE	S
per0223034a	245979015	CWW	2/23/2010 17:00	950063	10-1514	1	LANL	USE	S
per0223035a	WCLCCV	CWW	2/23/2010 17:08			1		USE	C
per0223036a	IPB005	CWW	2/23/2010 17:16			1		USE	B
per0223037a	WCLCRI	CWW	2/23/2010 17:24			1		USE	C
per0223038a	1202035660	CWW	2/23/2010 17:32	950071	VARIOUS	1	LANL	USE	S
per0223039a	1202035661	CWW	2/23/2010 17:40	950071	VARIOUS	1	LANL	USE	S
per0223040a	1202035664	CWW	2/23/2010 17:48	950071	VARIOUS	1	LANL	USE	S
per0223041a	245998001	CWW	2/23/2010 17:56	950071	10-1517	1	LANL	USE	S
per0223042a	245998002	CWW	2/23/2010 18:04	950071	10-1517	1	LANL	USE	S
per0223043a	245998003	CWW	2/23/2010 18:12	950071	10-1517	1	LANL	USE	S
per0223044a	245998004	CWW	2/23/2010 18:20	950071	10-1517	1	LANL	USE	S
per0223045a	245998005	CWW	2/23/2010 18:28	950071	10-1517	1	LANL	USE	S
per0223046a	245998006	CWW	2/23/2010 18:36	950071	10-1517	1	LANL	USE	S
per0223047a	245998007	CWW	2/23/2010 18:44	950071	10-1517	1	LANL	USE	S
per0223048a	WCLCCV	CWW	2/23/2010 18:52			1		USE	C
per0223049a	IPB006	CWW	2/23/2010 19:01			1		USE	B
per0223050a	WCLCRI	CWW	2/23/2010 19:09			1		USE	C
per0223051a	245998008	CWW	2/23/2010 19:17	950071	10-1517	1	LANL	USE	S
per0223052a	245998009	CWW	2/23/2010 19:25	950071	10-1517	1	LANL	USE	S
per0223053a	246055001	CWW	2/23/2010 19:33	950071	10-1545	1	LANL	USE	S
per0223054a	1202035662	CWW	2/23/2010 19:41	950071	10-1545	1	LANL	USE	S
per0223055a	1202035663	CWW	2/23/2010 19:49	950071	10-1545	1	LANL	USE	S
per0223056a	246055002	CWW	2/23/2010 19:57	950071	10-1545	1	LANL	USE	S
per0223057a	246055003	CWW	2/23/2010 20:05	950071	10-1545	1	LANL	USE	S
per0223058a	246055004	CWW	2/23/2010 20:13	950071	10-1545	1	LANL	USE	S
per0223059a	246055005	CWW	2/23/2010 20:21	950071	10-1545	1	LANL	USE	S
per0223060a	246055006	CWW	2/23/2010 20:29	950071	10-1545	1	LANL	USE	S
per0223061a	WCLCCV	CWW	2/23/2010 20:37			1		USE	C
per0223062a	IPB007	CWW	2/23/2010 20:46			1		USE	B
per0223063a	WCLCRI	CWW	2/23/2010 20:54			1		USE	C
per0223064a	246055007	CWW	2/23/2010 21:02	950071	10-1545	1	LANL	USE	S
per0223065a	246055008	CWW	2/23/2010 21:10	950071	10-1545	1	LANL	USE	S
per0223066a	246055009	CWW	2/23/2010 21:18	950071	10-1545	1	LANL	USE	S

per0223067a	IPB008	CWW	2/23/2010 21:26	952906	VARIOUS	1	LANL	USE	B
per0223068a	1202042433	CWW	2/23/2010 21:34	952906	VARIOUS	1	LANL	USE	S
per0223069a	1202042434	CWW	2/23/2010 21:42	952906	VARIOUS	1	LANL	USE	S
per0223070a	1202042437	CWW	2/23/2010 21:50	952906	VARIOUS	1	LANL	USE	S
per0223071a	246607001	CWW	2/23/2010 21:58	952906	10-1699-1	1	LANL	USE	S
per0223072a	246607002	CWW	2/23/2010 22:06	952906	10-1699-1	1	LANL	USE	S
per0223073a	246607003	CWW	2/23/2010 22:14	952906	10-1699-1	1	LANL	USE	S
per0223074a	WCLCCV	CWW	2/23/2010 22:22			1		USE	C
per0223075a	IPB009	CWW	2/23/2010 22:31			1		USE	B
per0223076a	WCLCRI	CWW	2/23/2010 22:39			1		USE	C
per0223077a	246607004	CWW	2/23/2010 22:47	952906	10-1699-1	1	LANL	USE	S
per0223078a	246607005	CWW	2/23/2010 22:55	952906	10-1699-1	1	LANL	USE	S
per0223079a	246607006	CWW	2/23/2010 23:03	952906	10-1699-1	1	LANL	USE	S
per0223080a	246610001	CWW	2/23/2010 23:11	952906	10-1701	1	LANL	USE	S
per0223081a	246610002	CWW	2/23/2010 23:19	952906	10-1701	1	LANL	USE	S
per0223082a	246610003	CWW	2/23/2010 23:27	952906	10-1701	1	LANL	USE	S
per0223083a	246611001	CWW	2/23/2010 23:35	952906	10-1702	1	LANL	USE	S
per0223084a	246611002	CWW	2/23/2010 23:43	952906	10-1702	1	LANL	USE	S
per0223085a	246611003	CWW	2/23/2010 23:51	952906	10-1702	1	LANL	USE	S
per0223086a	WCLCCV	CWW	2/23/2010 23:59			1		USE	C
per0223087a	IPB010	CWW	2/24/2010 0:08			1		USE	B
per0223088a	WCLCRI	CWW	2/24/2010 0:16			1		USE	C
per0223089a	246679001	CWW	2/24/2010 0:24	952906	10-1704	1	LANL	USE	S
per0223090a	1202042435	CWW	2/24/2010 0:32	952906	10-1704	1	LANL	USE	S
per0223091a	1202042436	CWW	2/24/2010 0:40	952906	10-1704	1	LANL	USE	S
per0223092a	246679002	CWW	2/24/2010 0:48	952906	10-1704	1	LANL	USE	S
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per0223098a	246679008	CWW	2/24/2010 1:36	952906	10-1704	1	LANL	USE	S
per0223099a	WCLCCV	CWW	2/24/2010 1:44			1		USE	C
per0223100a	IPB011	CWW	2/24/2010 1:52			1		USE	B
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per0223102a	1202042671	CWW	2/24/2010 2:08	952990	VARIOUS	1	LANL	USE	S
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per0223104a	1202042675	CWW	2/24/2010 2:25	952990	VARIOUS	1	LANL	USE	S
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per0223106a	1202042673	CWW	2/24/2010 2:41	952990	10-1729	1	LANL	USE	S
per0223107a	1202042674	CWW	2/24/2010 2:49	952990	10-1729	1	LANL	USE	S
per0223108a	246719002	CWW	2/24/2010 2:57	952990	10-1729	1	LANL	USE	S
per0223109a	246719003	CWW	2/24/2010 3:05	952990	10-1729	1	LANL	USE	S
per0223110a	WCLCCV	CWW	2/24/2010 3:13			1		USE	C
per0223111a	IPB012	CWW	2/24/2010 3:21			1		USE	B
per0223112a	WCLCRI	CWW	2/24/2010 3:29			1		USE	C
per0223113a	246719004	CWW	2/24/2010 3:37	952990	10-1729	1	LANL	USE	S
per0223114a	246719005	CWW	2/24/2010 3:46	952990	10-1729	1	LANL	USE	S
per0223115a	246719006	CWW	2/24/2010 3:54	952990	10-1729	1	LANL	USE	S
per0223116a	246719007	CWW	2/24/2010 4:02	952990	10-1729	1	LANL	USE	S
per0223117a	246719008	CWW	2/24/2010 4:10	952990	10-1729	1	LANL	USE	S
per0223118a	246741001	CWW	2/24/2010 4:18	952990	10-1711	1	LANL	USE	S
per0223119a	246741002	CWW	2/24/2010 4:26	952990	10-1711	1	LANL	USE	S
per0223120a	246741003	CWW	2/24/2010 4:34	952990	10-1711	1	LANL	USE	S
per0223121a	WCLCCV	CWW	2/24/2010 4:42			1		USE	C
per0223122a	IPB013	CWW	2/24/2010 4:50			1		USE	B
per0223123a	WCLCRI	CWW	2/24/2010 4:58			1		USE	C
per0223124a	246741004	CWW	2/24/2010 5:06	952990	10-1711	1	LANL	USE	S
per0223125a	246741005	CWW	2/24/2010 5:14	952990	10-1711	1	LANL	USE	S
per0223126a	246741006	CWW	2/24/2010 5:22	952990	10-1711	1	LANL	USE	S
per0223127a	246741007	CWW	2/24/2010 5:30	952990	10-1711	1	LANL	USE	S
per0223128a	246741008	CWW	2/24/2010 5:38	952990	10-1711	1	LANL	USE	S
per0223129a	246741009	CWW	2/24/2010 5:46	952990	10-1711	1	LANL	USE	S
per0223130a	246741010	CWW	2/24/2010 5:54	952990	10-1711	1	LANL	USE	S
per0223131a	246741011	CWW	2/24/2010 6:02	952990	10-1711	1	LANL	USE	S
per0223132a	WCLCCV	CWW	2/24/2010 6:11			1		USE	C
per0223133a	IPB014	CWW	2/24/2010 6:19			1		USE	B
per0223134a	WCLCRI	CWW	2/24/2010 6:27			1		USE	C

Isotope Ratio Criteria

Isotope Ratio $^{35}\text{Cl}/^{37}\text{Cl}$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1514-1**

Method/Analysis Information

Procedure: **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)**

Analytical Method: SW846 6850 Modified

Prep Method: SW846 6850 Modified

Analytical Batch Number: 950028

Prep Batch Number: 950027

Sample Analysis

Sample ID	Client ID
245981001	RE15-10-8083
1202035573	Interference Check Sample (ICS)
1202035565	Method Blank (MB)
1202035566	Laboratory Control Sample (LCS)
1202035571	245911001(RE16-10-1400) Matrix Spike (MS)
1202035572	245911001(RE16-10-1400) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 6.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCV Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

CCB Requirements

All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

10-1514-1-PERLCMS

Page 1 of 4

CCV Requirements

All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

Low Level Standard (CRI) Requirements

All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

Quality Control (QC) Information**Method Blank (MB) Statement**

The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)

The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Client sample 245911001 (RE16-10-1400) from SDG 10-1487-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance

The retention time standard areas were within the required acceptance criteria for all samples and QC.

Retention Time

During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard. The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

Technical Information**Holding Time Specifications**

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Data Exception (DER) Documentation

Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Manual Integrations

Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments

The sample in this SDG was not originally analyzed using EPA Method 314.0.

Additional Comments

The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio

The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Herbert H. Mauer Date: 02/11/10

SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 250027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8083

Date Received: 02-FEB-10

GEL Job No (SDG): 10-1514-1

GEL Sample ID: 245981001

Date Filtered: 07-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:06	per0208067a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:06	per0208067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:06	per0208067a
	Perchlorate-O(18)			0.481	ug/L		1	08-FEB-10 21:06	per0208067a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X ¹
Aliquot %Solids

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1514-1

Extract Batch Code: 950027

Date Filtered: 07-FEB-10

Matrix: WASTE WATER

Sample ID: 1202035566

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.196	ug/L	98.0		85 - 115
Perchlorate Isotope Ratio		3.01				-
Perchlorate-101	0.200	.207	ug/L	103		85 - 115
Perchlorate-O(18)		.483	ug/L			-

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1514-1

Extract Batch Code: 950027

Date Filtered: 07-FEB-10

Matrix: WATER

Sample ID: 1202035573

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.211	ug/L	105		70 - 130
Perchlorate Isotope Ratio		3.12				
Perchlorate-101	0.200	.214	ug/L	107		70 - 130
Perchlorate-O(18)		.488	ug/L			

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

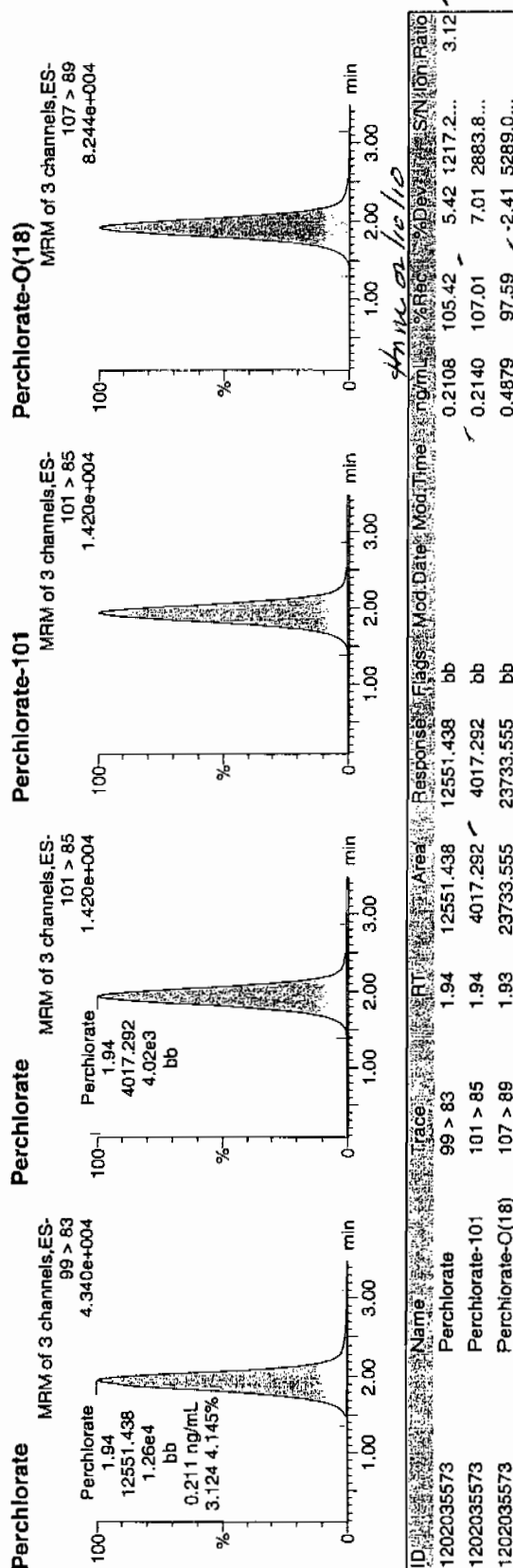
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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208052a
Date: 08-Feb-2010
Time: 19:28:20
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Vial: 2:1,C

02-09-10

1202035573 | 202035573 | 11



GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1514-1

Extract Batch Code: 950027

Date Extracted: 07-FEB-10

GEL MS/PS ID: 1202035571

Client ID: RE16-10-1400

GEL MSD/PSD ID: 1202035572

QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00204	ug/L	0.192	94.8		.198	98.1		3.39		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3			3.01			0			-
Perchlorate-101	0.200	0.00319	ug/L	0.203	99.9		.209	103		2.76		30	75 - 125
Perchlorate-O(18)	0	0.461	ug/L	0.468			.462			1.31			-

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-FEB-10	per0208001a	IPB001
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208001a	IPB001
Perchlorate	0.00	0	NA	08-FEB-10	per0208002a	IPB001
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208002a	IPB001

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

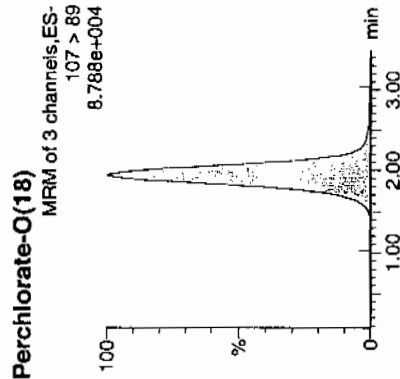
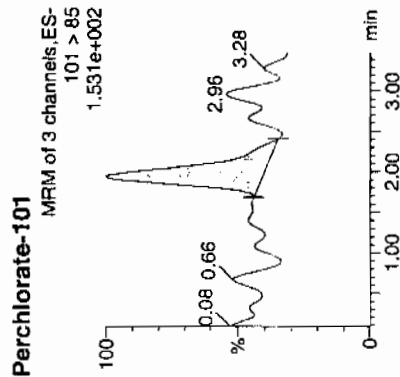
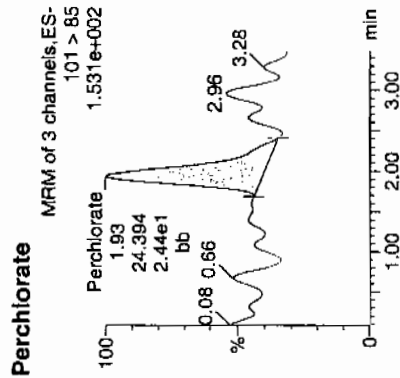
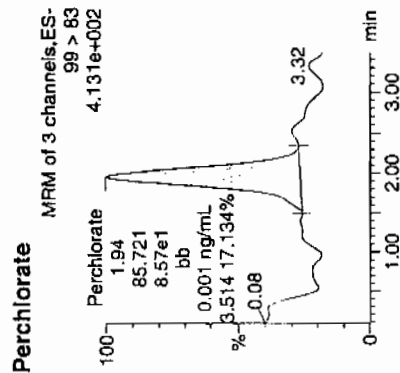
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Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020810a.cdb 09 Feb 2010 07:48:17

Name: per0208001a
Date: 08-Feb-2010
Time: 13:54:09
ID: IPB001
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	1.94	85.721	85.721	bb			0.0014			29.463	3.51
IPB001	Perchlorate-101	101 > 85	1.93	24.394	24.394	bb			0.0013			21.780	
IPB001	Perchlorate-O(18)	107 > 89	1.94	25816.436	25816.436	bb			0.5308	106.15	6.15	6489.2...	

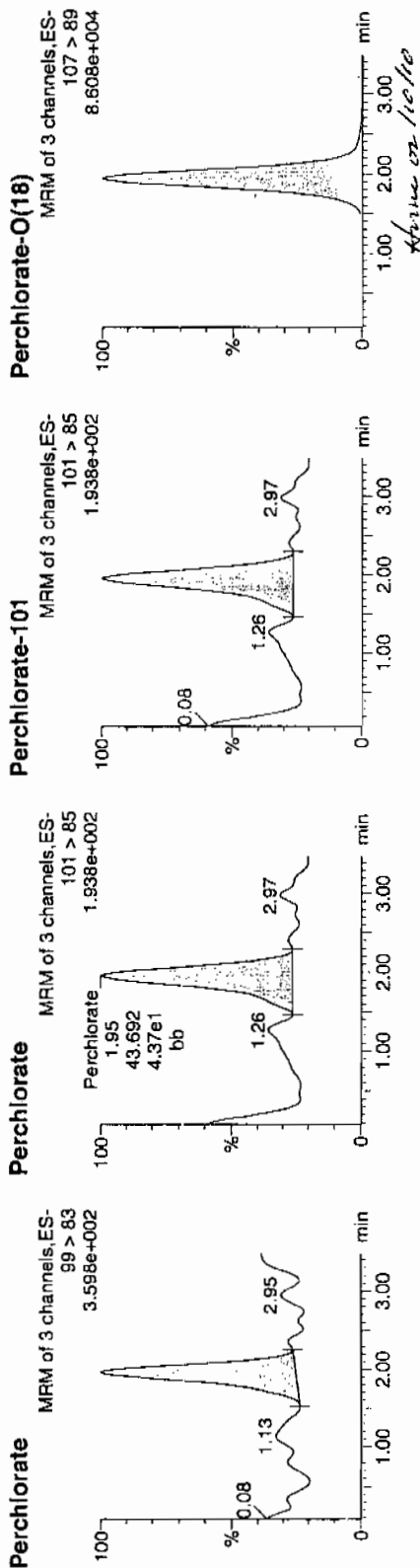
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qid

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Date: 08-Feb-2010
Time: 14:00:52
ID: IPB001
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83	1.97	72.177	72.177	bb			0.0012			25.847	1.65
IPB001	Perchlorate-101	101 > 85	1.95	43.692	43.692	bb			0.0023			6.442	
IPB001	Perchlorate-O(18)	107 > 89	1.94	25472.947	25472.947	bb			0.5237	104.74	4.74	6120.9...	

0.0012
0.0023
0.5237

Perchlorate Continuing Calibration Blank

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	08-FEB-10	per0208008a	IPB002
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208008a	IPB002
Perchlorate	0.00	0	NA	08-FEB-10	per0208010a	IPB003
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208010a	IPB003
Perchlorate	0.00	0	NA	08-FEB-10	per0208022a	IPB004
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208022a	IPB004
Perchlorate	0.00	0	NA	08-FEB-10	per0208026a	IPB005
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208026a	IPB005
Perchlorate	0.00	0	NA	08-FEB-10	per0208035a	IPB006
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208035a	IPB006
Perchlorate	0.00	0	NA	08-FEB-10	per0208048a	IPB007
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208048a	IPB007
Perchlorate	0.00	0	NA	08-FEB-10	per0208061a	IPB008

Perchlorate Continuing Calibration Blank

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: General Engineering LaboratoriesGEL Job No.(SDG): 10-1514-1Lab Code: GELReporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208061a	IPB008
Perchlorate	0.00	0	NA	08-FEB-10	per0208074a	IPB009
Perchlorate-101	0.00	0	NA	08-FEB-10	per0208074a	IPB009

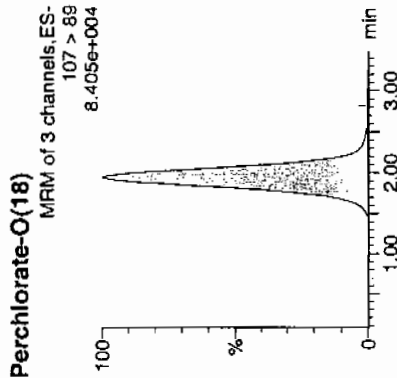
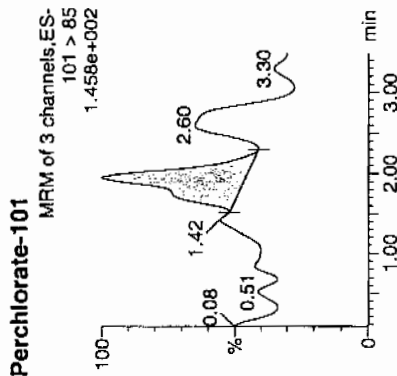
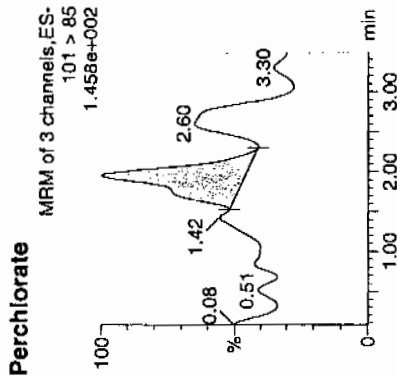
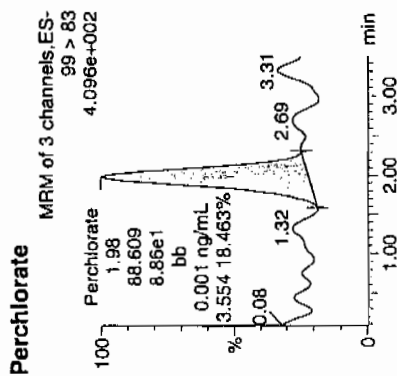
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208008a
Date: 08-Feb-2010
Time: 14:40:00
ID: IPB002
Vial: 1:1,A

02-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83	1.98	88.609	88.609	bb			0.0015			17.608	3.55
IPB002	Perchlorate-101	101 > 85	1.95	24.933	24.933	bb			0.0013			9.796	
IPB002	Perchlorate-O(18)	107 > 89	1.94	24800.170	24800.170	bb			0.5099	101.97	1.97	8413.0...	

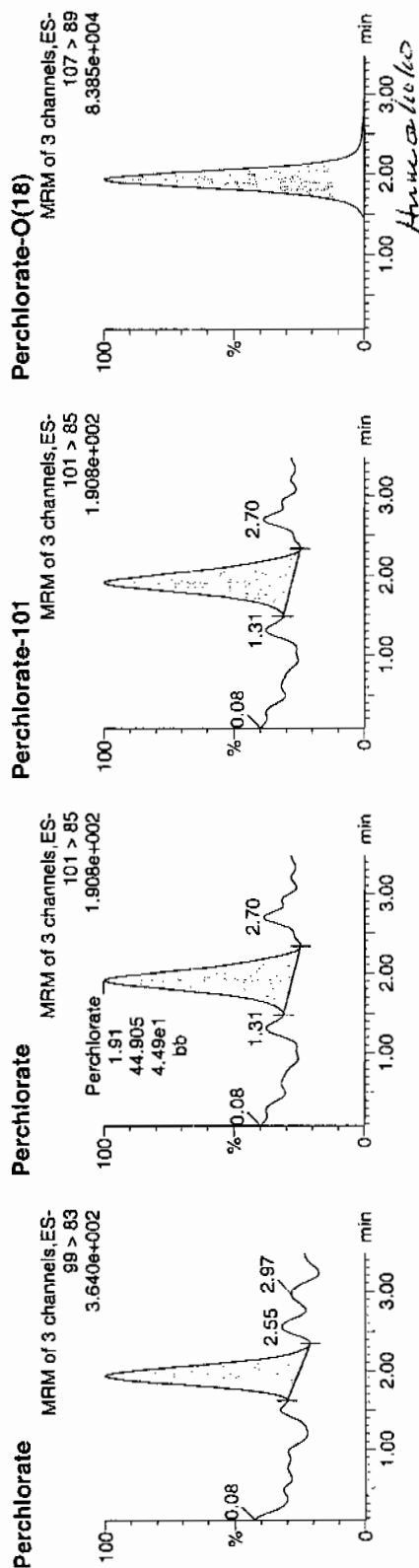
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208010a
Date: 08-Feb-2010
Time: 14:53:04
ID: IPB003
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB003	Perchlorate	99 > 83	1.93	78.058	78.058	bb			0.0013			17.447	1.74
IPB003	Perchlorate-101	101 > 85	1.91	44.905	44.905	bb			0.0024			6.119	
IPB003	Perchlorate-Q(18)	107 > 89	1.93	24645.639	24645.639	bb			0.5067	101.34	1.34	10100	

0.034
40.030

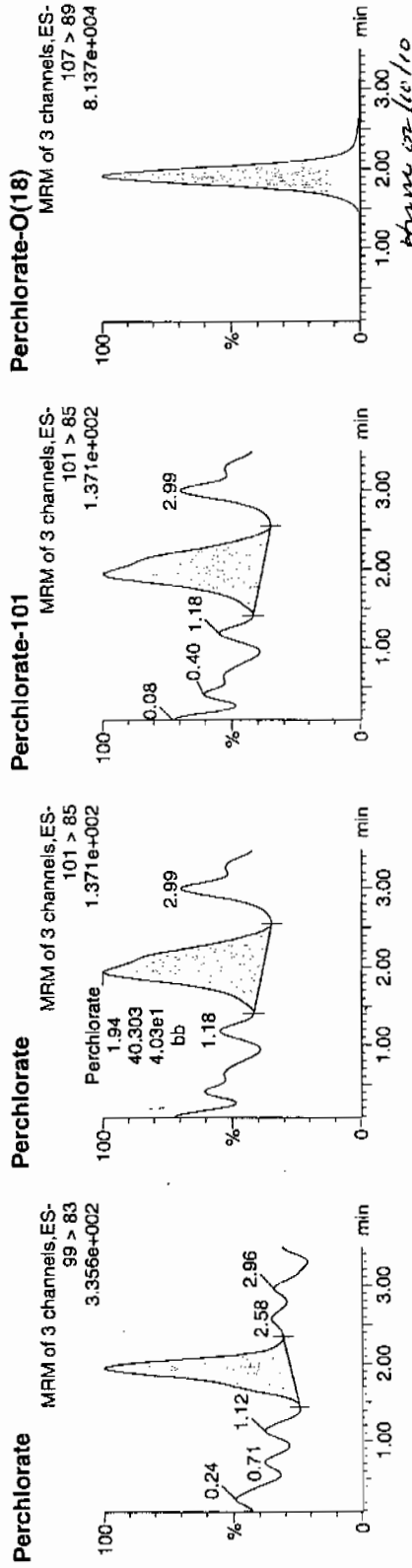
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208022a
Date: 08-Feb-2010
Time: 16:11:45
ID: IPB004
Vial: 1:1,A

02-07-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB004	Perchlorate	99 > 83	1.94	78.709	78.709	bb			0.0013			20.514	1.95
IPB004	Perchlorate-101	101 > 85	1.94	40.303	40.303	bb			0.0021			13.319	
IPB004	Perchlorate-O(18)	107 > 89	1.92	23985.541	23985.541	bb			0.4931	98.62	-1.38	5434.3...	

0.91
20.000

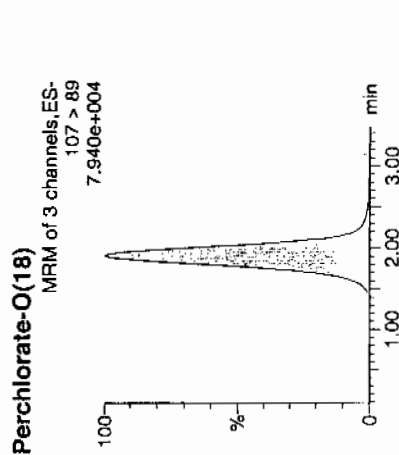
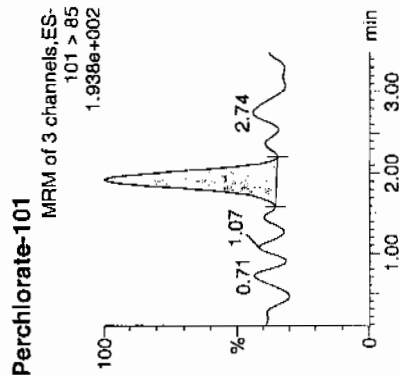
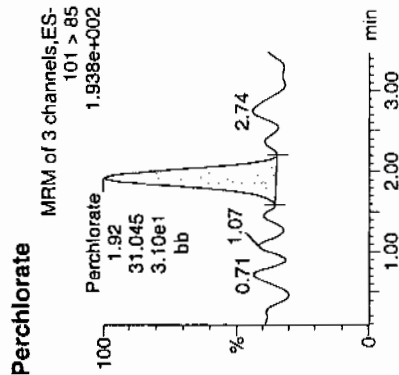
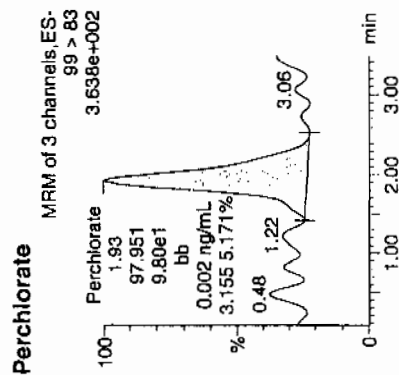
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qid

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208026a
Date: 08-Feb-2010
Time: 16:37:55
ID: IPB005
Vial: 1:1,A

0209-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB005	Perchlorate	99 > 83	1.93	97.951	97.951	bb			0.0016			26.012	3.16
IPB005	Perchlorate-101	101 > 85	1.92	31.045	31.045	bb			0.0017			24.338	
IPB005	Perchlorate-O(18)	107 > 89	1.91	23263.740	23263.740	bb			0.4783	95.66	-4.34	17328...	

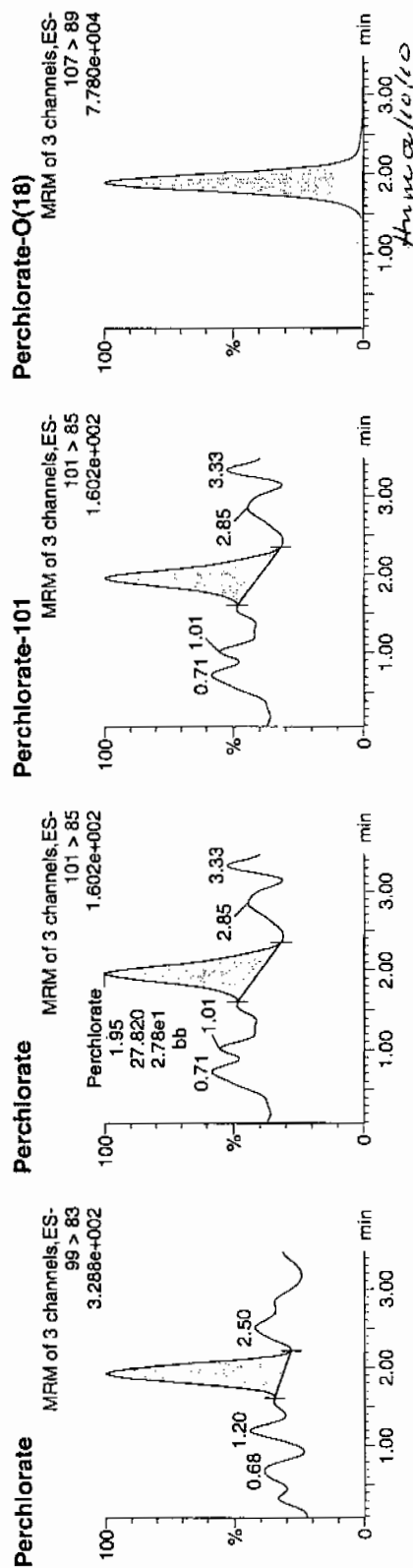
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208035a
Date: 08-Feb-2010
Time: 17:36:50
ID: IPB006
Vial: 1:1,A

02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB006	Perchlorate	99 > 83	1.92	61.682	61.682	bb			0.0010			7.589	2.22
IPB006	Perchlorate-101	101 > 85	1.95	27.820	27.820	bb			0.0015			8.535	
IPB006	Perchlorate-O(18)	107 > 89	1.89	22700.701	22700.701	bb			0.4667	93.34	-6.66	9296.2...	

0.004
22.0500

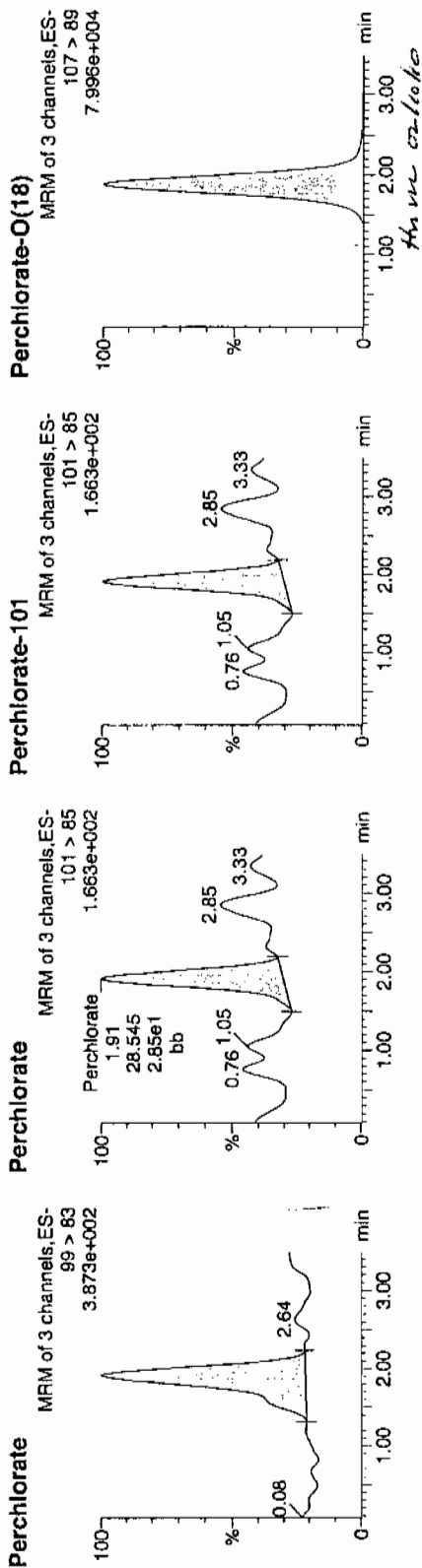
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208048a
Date: 08-Feb-2010
Time: 19:01:59
ID: IPB007
Vial: 1:1,A

0000
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB007	Perchlorate	99 > 83	1.92	98.695	98.695	bb			0.0017			45.617	3.46
IPB007	Perchlorate-101	101 > 85	1.91	28.545	28.545	bb			0.0015			16.585	
IPB007	Perchlorate-O(18)	107 > 89	1.88	23201.119	23201.119	bb			0.4770	95.40	-4.60	2781.0...	

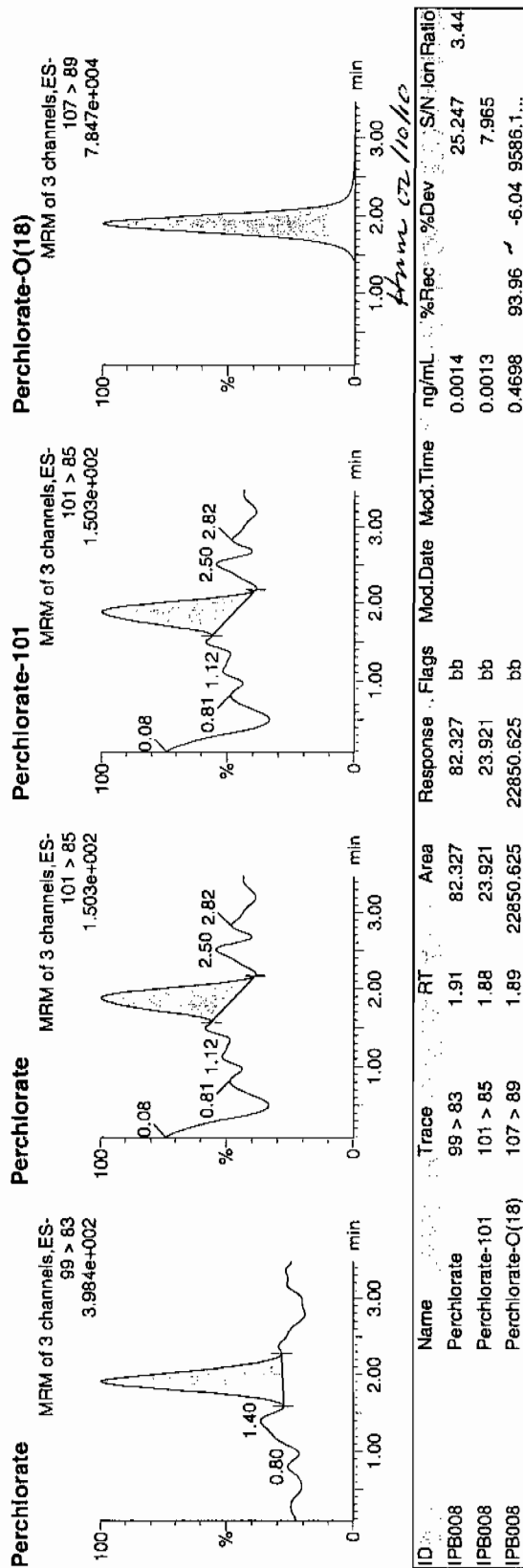
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208061a
Date: 08-Feb-2010
Time: 20:27:18
ID: IPB008
Vial: 1:1,A

03-21-10



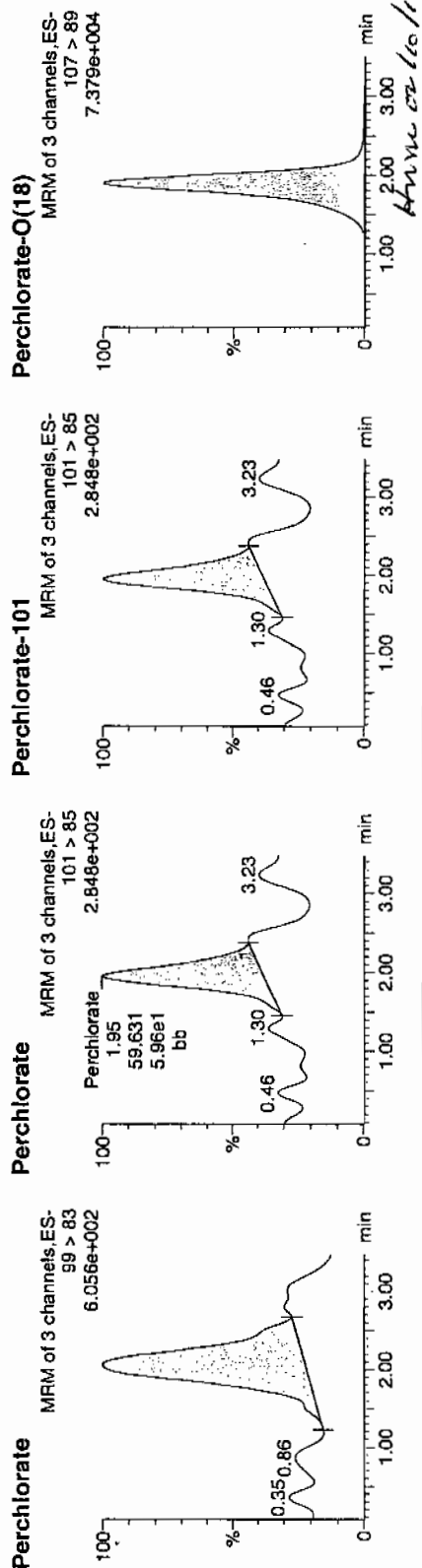
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208074a
Date: 08-Feb-2010
Time: 21:52:41
ID: IPB009
Vial: 1:1,A

Sum
02-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83	2.05	246.817	246.817	bb			0.0041			12.504	4.14
IPB009	Perchlorate-101	101 > 85	1.95	59.631	59.631	bb			0.0032			10.438	
IPB009	Perchlorate-O(18)	107 > 89	1.89	23201.656	23201.656	bb			0.4770	95.40	-4.60	2554.5...	

Sum
02-04-10

Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

QUANTO ULTIMA: nairb 01-08-08.ca1

Calibration Report - MS1 Static

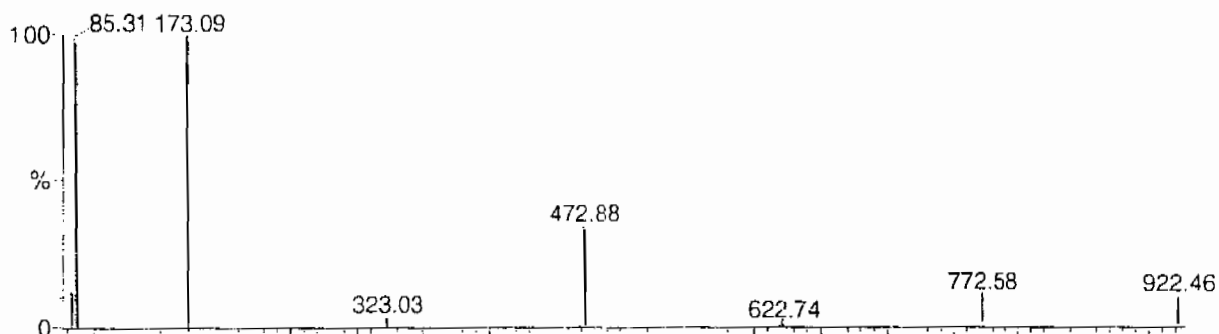
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

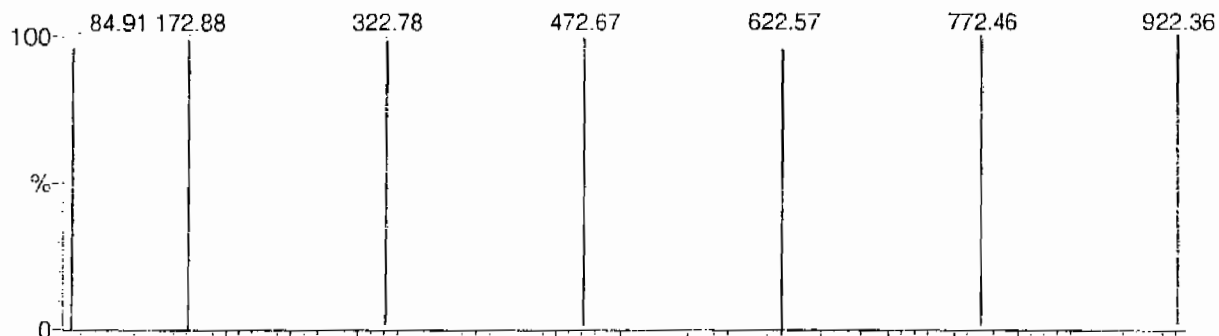
DATA HIGHLIGHTED BY CURS 01-07-03

Data file: STATMS1 - Uncalibrated

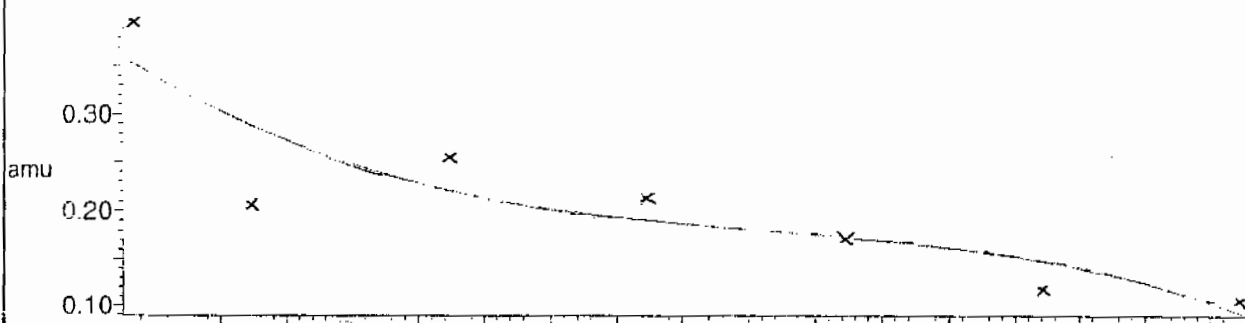
7 matches of 7 tested references



Reference file: Nairb

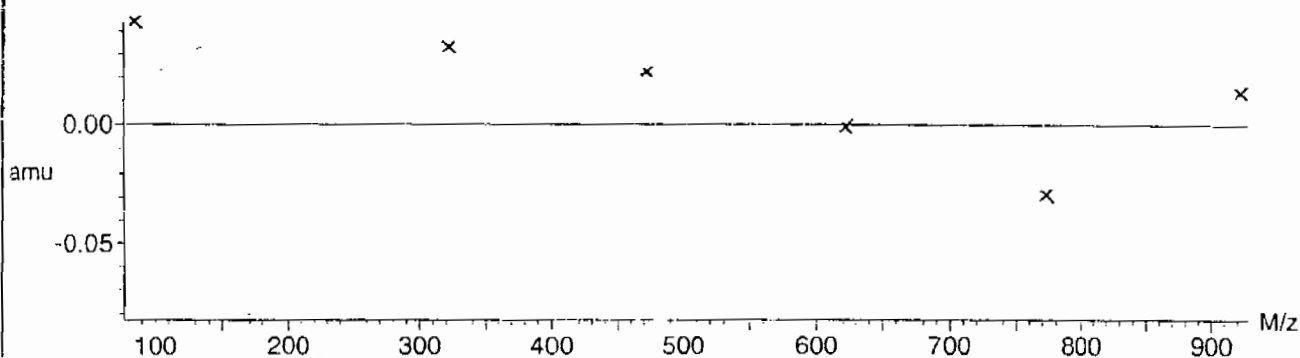


Mass difference (Raw - Ref mass)



Residuals

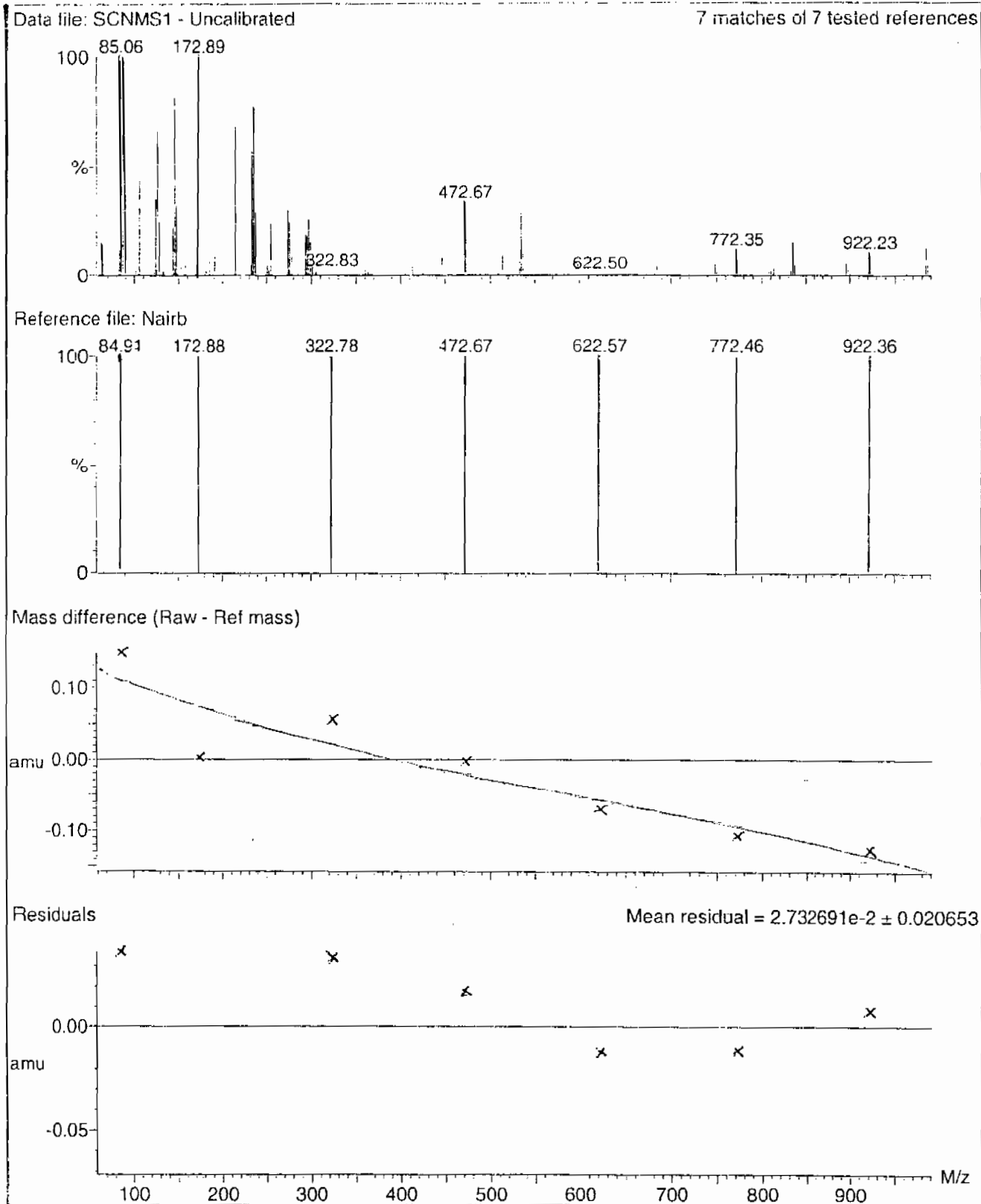
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:20:09 2008



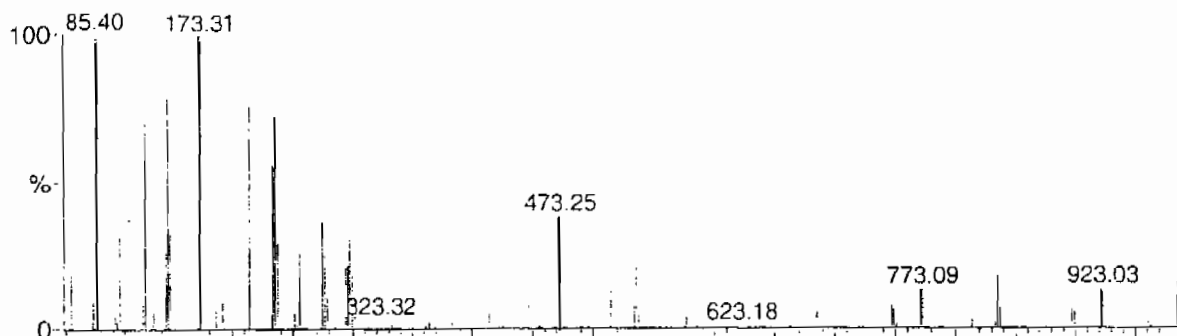
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

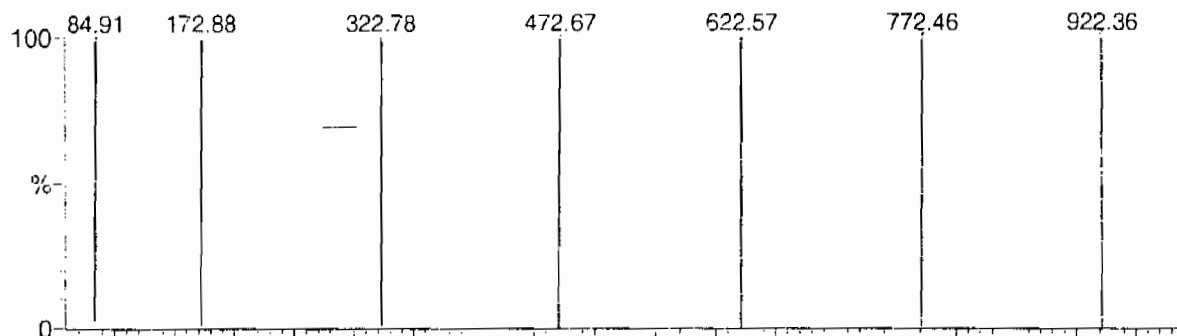
Printed: Tue Jan 08 12:21:04 2008

Data file: FASTMS1 - Uncalibrated

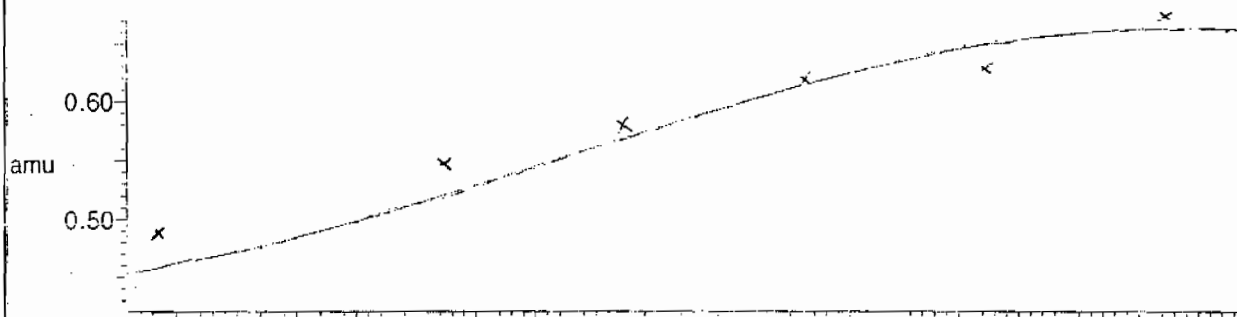
7 matches of 7 tested references



Reference file: Nairb

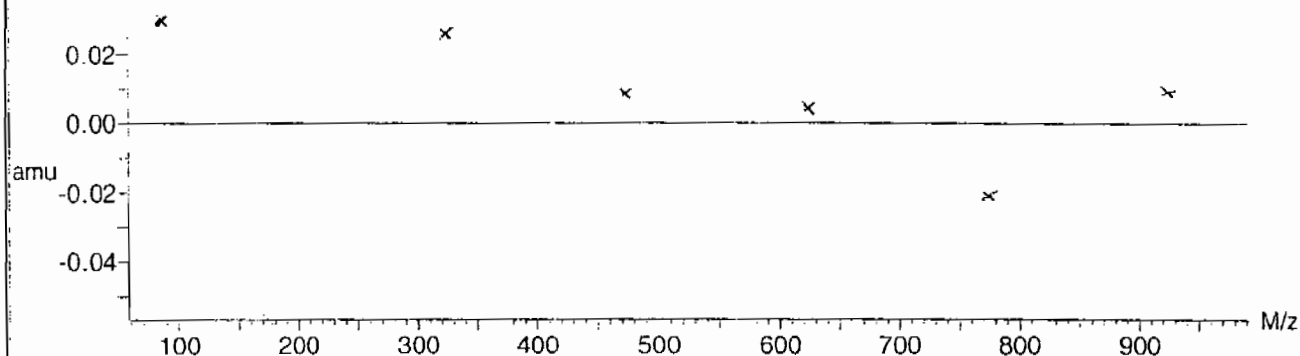


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.224580 \times 10^{-2} \pm 0.016544$



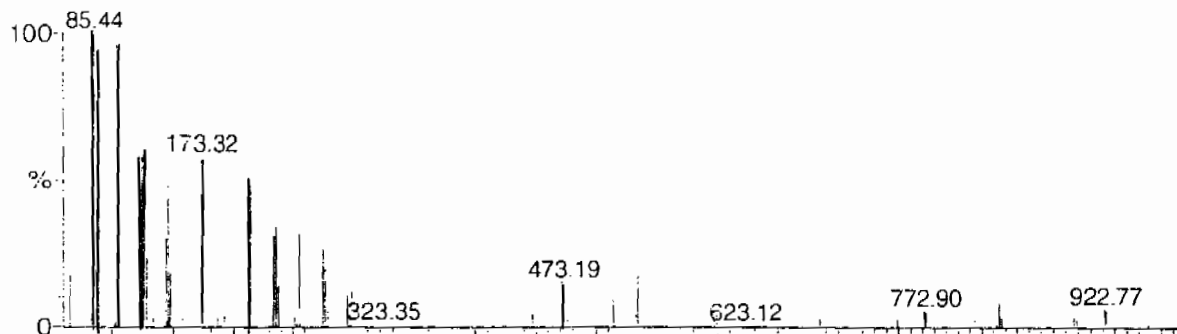
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

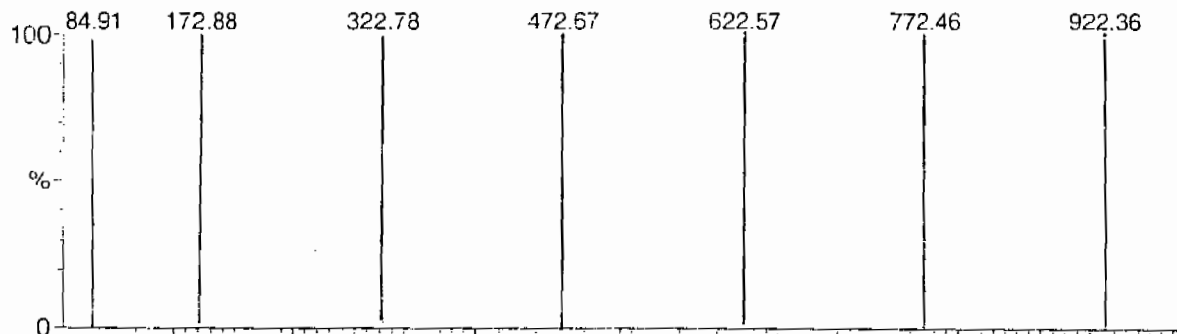
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Data file: FASTMS2 - Uncalibrated

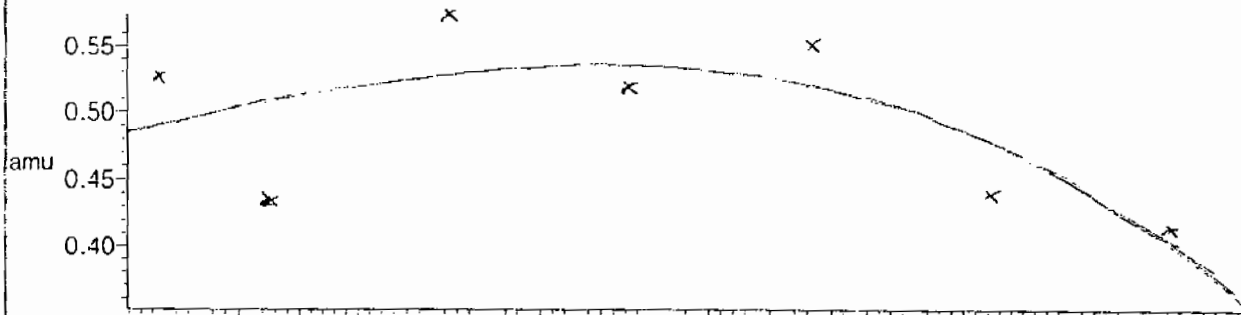
7 matches of 7 tested references



Reference file: Nairb

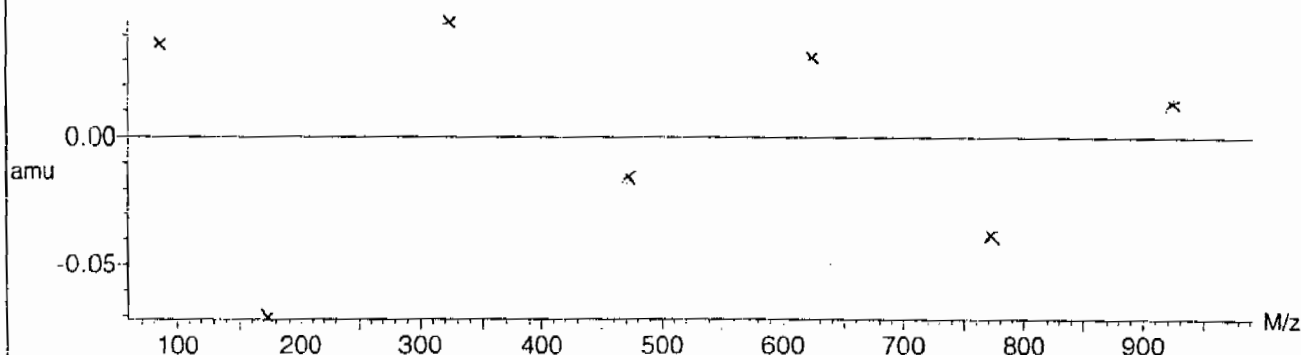


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.598289 \times 10^{-2} \pm 0.017899$



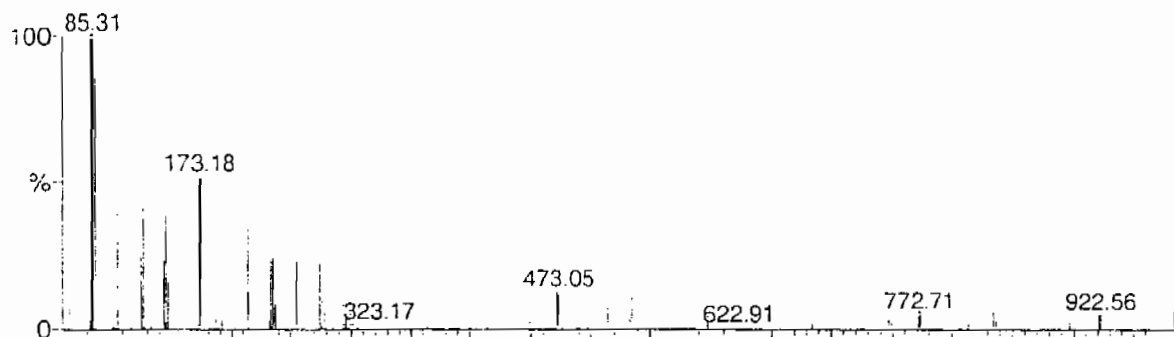
Calibration Report - MS2 Scanning

Page 1 of 1

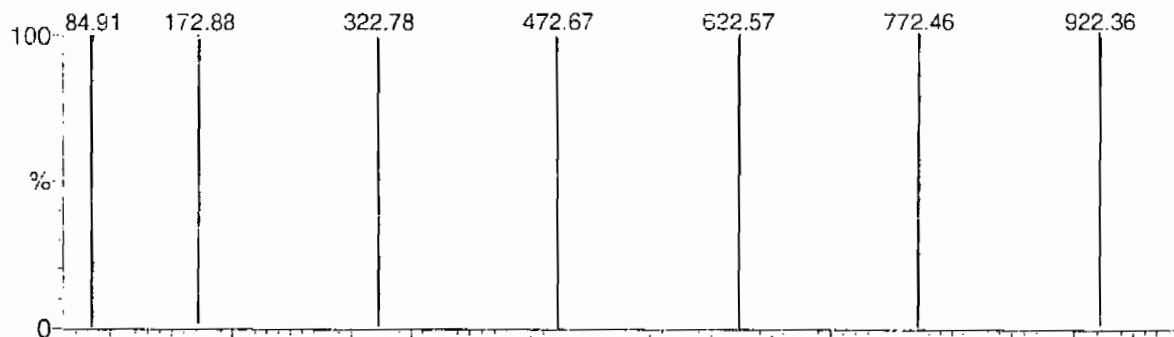
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Data file: SCNMS2 - Uncalibrated

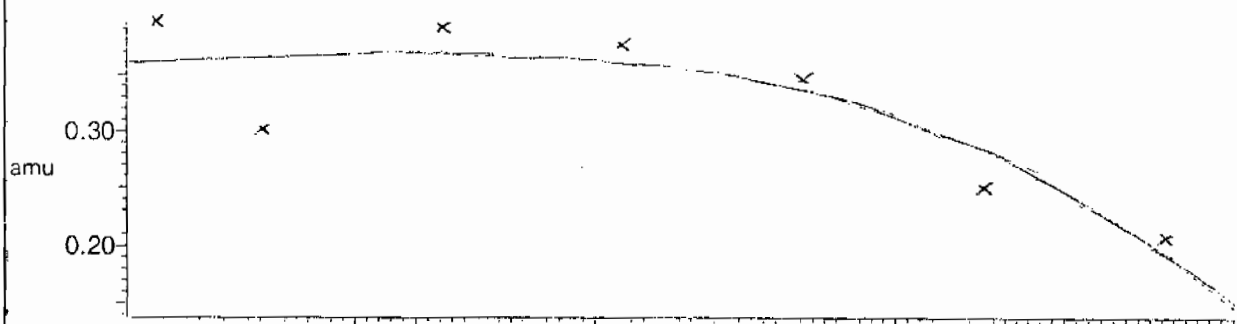
7 matches of 7 tested references



Reference file: Nairb

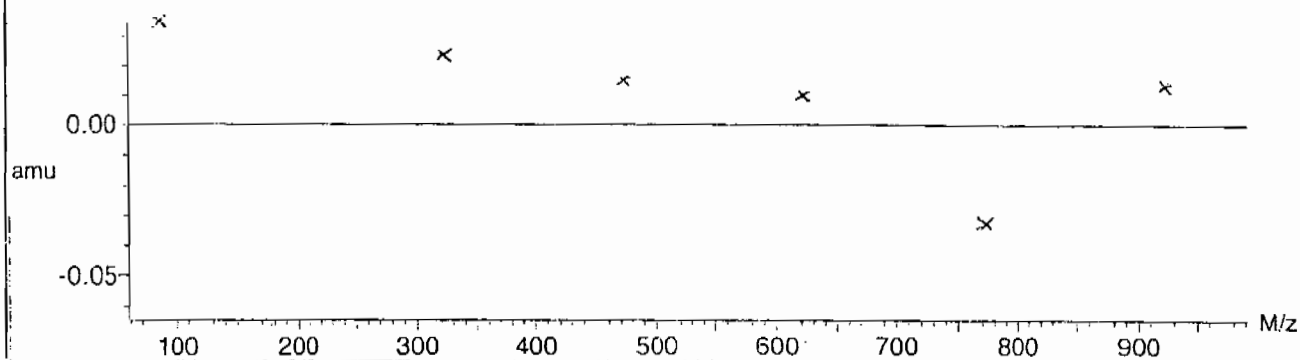


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.782494 \times 10^{-2} \pm 0.017442$



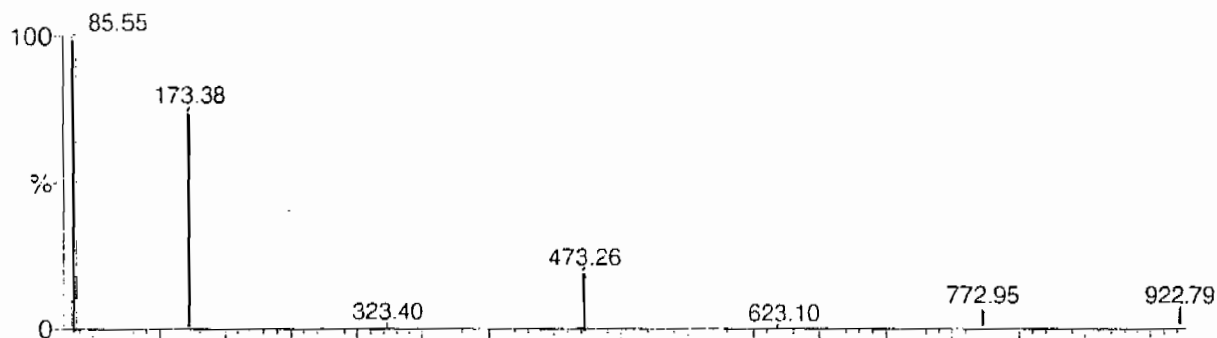
Calibration Report - MS2 Static

Page 1 of 1

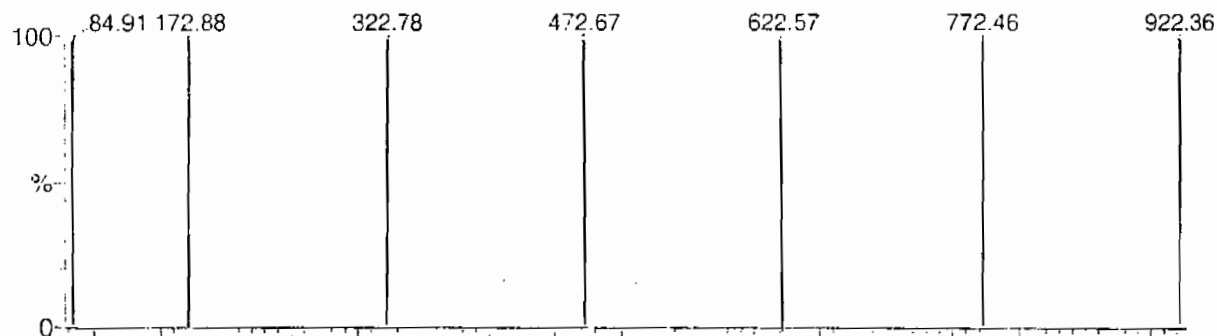
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

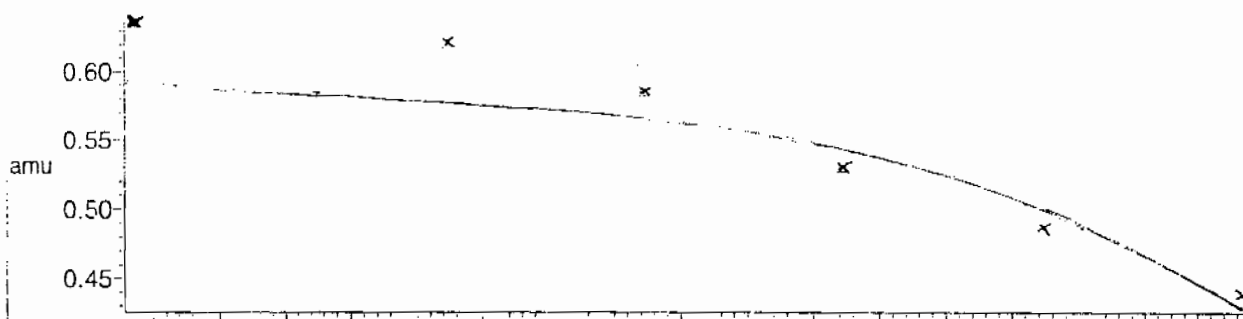
7 matches of 7 tested references



Reference file: Nairb

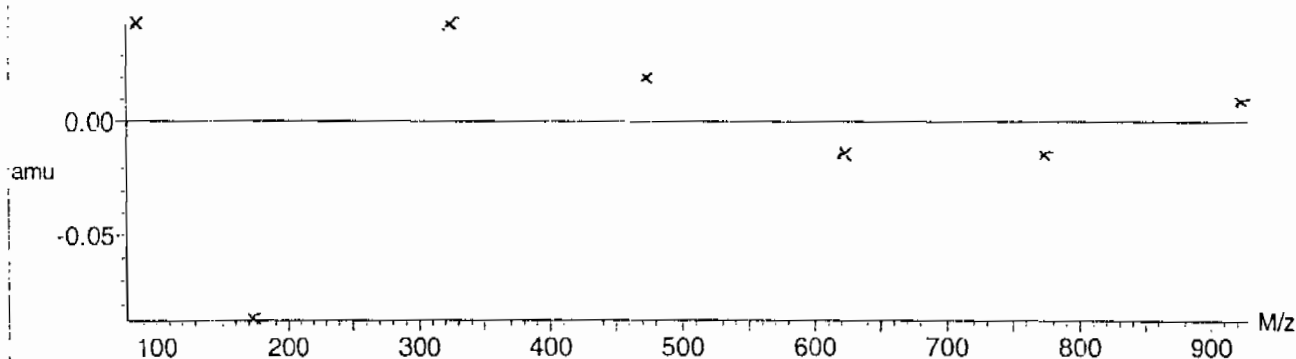


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.295980 \times 10^{-2} \pm 0.025603$



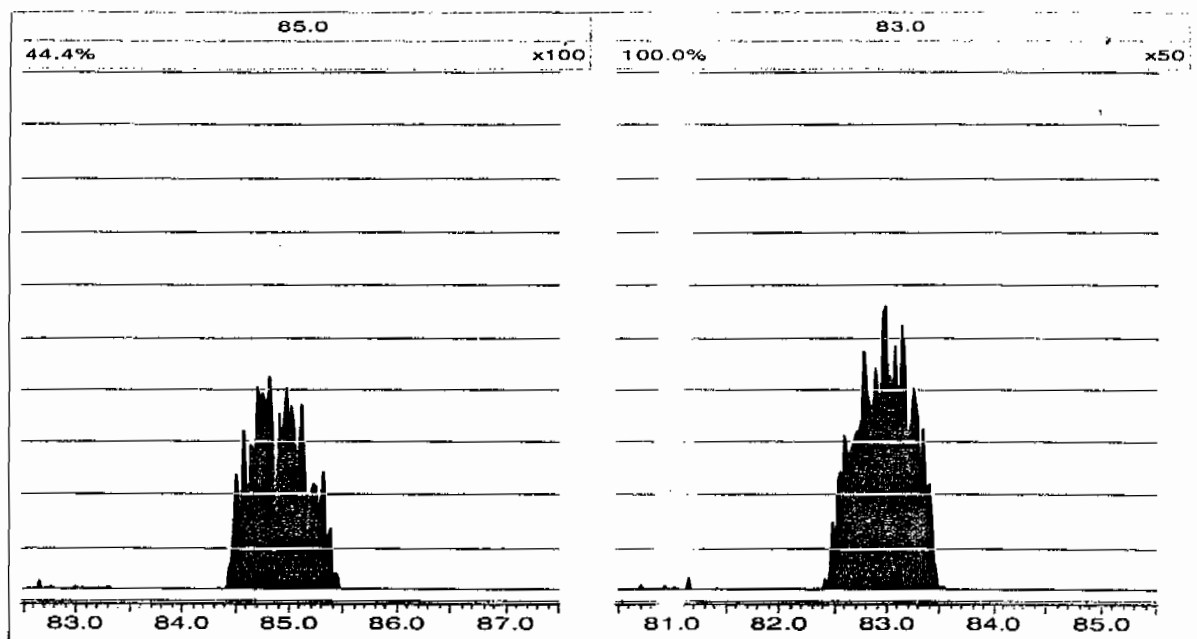
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PROVACQUDB\Perchlorate.IPR

Printed: Monday, February 08, 2010 12:29:43 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories
GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	per0208006a	08-FEB-10	24441.6				
Lower Area Limit			12220.8				
Upper Area Limit			48883.2				
1202035565	per0208050a	08-FEB-10 19:15	22209.3	1.88	1.89273	1.007	
1202035566	per0208051a	08-FEB-10 19:21	23514.8	1.88	1.89277	1.007	
1202035573	per0208052a	08-FEB-10 19:28	23733.6	1.93	1.94248	1.006	
245981001	per0208067a	08-FEB-10 21:06	23383.4	1.89	1.89273	1.001	

SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 950027
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. RE15-10-8083
 Date Received: 02-FEB-10
 GEL Job No (SDG): 10-1514-1
 GEL Sample ID: 245981001
 Date Filtered: 07-FEB-10
 Injection Volume (uL): 20
 %Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:06	per0208067a
	Perchlorate Isotope Ratio						1	08-FEB-10 21:06	per0208067a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 21:06	per0208067a
	Perchlorate-O(18)			0.481	ug/L		1	08-FEB-10 21:06	per0208067a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

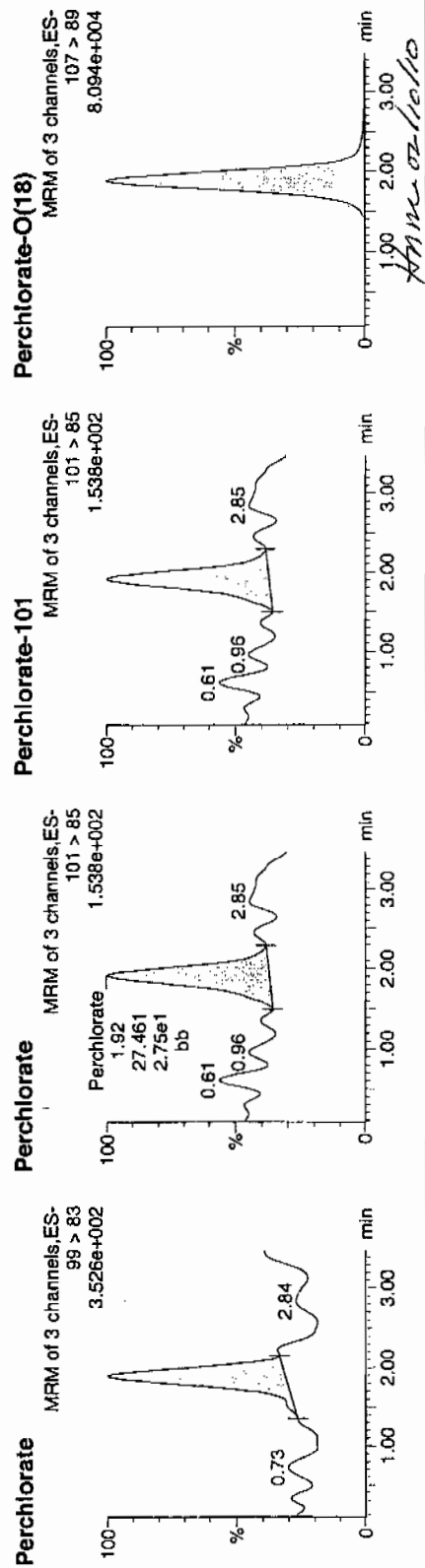
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208067a
Date: 08-Feb-2010
Time: 21:06:42
ID: 245981001
Vial: 2:3,C

02-01-10

LANL 1950023 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
245981001	Perchlorate	99 > 83	1.89	63.794	63.794	bb			0.0011			20.850	2.32
245981001	Perchlorate-101	101 > 85	1.92	27.461	27.461	bb			0.0015			5.444	
245981001	Perchlorate-O(18)	107 > 89	1.89	23383.402	23383.402	bb			0.4807	96.15	-3.85	1376.9...	

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 08-FEB-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 59530.66

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 08-FEB-10

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 18771.12

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

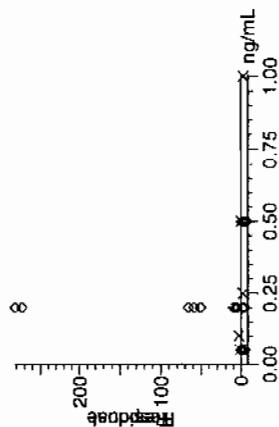
Page 1 of 2

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

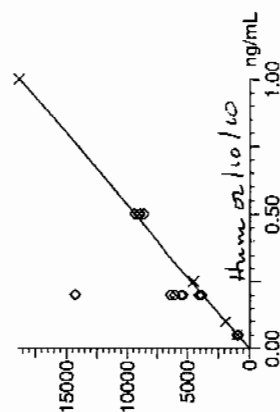
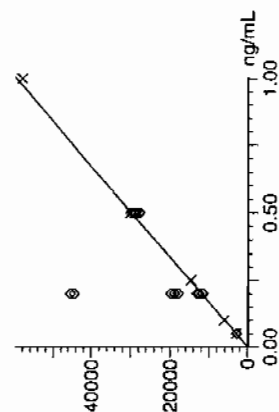
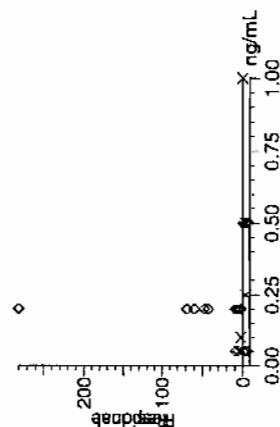
Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020810a.mdb 09 Feb 2010 07:47:59
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020810a.cdb 09 Feb 2010 07:48:17

Compound name: Perchlorate
Response Factor: 59530.6
RF SD: 1393.77, % Relative SD: 2.34126
Response type: External Std, Area
Curve type: RF



Compound name: Perchlorate-101
Response Factor: 18771.1
RF SD: 687.466, % Relative SD: 3.66236
Response type: External Std, Area
Curve type: RF



Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

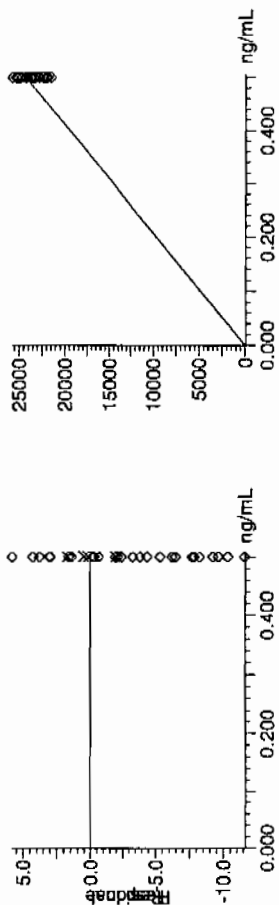
Compound name: Perchlorate-O(18)

Response Factor: 48640

RRF SD: 647.782, % Relative SD: 1.33179

Response type: External Std, Area

Curve type: RF ✓



Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.59	08-FEB-10 14:46	per0208009a
Perchlorate Isotope Ratio		3.19		08-FEB-10 14:46	per0208009a
Perchlorate-101	.5	.5	99.88	08-FEB-10 14:46	per0208009a

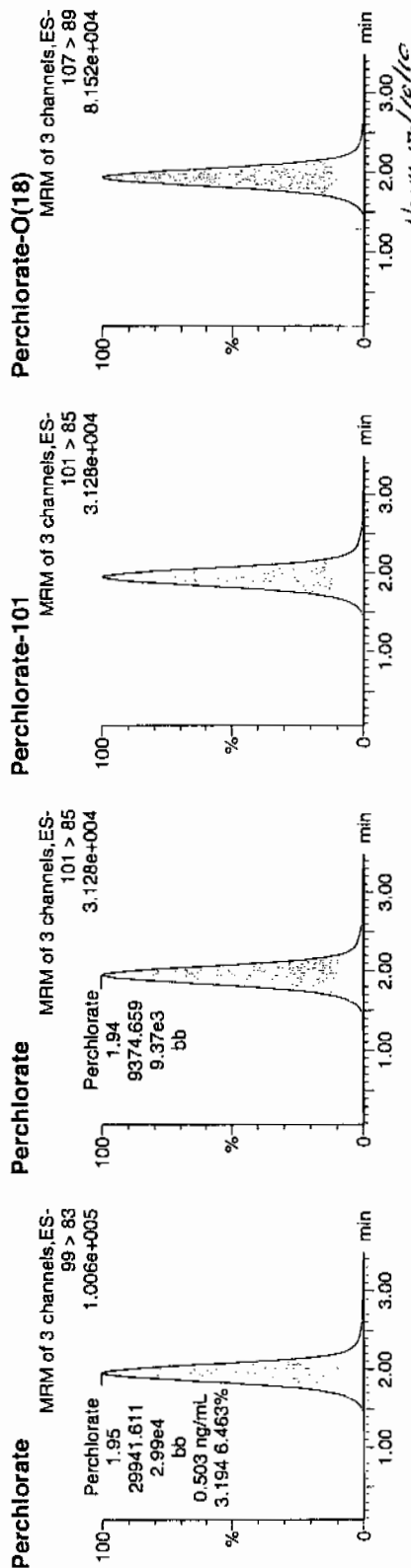
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208009a
Date: 08-Feb-2010
Time: 14:46:32
ID: WCL100128-06ICV
Vial: 1:2,A

Per
Cms
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06ICV	Perchlorate	99 > 83	1.95	29941.611	29941.611	bb			0.5030	100.59	0.59	5446.9...	3.19
WCL100128-06ICV	Perchlorate-101	101 > 85	1.94	9374.659	9374.659	bb			0.4994	99.88	-0.12	264.354	
WCL100128-06ICV	Perchlorate-O(18)	107 > 89	1.93	24277.504	24277.504	bb			0.4991	99.83	-0.17	3258.6...	

Perchlorate Continuing Calibration Verification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.49	08-FEB-10 16:05	per0208021a
Perchlorate Isotope Ratio		3.13		08-FEB-10 16:05	per0208021a
Perchlorate-101	.5	.5	99.83	08-FEB-10 16:05	per0208021a
Perchlorate	.5	.49	97.32	08-FEB-10 17:30	per0208034a
Perchlorate Isotope Ratio		3.24		08-FEB-10 17:30	per0208034a
Perchlorate-101	.5	.48	95.26	08-FEB-10 17:30	per0208034a
Perchlorate	.5	.48	95.6	08-FEB-10 18:55	per0208047a
Perchlorate Isotope Ratio		3.13		08-FEB-10 18:55	per0208047a
Perchlorate-101	.5	.49	97	08-FEB-10 18:55	per0208047a
Perchlorate	.5	.47	93.45	08-FEB-10 20:20	per0208060a
Perchlorate Isotope Ratio		3.05		08-FEB-10 20:20	per0208060a
Perchlorate-101	.5	.49	97.09	08-FEB-10 20:20	per0208060a
Perchlorate	.5	.48	96.67	08-FEB-10 21:45	per0208073a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.22		08-FEB-10 21:45	per0208073a
Perchlorate-101	.5	.48	95.12	08-FEB-10 21:45	per0208073a

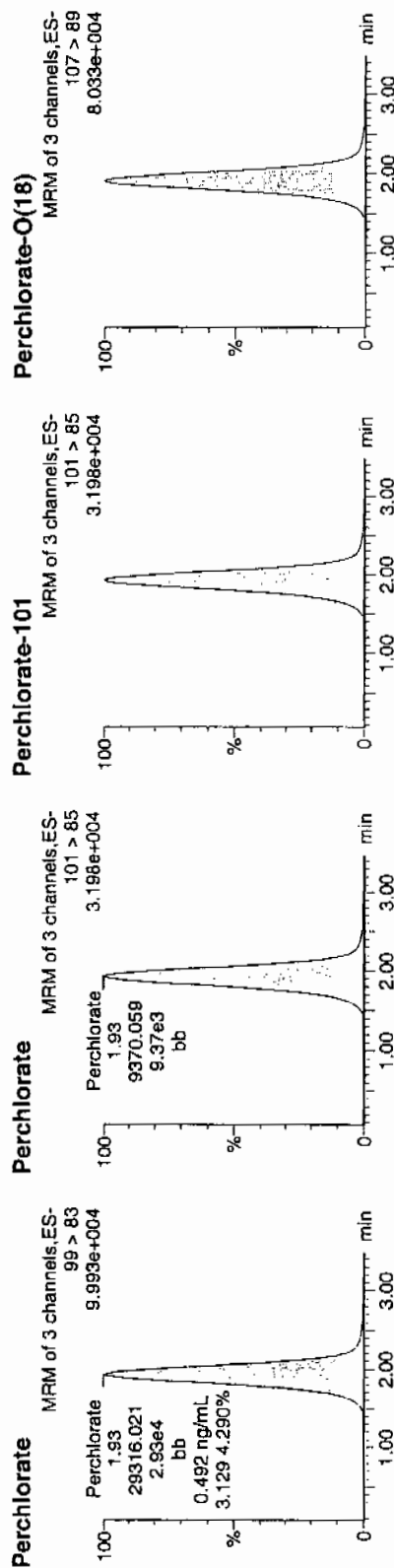
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208021a
Date: 08-Feb-2010
Time: 16:05:12
ID: WCL100128-06CCV
Vial: 1:2,A

Pure
CWS
02-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.93	29316.021	29316.021	bb			0.4925	98.49	-1.51	1324.3...	3.13
WCL100128-06CCV	Perchlorate-101	101 > 85	1.93	9370.059	9370.059	bb			0.4992	99.83	-0.17	4157.5...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.92	23385.551	23385.551	bb			0.4808	96.16	-3.84	3253.6...	

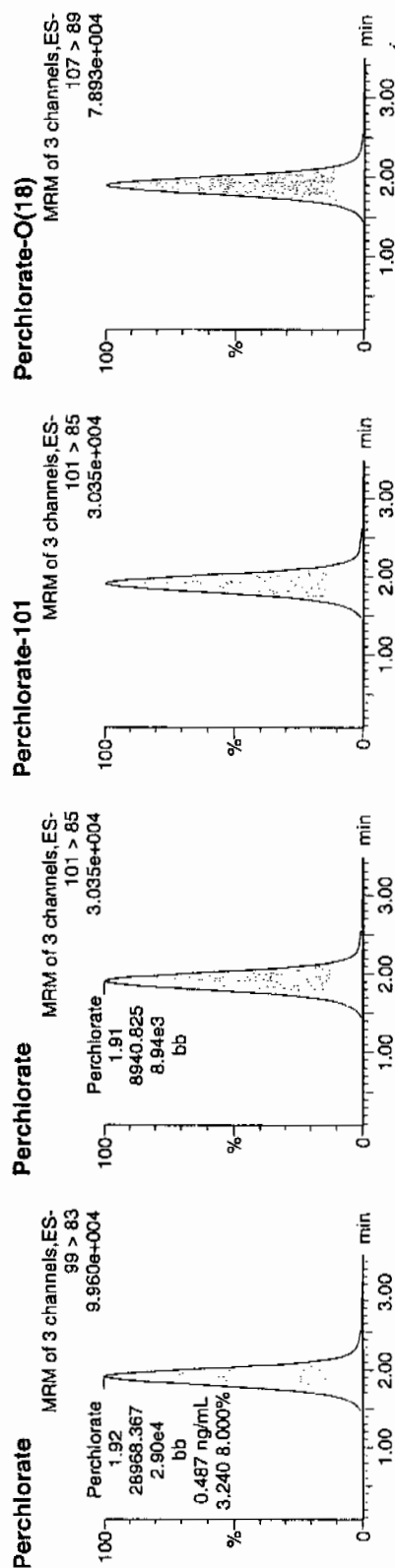
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208034a
Date: 08-Feb-2010
Time: 17:30:17
ID: WCL100128-06CCV
Vial: 1:2,A

Pure
CWS
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.92	28968.367	28968.367	bb			0.4866	97.32	-2.68	7606.4...	3.24
WCL100128-06CCV	Perchlorate-101	101 > 85	1.91	8940.825	8940.825	bb			0.4763	95.26	-4.74	3381.0...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.91	23019.350	23019.350	bb			0.4733	94.65	-5.35	4411.7...	

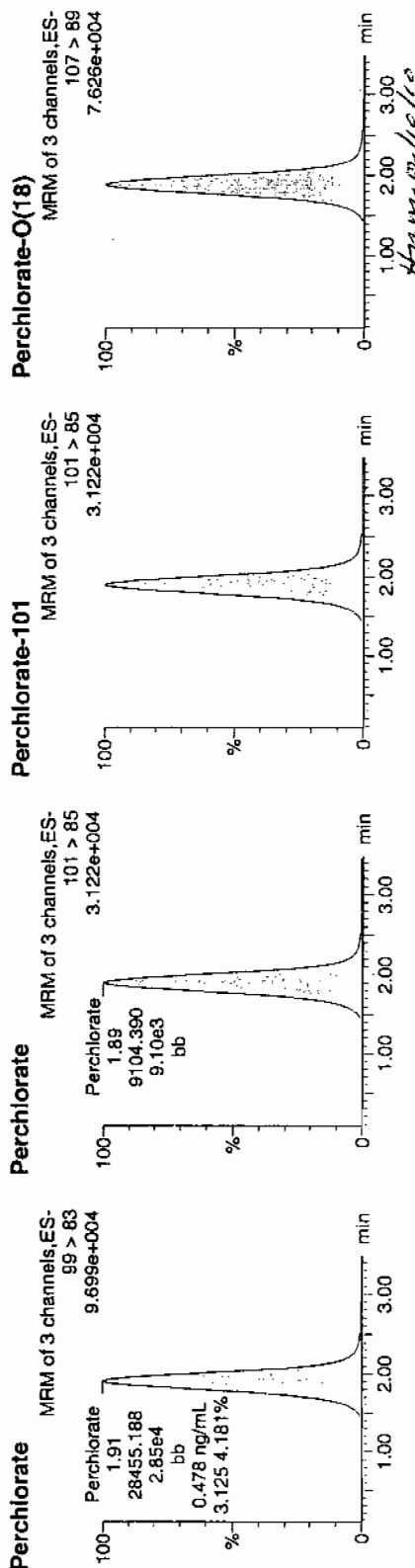
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208047a
Date: 08-Feb-2010
Time: 18:55:25
ID: WCL100128-06CCV
Vial: 1:2,A

Pure
Low
02-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.91	28455.188	28455.188	bb			0.4780	95.60	-4.40	6190.9...	3.13
WCL100128-06CCV	Perchlorate-101	101 > 85	1.89	9104.390	9104.390	bb			0.4850	97.00	-3.00	681.071	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.89	22404.150	22404.150	bb			0.4606	92.12	-7.88	2959.4...	

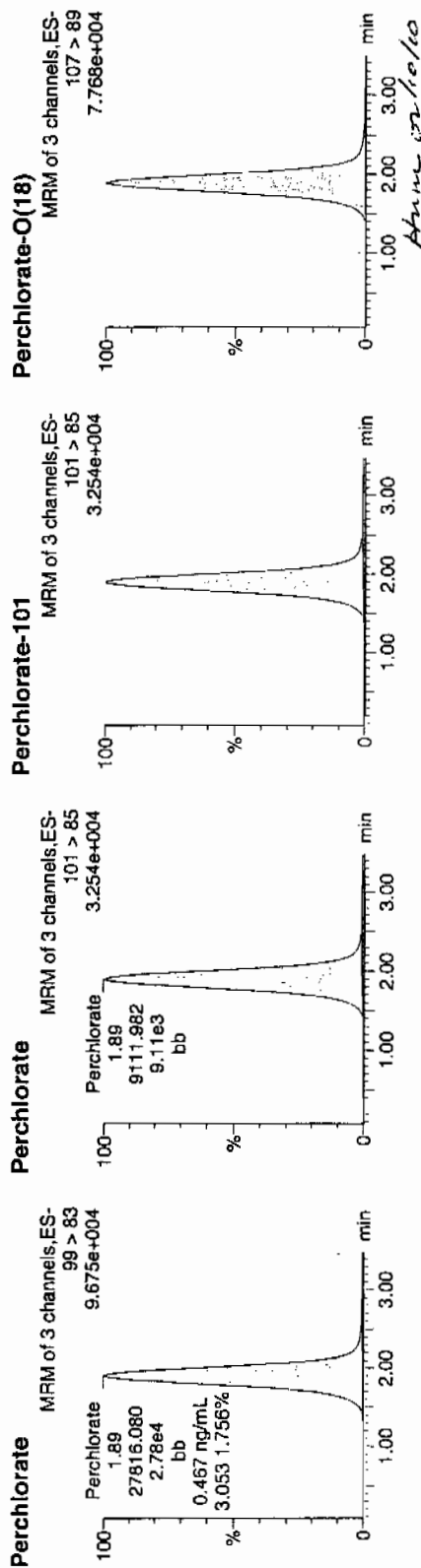
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208060a
Date: 08-Feb-2010
Time: 20:20:32
ID: WCL100128-06CCV
Vial: 1;2,A

*Per
and
02-21-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.89	27816.080	27816.080	bb			0.4673	93.45	-6.55	1799.5...	3.05
WCL100128-06CCV	Perchlorate-101	101 > 85	1.89	9111.982	9111.982	bb			0.4854	97.09	-2.91	1434.4...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.89	22435.383	22435.383	bb			0.4613	92.25	-7.75	1805.8...	

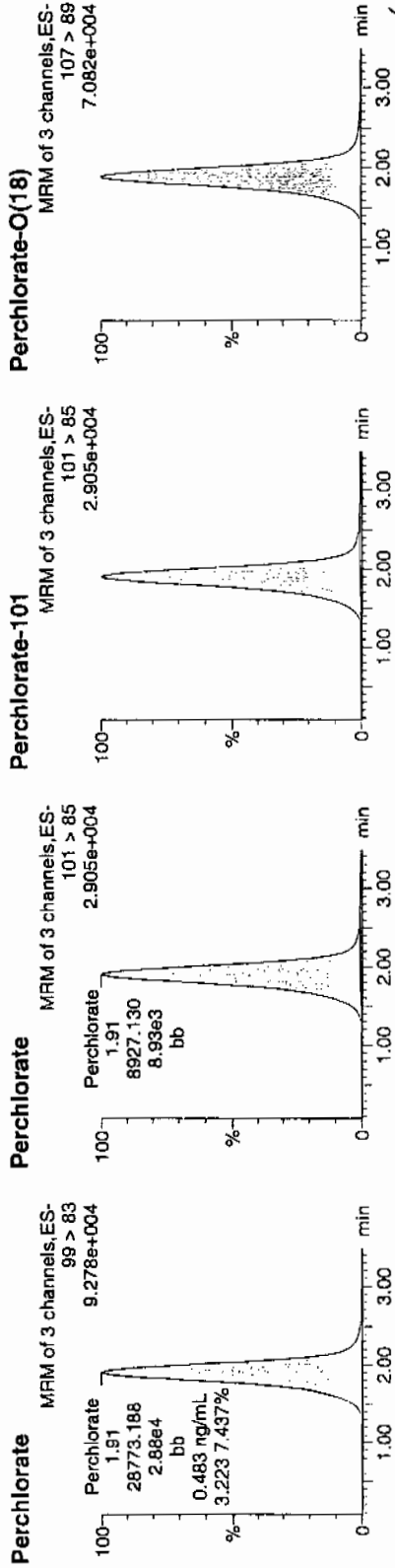
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208073a
Date: 08-Feb-2010
Time: 21:45:55
ID: WCL100128-06CCV
Vial: 1:2,A

Pass
02-04-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion.Ratio
WCL100128-06CCV	Perchlorate	99 > 83	1.91	28773.188	28773.188	bb			0.4833	96.67	-3.33	3174.1...	3.22
WCL100128-06CCV	Perchlorate-101	101 > 85	1.91	8927.130	8927.130	bb			0.4756	95.12	-4.88	5417.8...	
WCL100128-06CCV	Perchlorate-O(18)	107 > 89	1.89	22077.664	22077.664	bb			0.4539	90.78	-9.22	7805.6...	

Perchlorate MDL Verification

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	101.73	08-FEB-10 14:59	per0208011a
Perchlorate Isotope Ratio		2.96		08-FEB-10 14:59	per0208011a
Perchlorate-101	.05	.05	109.1	08-FEB-10 14:59	per0208011a
Perchlorate	.05	.05	100.29	08-FEB-10 16:18	per0208023a
Perchlorate Isotope Ratio		3.21		08-FEB-10 16:18	per0208023a
Perchlorate-101	.05	.05	98.94	08-FEB-10 16:18	per0208023a
Perchlorate	.05	.05	101.53	08-FEB-10 17:43	per0208036a
Perchlorate Isotope Ratio		3.05		08-FEB-10 17:43	per0208036a
Perchlorate-101	.05	.05	105.49	08-FEB-10 17:43	per0208036a
Perchlorate	.05	.05	101.45	08-FEB-10 19:08	per0208049a
Perchlorate Isotope Ratio		3.36		08-FEB-10 19:08	per0208049a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1514-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	95.78	08-FEB-10 19:08	per0208049a
Perchlorate	.05	.05	97.2	08-FEB-10 20:33	per0208062a
Perchlorate Isotope Ratio		3.14		08-FEB-10 20:33	per0208062a
Perchlorate-101	.05	.05	98.24	08-FEB-10 20:33	per0208062a
Perchlorate	.05	.05	99.1	08-FEB-10 21:59	per0208075a
Perchlorate Isotope Ratio		3.16		08-FEB-10 21:59	per0208075a
Perchlorate-101	.05	.05	99.59	08-FEB-10 21:59	per0208075a

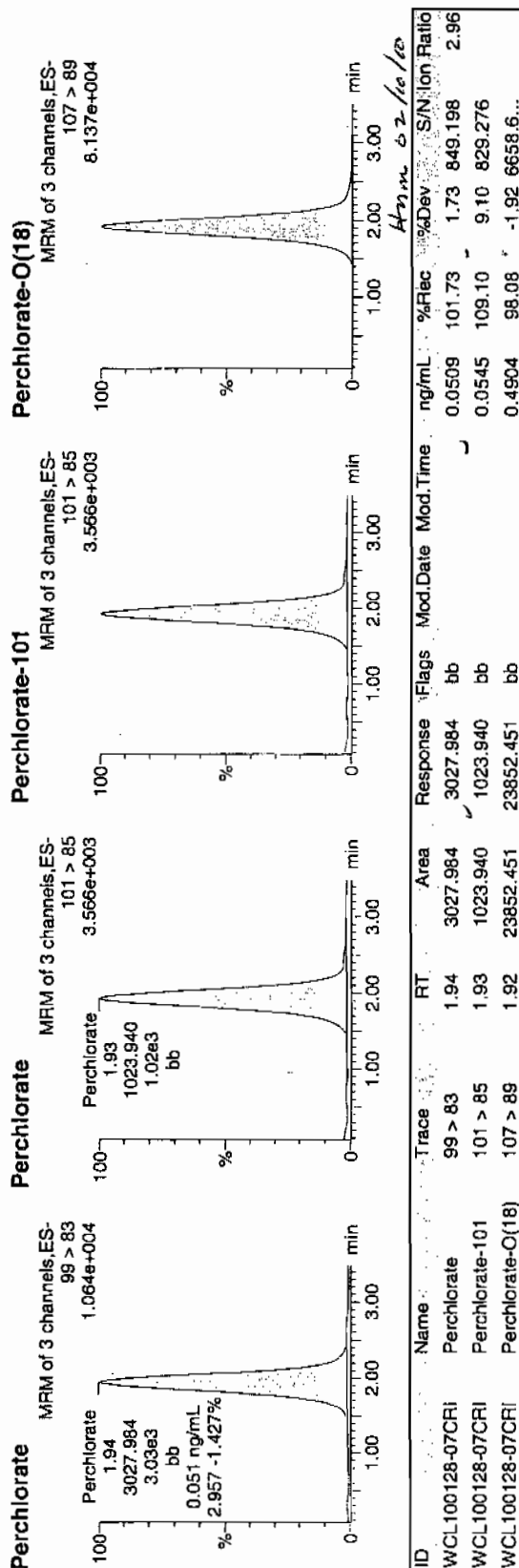
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208011a
Date: 08-Feb-2010
Time: 14:59:36
ID: WCL100128-07CRI
Vial: 1:2,B

*Runs
CWS
01-29-10*



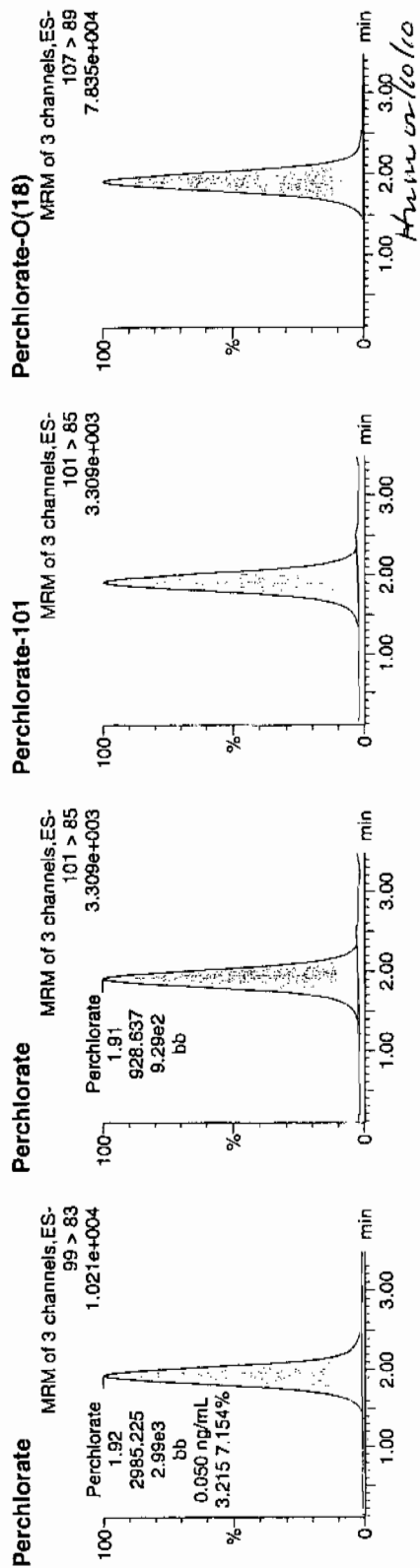
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208023a
Date: 08-Feb-2010
Time: 16:18:17
ID: WCL100128-07CRI
Vial: 1;2,B

Per
Gund
02-09-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.92	2985.225	2985.225	bb			0.0501	100.29	0.29	2277.7...	3.21
WCL100128-07CRI	Perchlorate-101	101 > 85	1.91	928.637	928.637	bb			0.0495	98.94	-1.06	1285.2...	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.91	22805.957	22805.957	bb			0.4689	93.77	-6.23	2391.8...	

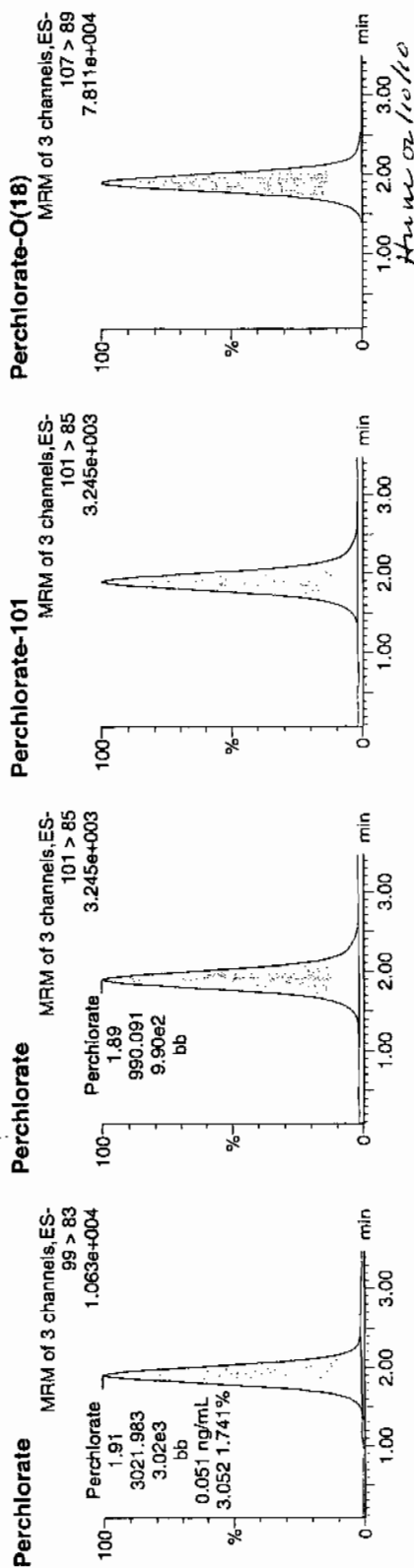
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208036a
Date: 08-Feb-2010
Time: 17:43:22
ID: WCL100128-07CRI
Vial: 1;2,B

*Pass
and
02-09-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.91	3021.983	3021.983	bb			0.0508	101.53	1.53	1282.6...	3.05
WCL100128-07CRI	Perchlorate-101	101 > 85	1.89	990.091	990.091	bb			0.0527	105.49	5.49	30.390	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.89	22734.426	22734.426	bb			0.4674	93.48	-6.52	4696.0...	

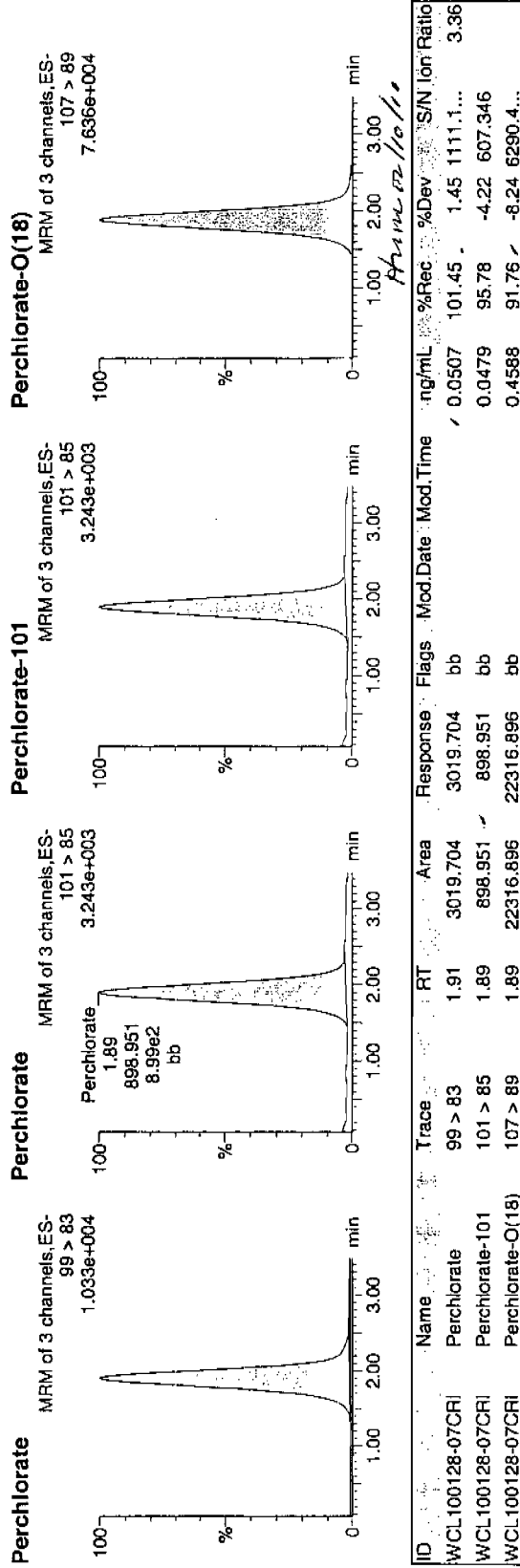
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The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qid

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208049a
Date: 08-Feb-2010
Time: 19:08:31
ID: WCL100128-07CRI
Vial: 1:2,B

Pure
and
02-31-10

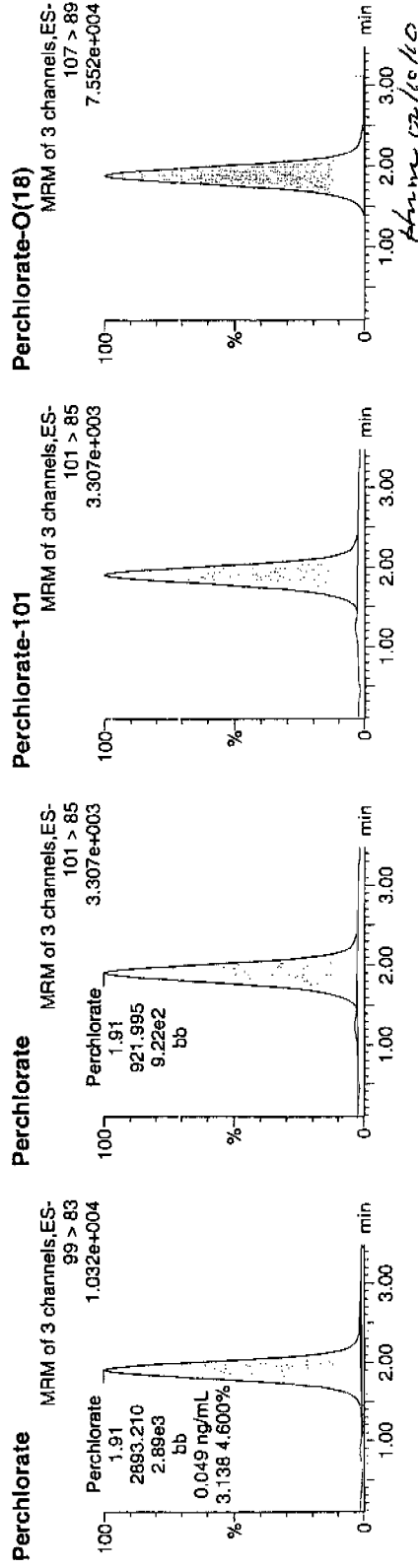


Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208062a
Date: 08-Feb-2010
Time: 20:33:51
ID: WCL100128-07CRI
Vial: 1:2,B

Pure
and
02-29-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100128-07CRI	Perchlorate	99 > 83	1.91	2893.210	2893.210	bb			0.0486	97.20	-2.80	767.866	3.14
WCL100128-07CRI	Perchlorate-101	101 > 85	1.91	921.995	921.995	bb			0.0491	98.24	-1.76	510.313	
WCL100128-07CRI	Perchlorate-O(18)	107 > 89	1.89	21979.691	21979.691	bb			0.4519	90.36	-9.62	1938.1...	

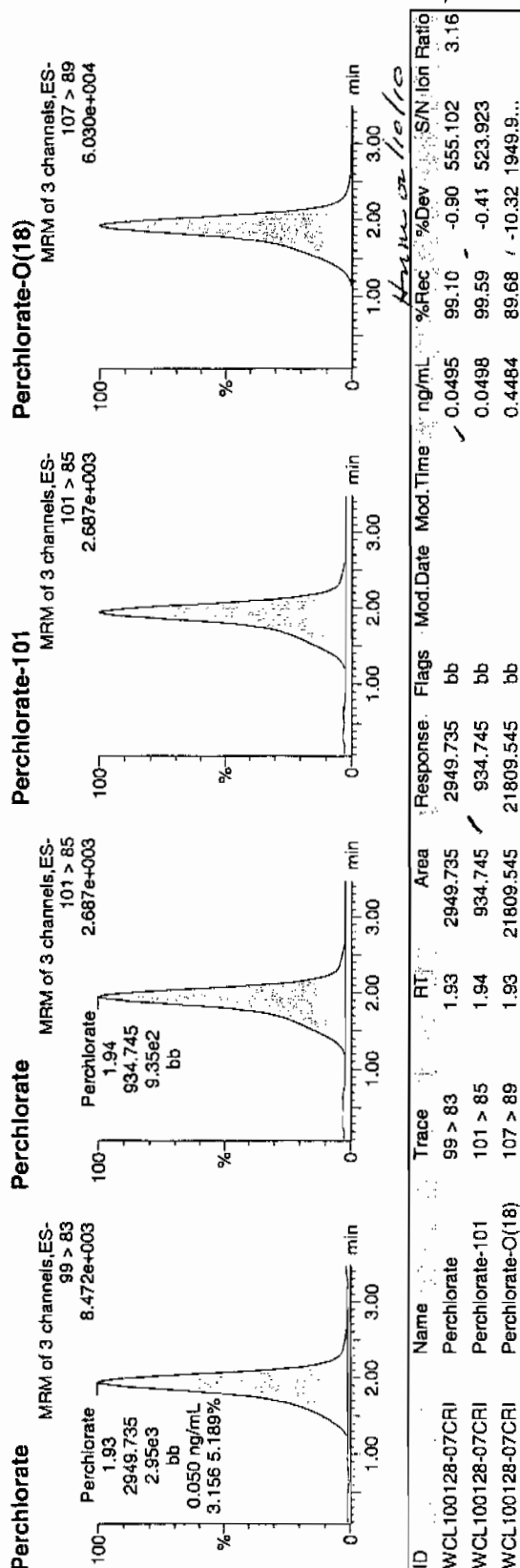
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qid

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208075a
Date: 08-Feb-2010
Time: 21:59:15
ID: WCL100128-07CRI
Vial: 1:2,B

*Per
and
02-21-10*



QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: WASTE WATER
 Extraction Batch ID: 950027
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. MB
 Date Received: 07-FEB-10
 GEL Job No (SDG): 10-1514-1
 GEL Sample ID: 1202035565
 Date Filtered: 07-FEB-10
 Injection Volume (uL): 20
 %Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	08-FEB-10 19:15	per0208050a
	Perchlorate Isotope Ratio						1	08-FEB-10 19:15	per0208050a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	08-FEB-10 19:15	per0208050a
	Perchlorate-O(18)			0.457	ug/L		1	08-FEB-10 19:15	per0208050a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X ¹
 Aliquot %Solids

Quantify Sample Report MassLynx 4.0 SP4 The GEL Group, LLC Analyst: Charlers W. Wilson

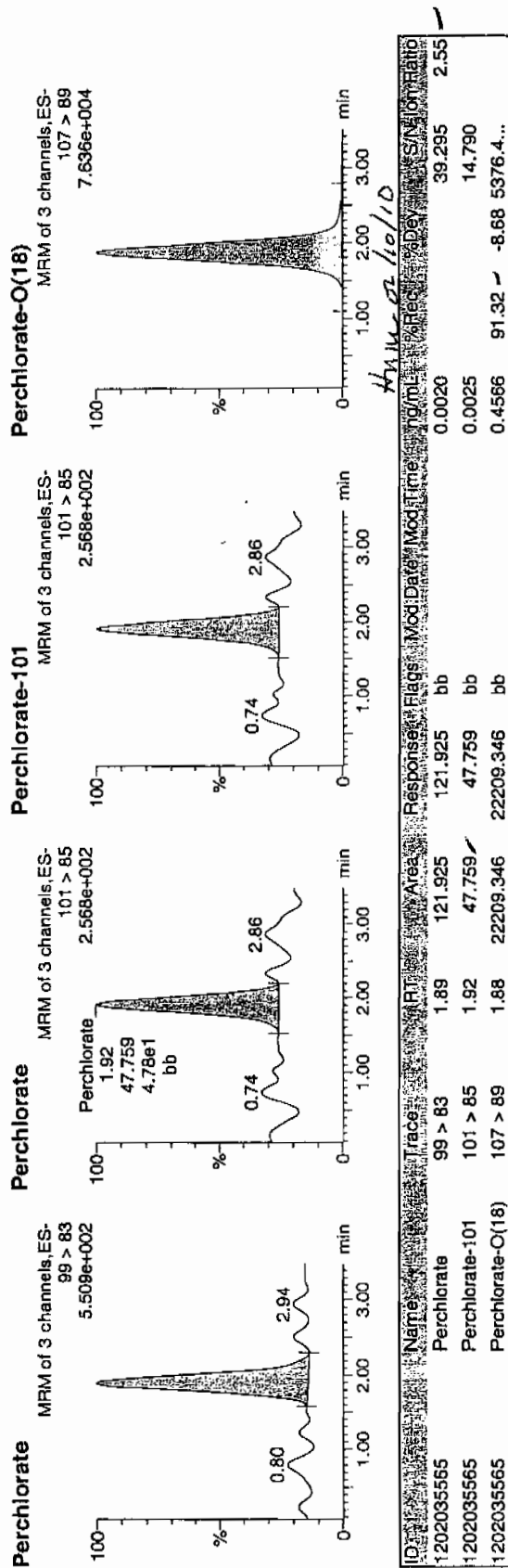
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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208050a
Date: 08-Feb-2010
Time: 19:15:05
ID: 1202035565
Vial: 2:1,A

WJ
02-09-10

1202035565 | 1202035565 | 1202035565



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WASTE WATER

Extraction Batch ID: 250027

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

LCS

Date Received: 07-FEB-10

GEL Job No (SDG): 10-1514-1

GEL Sample ID: 1202035566

Date Filtered: 07-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.196	ug/L	J	1	08-FEB-10 19:21	per0208051a
	Perchlorate Isotope Ratio			3.01			1	08-FEB-10 19:21	per0208051a
14797-73-0	Perchlorate-101	.05	.2	0.207	ug/L		1	08-FEB-10 19:21	per0208051a
	Perchlorate-O(18)			0.483	ug/L		1	08-FEB-10 19:21	per0208051a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

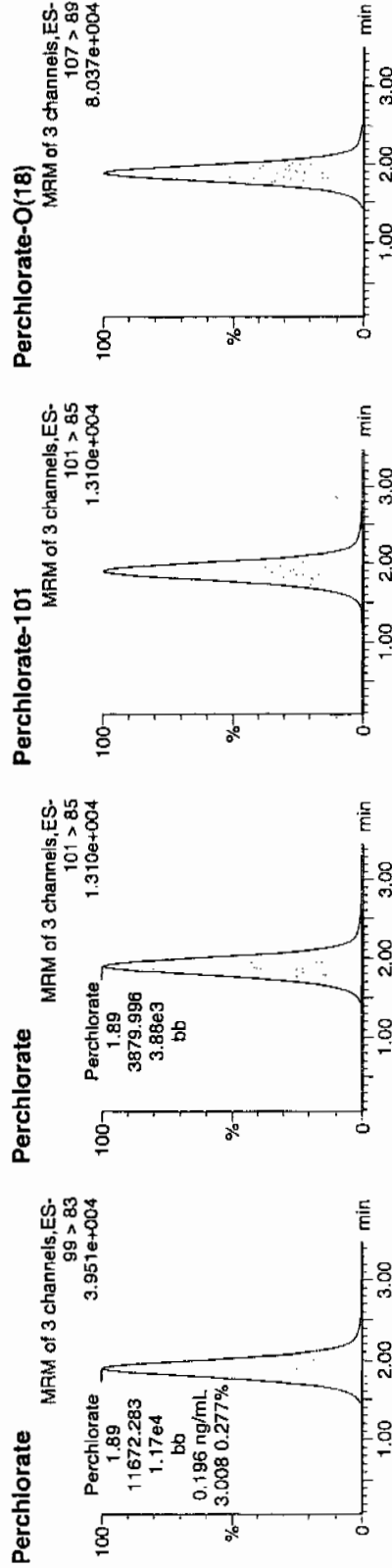
Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

Last Altered: Tuesday, February 09, 2010 7:48:19 AM Eastern Standard Time
Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208051a
Date: 08-Feb-2010
Time: 19:21:48
ID: 1202035566
Vial: 2:1,B

WJ
2/29/10

1202035566 / 1202035566



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035566	Perchlorate	99 > 83	1.89	11672.283	11672.283	bb			0.1961	98.04	-1.96	1706.5...	3.01
1202035566	Perchlorate-101	101 > 85	1.89	3879.996	3879.996	bb			0.2067	103.35	3.35	835.288	
1202035566	Perchlorate-O(18)	107 > 89	1.88	23514.770	23514.770	bb			0.4834	96.69	-3.31	6317.6...	

$$\frac{11672.283}{59530.6} = 0.1961$$

Handwritten note: 100/10

MISCELLANEOUS DATA

Prep Logbook

Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) by EPA Method 6850 Modified (6850M)

Batch ID: 950027 Verified by: _____
 Analyst: Charles Wilson Lab SOP: GL-OA-E-067 REV# 6
 Method: SW846 6850 Modified Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202035565 MB	07-FEB-2010 14:31:00	10	10	1
1202035566 LCS	07-FEB-2010 14:31:00	10	10	1
245911001	07-FEB-2010 14:31:00	10	10	1
1202035571 MS (245911001)	07-FEB-2010 14:31:00	10	10	1
1202035572 MSD (245911001)	07-FEB-2010 14:31:00	10	10	1
245922001	07-FEB-2010 14:31:00	10	10	1
245934001	07-FEB-2010 14:31:00	10	10	1
245934004	07-FEB-2010 14:31:00	10	10	1
245939001	07-FEB-2010 14:31:00	10	10	1
245939002	07-FEB-2010 14:31:00	10	10	1
245953001	07-FEB-2010 14:31:00	10	10	1
245965001	07-FEB-2010 14:31:00	10	10	1
245975001	07-FEB-2010 14:31:00	10	10	1
245981001	07-FEB-2010 14:31:00	10	10	1
246000001	07-FEB-2010 14:31:00	10	10	1
246007001	07-FEB-2010 14:31:00	10	10	1
246056001	07-FEB-2010 14:31:00	10	10	1
246056002	07-FEB-2010 14:31:00	10	10	1
246056003	07-FEB-2010 14:31:00	10	10	1
246056004	07-FEB-2010 14:31:00	10	10	1
246375001	07-FEB-2010 14:31:00	10	10	1
1202035567 MS (246375001)	07-FEB-2010 14:31:00	10	10	1
1202035568 MSD (246375001)	07-FEB-2010 14:31:00	10	10	1
1202035573 ICS	07-FEB-2010 14:31:00	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1202035573	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	Desalting cartridges used: 100105-1-H & 091118-1-Ba
LCS	1202035566	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
MS	1202035567	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
MS	1202035571	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
MSD	1202035568	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
MSD	1202035572	10 ug/L ICV/CCV Second Source	UCL100126-02.1	.2	mL	
RGNT	All	O2SI HPLC Grade Water	1246195	10	mL	
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1262643	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/08/10

Extr. Injection Volume: 20uL

Sequence Number: per020810a

Initial Calibration Date: 02/08/10

Method: EPA 6850-Modified

Int. Std.: UCL100122-01

Mobile Phase Lot#: 1254342, 1261217

Standard-Samp Reagent Lot#: 1233976

Reviewed BY: *hmc*
Date: *02/10/10*
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100128-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0208001a	IPB001	CWW	2/8/2010 13:54			1		USE	B
per0208002a	IPB001	CWW	2/8/2010 14:00			1		USE	B
per0208003a	WCLICAL-01	CWW	2/8/2010 14:07			1		USE	I
per0208004a	WCLICAL-02	CWW	2/8/2010 14:13			1		USE	I
per0208005a	WCLICAL-03	CWW	2/8/2010 14:20			1		USE	I
per0208006a	WCLICAL-04	CWW	2/8/2010 14:26			1		USE	I
per0208007a	WCLICAL-05	CWW	2/8/2010 14:33			1		USE	I
per0208008a	IPB002	CWW	2/8/2010 14:40			1		USE	B
per0208009a	WCLICV	CWW	2/8/2010 14:46			1		USE	C
per0208010a	IPB003	CWW	2/8/2010 14:53			1		USE	B
per0208011a	WCLCRI	CWW	2/8/2010 14:59			1		USE	C
per0208012a	1202035621	CWW	2/8/2010 15:06	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208013a	1202035622	CWW	2/8/2010 15:12	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208014a	1202035625	CWW	2/8/2010 15:19	950048	VARIOUS	1	LANL	DUSE-RE	S
per0208015a	246431001	CWW	2/8/2010 15:25	950048	10-1650	1	LANL	DUSE-RE	S
per0208016a	1202035623	CWW	2/8/2010 15:32	950048	10-1650	1	LANL	DUSE-RE	S
per0208017a	1202035624	CWW	2/8/2010 15:39	950048	10-1650	1	LANL	DUSE-RE	S
per0208018a	246431002	CWW	2/8/2010 15:45	950048	10-1650	1	LANL	DUSE-RE	S
per0208019a	246431003	CWW	2/8/2010 15:52	950048	10-1650	1	LANL	DUSE-RE	S
per0208020a	246431004	CWW	2/8/2010 15:58	950048	10-1650	1	LANL	DUSE-RE	S
per0208021a	WCLCCV	CWW	2/8/2010 16:05			1		USE	C
per0208022a	IPB004	CWW	2/8/2010 16:11			1		USE	B
per0208023a	WCLCRI	CWW	2/8/2010 16:18			1		USE	C
per0208024a	246472001	CWW	2/8/2010 16:24	950048	10-1640	1	LANL	DUSE-RE	S
per0208025a	246472002	CWW	2/8/2010 16:31	950048	10-1640	1	LANL	DUSE-RE	S
per0208026a	IPB005	CWW	2/8/2010 16:37			1		USE	B
per0208027a	1202029082	CWW	2/8/2010 16:44	947249	VARIOUS	1	LANL	USE	S
per0208028a	1202029083	CWW	2/8/2010 16:51	947249	VARIOUS	1	LANL	USE	S
per0208029a	1202029088	CWW	2/8/2010 16:57	947249	VARIOUS	1	LANL	USE	S

per0208030a	245605003	CWW	2/8/2010 17:04	947249	10-1413	200	LANL	USE	S
per0208031a	245608002	CWW	2/8/2010 17:10	947249	10-1415	1	LANL	USE	S
per0208032a	245673001	CWW	2/8/2010 17:17	947249	10-1442	100	LANL	USE	S
per0208033a	245673003	CWW	2/8/2010 17:23	947249	10-1442	200	LANL	USE	S
per0208034a	WCLCCV	CWW	2/8/2010 17:30			1		USE	C
per0208035a	IPB006	CWW	2/8/2010 17:36			1		USE	B
per0208036a	WCLCRI	CWW	2/8/2010 17:43			1		USE	C
per0208037a	245673006	CWW	2/8/2010 17:49	947249	10-1442	200	LANL	USE	S
per0208038a	245676001	CWW	2/8/2010 17:56	947249	10-1446	1	LANL	USE	S
per0208039a	1202029086	CWW	2/8/2010 18:03	947249	10-1446	1	LANL	USE	S
per0208040a	1202029087	CWW	2/8/2010 18:09	947249	10-1446	1	LANL	USE	S
per0208041a	245791001	CWW	2/8/2010 18:16	947249	10-1467	1	LANL	USE	S
per0208042a	1202029084	CWW	2/8/2010 18:22	947249	10-1467	1	LANL	USE	S
per0208043a	1202029085	CWW	2/8/2010 18:29	947249	10-1467	1	LANL	USE	S
per0208044a	245791003	CWW	2/8/2010 18:35	947249	10-1467	1	LANL	USE	S
per0208045a	245791006	CWW	2/8/2010 18:42	947249	10-1467	1	LANL	USE	S
per0208046a	245791007	CWW	2/8/2010 18:48	947249	10-1467	1	LANL	USE	S
per0208047a	WCLCCV	CWW	2/8/2010 18:55			1		USE	C
per0208048a	IPB007	CWW	2/8/2010 19:01			1		USE	B
per0208049a	WCLCRI	CWW	2/8/2010 19:08			1		USE	C
per0208050a	1202035565	CWW	2/8/2010 19:15	950028	VARIOUS	1	LANL	USE	S
per0208051a	1202035566	CWW	2/8/2010 19:21	950028	VARIOUS	1	LANL	USE	S
per0208052a	1202035573	CWW	2/8/2010 19:28	950028	VARIOUS	1	LANL	USE	S
per0208053a	245911001	CWW	2/8/2010 19:34	950028	10-1487-1	1	LANL	USE	S
per0208054a	1202035571	CWW	2/8/2010 19:41	950028	10-1487-1	1	LANL	USE	S
per0208055a	1202035572	CWW	2/8/2010 19:47	950028	10-1487-1	1	LANL	USE	S
per0208056a	245922001	CWW	2/8/2010 19:54	950028	10-1493-1	1	LANL	USE	S
per0208057a	245934001	CWW	2/8/2010 20:00	950028	10-1502	1	LANL	DUSE-DL	S
per0208058a	245934004	CWW	2/8/2010 20:07	950028	10-1502	1	LANL	DUSE-RA	S
per0208059a	245939001	CWW	2/8/2010 20:14	950028	10-1506-1	1	LANL	USE	S
per0208060a	WCLCCV	CWW	2/8/2010 20:20			1		USE	C
per0208061a	IPB008	CWW	2/8/2010 20:27			1		USE	B
per0208062a	WCLCRI	CWW	2/8/2010 20:33			1		USE	C
per0208063a	245939002	CWW	2/8/2010 20:40	950028	10-1506-1	1	LANL	USE	S
per0208064a	245953001	CWW	2/8/2010 20:47	950028	10-1508-1	1	LANL	USE	S
per0208065a	245965001	CWW	2/8/2010 20:53	950028	10-1511-1	1	LANL	USE	S
per0208066a	245975001	CWW	2/8/2010 21:00	950028	10-1512-1	1	LANL	USE	S

per0208067a	245981001	CWW	2/8/2010 21:06	950028	10-1514-1	1	LANL	USE	S
per0208068a	246000001	CWW	2/8/2010 21:13	950028	10-1517-1	1	LANL	USE	S
per0208069a	246007001	CWW	2/8/2010 21:19	950028	10-1520-1	1	LANL	USE	S
per0208070a	246056001	CWW	2/8/2010 21:26	950028	10-1545-1	1	LANL	USE	S
per0208071a	246056002	CWW	2/8/2010 21:32	950028	10-1545-1	1	LANL	USE	S
per0208072a	246056003	CWW	2/8/2010 21:39	950028	10-1545-1	1	LANL	USE	S
per0208073a	WCLCCV	CWW	2/8/2010 21:45			1		USE	C
per0208074a	IPB009	CWW	2/8/2010 21:52			1		USE	B
per0208075a	WCLCRI	CWW	2/8/2010 21:59			1		USE	C
per0208076a	246056004	CWW	2/8/2010 22:05	950028	10-1545-1	1	LANL	USE	S
per0208077a	246375001	CWW	2/8/2010 22:12	950028	10-1609	1	LANL	USE	S
per0208078a	1202035567	CWW	2/8/2010 22:19	950028	10-1609	1	LANL	USE	S
per0208079a	1202035568	CWW	2/8/2010 22:25	950028	10-1609	1	LANL	USE	S
per0208080a	IPB010	CWW	2/8/2010 22:32			1		USE	B
per0208081a	1262643 Supp	CWW	2/8/2010 22:38	Screen	Inhouse	1	GEL	DUSE	S
per0208082a	1202035625	CWW	2/8/2010 22:45	950048	VARIOUS	1	LANL	DUSE	S
per0208083a	WCLCCV	CWW	2/8/2010 22:52			1		USE	C
per0208084a	IPB011	CWW	2/8/2010 22:58			1		USE	B
per0208085a	WCLCRI	CWW	2/8/2010 23:05			1		USE	C

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208054a

Date: 08-Feb-2010

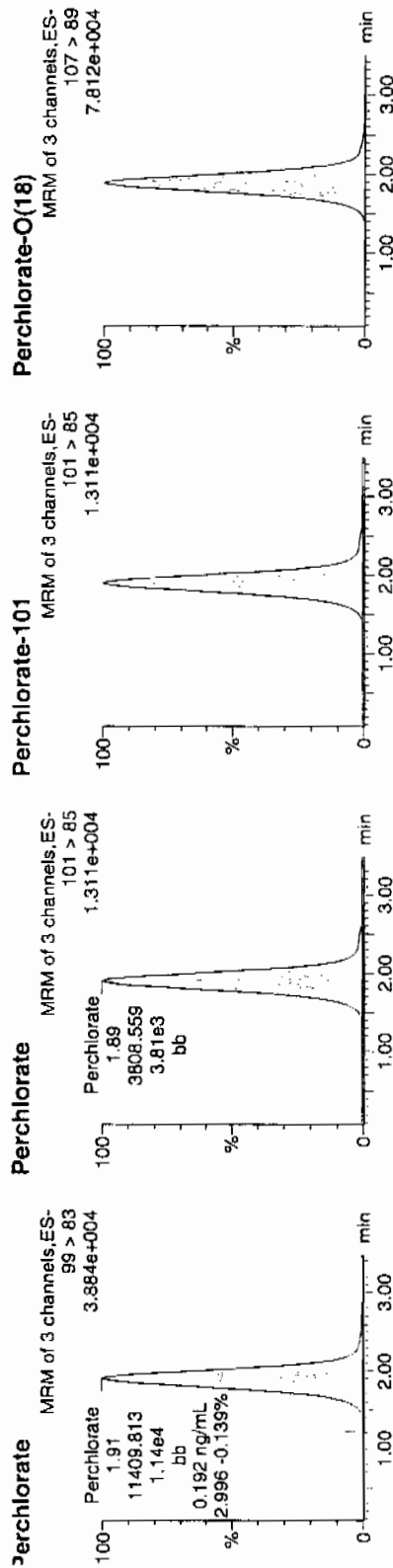
Time: 19:41:23

D: 1202035571

Vial: 2:1E

02-04-10

1202035571 | 1202035571 | 1202035571



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
202035571	Perchlorate	99 > 83	1.91	11409.813	11409.813	bb			0.1917	95.83	-4.17	2471.6...	3.00
202035571	Perchlorate-101	101 > 85	1.89	3808.559	3808.559	bb			0.2029	101.45	1.45	676.220	
202035571	Perchlorate-O(18)	107 > 89	1.89	22745.916	22745.916	bb			0.4676	93.53	-6.47	4602.2...	

Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per020810a.qld

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Printed: Tuesday, February 09, 2010 8:03:24 AM Eastern Standard Time

Name: per0208055a

Date: 08-Feb-2010

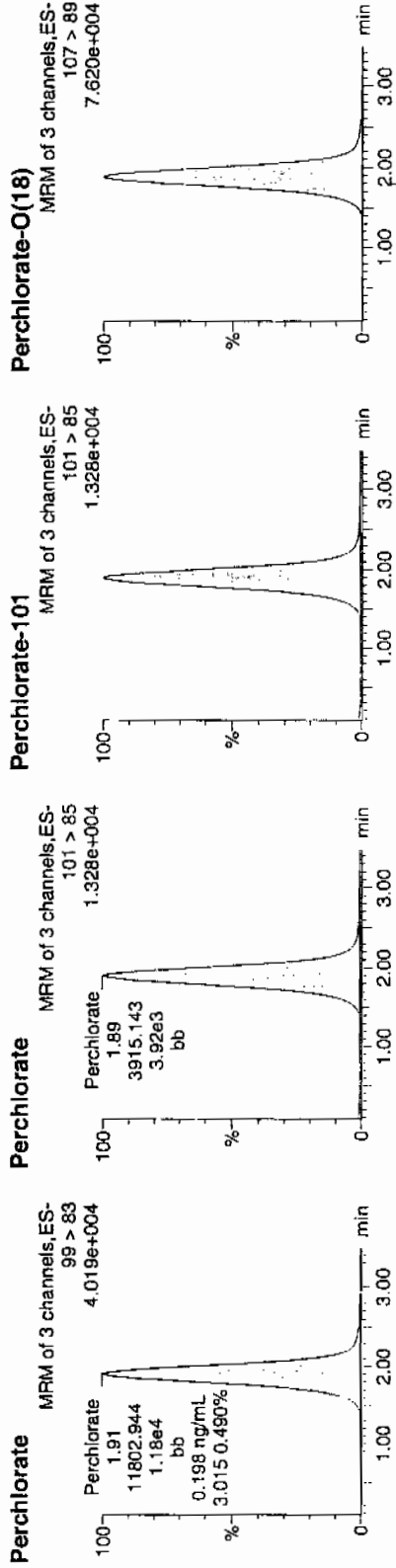
Time: 19:47:53

ID: 1202035572

Vial: 2:1,F

WWS
02-09-10

1202035572 | 1202035572 | MSO | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202035572	Perchlorate	99 > 83	1.91	11802.944	11802.944	bb			0.1983	99.13	-0.87	5921.1...	3.01
1202035572	Perchlorate-101	101 > 85	1.89	3915.143	3915.143	bb			0.2086	104.29	4.29	847.965	
1202035572	Perchlorate-O(18)	107 > 89	1.89	22449.852	22449.852	bb			0.4616	92.31	-7.69	7045.6...	

Isotope Ratio Criteria

Isotope Ratio $^{35}\text{Cl}/^{37}\text{Cl}$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1514**

Method/Analysis Information

Procedure: Definitive Low Level Analysis of Nitroaromatic Explosives Utilizing Liquid Chromatography / Mass Spectrometry / Mass Spectrometry (LC/MS/MS) by SW-846 Method 8321 Modified (8321M)

Analytical Method: SW846 8321A Modified

Prep Method: SW846 8330 PREP

Analytical Batch Number: 948577

Prep Batch Number: 948576

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
245979001	RE15-10-7980
245979002	RE15-10-7958
245979003	RE15-10-7960
245979004	RE15-10-7979
245979005	RE15-10-7972
245979006	RE15-10-7957
245979007	RE15-10-7974
245979008	RE15-10-7961
245979009	RE15-10-7971
245979010	RE15-10-7966
245979011	RE15-10-7959
245979012	RE15-10-7969
245979013	RE15-10-8061

10-1514-EXPLCMS

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245979014	RE15-10-8063
245979015	RE15-10-8062
1202032105	Method Blank (MB)
1202032106	Laboratory Control Sample (LCS)
1202032107	245979001(RE15-10-7980) Matrix Spike (MS)
1202032108	245979001(RE15-10-7980) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 12.

Primary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

Calibration Verification Standard Requirements

All associated calibration verification standard(s) (ICV or CCV) for this analysis met the acceptance criteria.

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS recovered Tetryl at 44.7% with recovery limits of 51-112%. Since there were no target analytes detected that exhibited a high bias in the associated samples, the data are reported. Please see data exception report 799292.

10-1514-EXPLCMS

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QC Sample Designation

Sample 245979001 (RE15-10-7980) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance

The internal standard responses were within the required acceptance criteria for all samples and QC in this SDG.

Technical Information**Holding Time Specifications**

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. Sample 245979012 (RE15-10-7969) was further diluted to bring the over range concentration within the calibration range. The final dilution in each case takes the 1:1 v/v dilution into account.

Sample Re-extraction/Re-analysis

Sample 245979015 (RE15-10-8062) failed ISTD acceptance criteria. The sample was re-analyzed and passed acceptance criteria. The re-analysis is reported.

Secondary Analyte Analysis**Calibration Information****Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

Calibration Verification Standard Requirements

All associated calibration verification standard(s) (ICV or CCV) for this analysis met the acceptance criteria.

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

10-1514-EXPLCMS

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Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS recovered 2,6-Diamino-4-nitrotoluene at 141% with recovery limits of 64-122%. Since there were no target analytes detected that exhibited a high bias in the associated samples, the data are reported. Please see data exception report 799292.

QC Sample Designation

Sample 245979001 (RE15-10-7980) was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recovered 2,4-Diamino-6-nitrotoluene at 136% with recovery limits of 34-135% and recovered 2,6-Diamino-4-nitrotoluene at 135% with recovery limits of 55-130%. Since there were no target analytes detected that exhibited a high bias in the associated samples, the data are reported. Please see data exception report 799292.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance

The internal standards were not added to the secondary analyte extracts.

Technical Information

Holding Time Specifications

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

Miscellaneous Information

Data Exception (DER) Documentation

Data exception report 799292 was generated for this SDG.

The LCS recovered Tetryl at 44.7% with recovery limits of 51-112%. The LCS recovered 2,6-Diamino-4-nitrotoluene at 141% with recovery limits of 64-122%. Since there were no target analytes detected that exhibited a high bias in the associated samples, the data are reported.

The MS recovered 2,4-Diamino-6-nitrotoluene at 136% with recovery limits of 34-135% and recovered 2,6-Diamino-4-nitrotoluene at 135% with recovery limits of 55-130%. Since there were no target analytes detected that exhibited a high bias in the associated samples, the data are reported.

Manual Integrations

Some initial calibration standards, continuing calibration standards, and/or samples required manual integrations due to software limitations.

Flagging Convention

The samples were not originally analyzed using SW-846 Method 8330.

Additional Comments

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data.

Due to software limitations, file extensions such as DL, RE, etc. may not appear on the generated forms and/or raw data.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

Chromatographic Columns

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Nesbitt Mauer Date: 03/05/10

SAMPLE DATA SUMMARY

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979001

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301048a

Date Analyzed: 02-MAR-10 14:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979001

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220046.wiff

Date Analyzed: 23-FEB-10 04:49

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7958

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979002

Sample Amount 2

Moisture: 19.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301051a

Date Analyzed: 02-MAR-10 16:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7958

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979002

Sample Amount 2

Moisture: 19.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220049.wiff

Date Analyzed: 23-FEB-10 05:36

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7960

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979003

Sample Amount 2

Moisture: 6.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301052a

Date Analyzed: 02-MAR-10 16:44

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7960

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979003

Sample Amount 2

Moisture: 6.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240014.wiff

Date Analyzed: 24-FEB-10 13:22

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7979

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979004

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301053a

Date Analyzed: 02-MAR-10 17:14

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7979

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979004

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240015.wiff

Date Analyzed: 24-FEB-10 13:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7972

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979005

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301054a

Date Analyzed: 02-MAR-10 17:43

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7972

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979005

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240016.wiff

Date Analyzed: 24-FEB-10 13:53

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7957

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979006

Sample Amount 2

Moisture: 22.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301055a

Date Analyzed: 02-MAR-10 18:13

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7957

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979006

Sample Amount 2

Moisture: 22.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240017.wiff

Date Analyzed: 24-FEB-10 14:09

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7974

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979007

Sample Amount 2

Moisture: 5.1

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301059a

Date Analyzed: 02-MAR-10 20:11

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7974

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979007

Sample Amount 2

Moisture: 5.1

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240018.wiff

Date Analyzed: 24-FEB-10 14:25

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7961

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979008

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301060a

Date Analyzed: 02-MAR-10 20:40

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	263	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7961

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979008

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240019.wiff

Date Analyzed: 24-FEB-10 14:40

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	625	J
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7971

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979009

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301061a

Date Analyzed: 02-MAR-10 21:10

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7971

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979009

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240020.wiff

Date Analyzed: 24-FEB-10 14:56

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7966

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979010

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301062a

Date Analyzed: 02-MAR-10 21:39

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	135	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	1430	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7966

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979010

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240021.wiff

Date Analyzed: 24-FEB-10 15:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	331	J
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7959

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979011

Sample Amount 2

Moisture: 20.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301063a

Date Analyzed: 02-MAR-10 22:09

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7959

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979011

Sample Amount 2

Moisture: 20.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240022.wiff

Date Analyzed: 24-FEB-10 15:28

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7969

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979012

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301064a

Date Analyzed: 02-MAR-10 22:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	205	J
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	2160	
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7969

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979012

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 5

Injection Volume (uL): 50

GEL data file: EXP0301100a

Date Analyzed: 03-MAR-10 16:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX	10900	

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7969

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979012

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240023.wiff

Date Analyzed: 24-FEB-10 15:43

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	8490	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8061

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979013

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301065a

Date Analyzed: 02-MAR-10 23:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8061

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979013

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240027.wiff

Date Analyzed: 24-FEB-10 16:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8063

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979014

Sample Amount 2

Moisture: 18.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301066a

Date Analyzed: 02-MAR-10 23:37

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8063

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979014

Sample Amount 2

Moisture: 18.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240028.wiff

Date Analyzed: 24-FEB-10 17:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8062

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979015

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301099a

Date Analyzed: 03-MAR-10 15:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	217	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	2270	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8062

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979015

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240029.wiff

Date Analyzed: 24-FEB-10 17:18

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

QUALITY CONTROL SUMMARY

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
245979001	RE15-10-7980	101	70 - 144	
245979001	RE15-10-7980	138	70 - 144	
245979002	RE15-10-7958	106	70 - 144	
245979002	RE15-10-7958	126	70 - 144	
245979003	RE15-10-7960	91.3	70 - 144	
245979003	RE15-10-7960	124	70 - 144	
245979004	RE15-10-7979	101	70 - 144	
245979004	RE15-10-7979	125	70 - 144	
245979005	RE15-10-7972	120	70 - 144	
245979005	RE15-10-7972	126	70 - 144	
245979006	RE15-10-7957	104	70 - 144	
245979006	RE15-10-7957	126	70 - 144	
245979007	RE15-10-7974	114	70 - 144	
245979007	RE15-10-7974	126	70 - 144	
245979008	RE15-10-7961	105	70 - 144	
245979008	RE15-10-7961	119	70 - 144	
245979009	RE15-10-7971	104	70 - 144	
245979009	RE15-10-7971	124	70 - 144	
245979010	RE15-10-7966	104	70 - 144	
245979010	RE15-10-7966	129	70 - 144	
245979011	RE15-10-7959	112	70 - 144	
245979011	RE15-10-7959	126	70 - 144	
245979012	RE15-10-7969	93.5	70 - 144	
245979012	RE15-10-7969	133	70 - 144	
245979012	RE15-10-7969	102	70 - 144	
245979013	RE15-10-8061	103	70 - 144	
245979013	RE15-10-8061	130	70 - 144	
245979014	RE15-10-8063	100	70 - 144	
245979014	RE15-10-8063	126	70 - 144	
245979015	RE15-10-8062	106	70 - 144	
245979015	RE15-10-8062	134	70 - 144	
1202032105	MB for batch 948576	92.7	70 - 144	
1202032105	MB for batch 948576	128	70 - 144	
1202032106	LCS for batch 948576	100	70 - 144	
1202032106	LCS for batch 948576	126	70 - 144	
1202032107	RE15-10-7980(245979001MS)	104	70 - 144	
1202032107	RE15-10-7980(245979001MS)	124	70 - 144	

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
1202032108	RE15-10-7980(245979001MSD)	100	70 - 144	
1202032108	RE15-10-7980(245979001MSD)	120	70 - 144	

DNT = 3,4-Dinitrotoluene

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1514

Extract Batch Code: 948576

Date Extracted: 09-FEB-10

GEL LCS ID: 1202032106

GEL LCSDUP ID:

Analysis Date/Time: 02-MAR-10 14:17

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
1,3,5-Trinitrobenzene	5000	4400	87.9					69 - 126
2,4,6-Trinitrotoluene	5000	5340	107					73 - 149
2,4-Dinitrotoluene	5000	5420	108					87 - 137
2,6-Dinitrotoluene	5000	4930	98.6					89 - 120
2-Amino-4,6-dinitrotoluene	5000	5490	110					90 - 130
4-Amino-2,6-dinitrotoluene	5000	5020	100					84 - 130
HMX	5000	4650	92.9					58 - 138
Nitrobenzene	5000	4670	93.4					71 - 122
PETN	5000	4150	83.1					64 - 137
RDX	5000	5030	101					81 - 137
Tetryl	5000	2230	44.7 *					51 - 112
m-Dinitrobenzene	5000	4750	95.1					83 - 122
m-Nitrotoluene	5000	4120	82.3					73 - 118
o-Nitrotoluene	5000	4300	86.1					72 - 119
p-Nitrotoluene	5000	4590	91.8					67 - 131

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1514

Extract Batch Code: 948576

Date Extracted: 09-FEB-10

GEL LCS ID: 1202032106

GEL LCSDUP ID:

Analysis Date/Time: 23-FEB-10 04:33

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
2,4-Diamino-6-nitrotoluene	5000	5570	111					52 - 114
2,6-Diamino-4-nitrotoluene	5000	7050	141 *					64 - 122
3,5-Dinitroaniline	5000	5250	105					70 - 127
tris(o-cresyl) phosphate	5000	5100	102					84 - 119
TATB	7500	5650	75.3					28 - 162

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7980

Lab Code: GEL

GEL Job No (SDG) 10-1514

Extract Batch Code: 948576

Date Extracted: 09-FEB-10

GEL Spike ID: 1202032107

GEL SpikeDup ID: 1202032108

Analysis Date/Time: 02-MAR-10 15:16

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
2,6-Dinitrotoluene	5000	0	5240	105	5120	102	2.5	30	90 - 118
2-Amino-4,6-dinitrotoluene	5000	0	5930	119	6090	122	2.73	30	85 - 137
4-Amino-2,6-dinitrotoluene	5000	0	5560	111	5320	106	4.56	30	72 - 143
HMX	5000	0	4410	88.2	5430	109	20.7	30	51 - 144
Nitrobenzene	5000	0	4390	87.8	4620	92.3	5.06	30	70 - 122
2,4-Dinitrotoluene	5000	0	5400	108	5170	103	4.42	30	86 - 135
2,4,6-Trinitrotoluene	5000	0	6040	121	5600	112	7.52	30	76 - 144
1,3,5-Trinitrobenzene	5000	0	4810	96.2	4820	96.3	.09	30	50 - 140
PETN	5000	0	4680	93.6	4660	93.2	.49	30	60 - 140
RDX	5000	0	4200	83.9	5200	104	21.3	30	59 - 152
Tetryl	5000	0	3550	71	3750	75.1	5.52	30	36 - 124
m-Dinitrobenzene	5000	0	4930	98.6	4950	99	.458	30	85 - 118
m-Nitrotoluene	5000	0	4590	91.9	4060	81.2	12.3	30	70 - 120
o-Nitrotoluene	5000	0	4660	93.2	4190	83.7	10.7	30	69 - 123
p-Nitrotoluene	5000	0	5010	100	4470	89.3	11.5	30	65 - 133

#Column to be used to flag recovery and RPD values with an asterisk

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7980

Lab Code: GEL

GEL Job No (SDG) 10-1514

Extract Batch Code: 948576

Date Extracted: 09-FEB-10

GEL Spike ID: 1202032107

GEL SpikeDup ID: 1202032108

Analysis Date/Time: 23-FEB-10 05:05

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
2,4-Diamino-6-nitrotoluene	5000	0	6800	136 *	6320	126	7.32	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	6740	135 *	6440	129	4.55	30	55 - 130
TATB	7500	0	5150	68.7	5340	71.2	3.62	30	29 - 155
tris(o-cresyl) phosphate	5000	6.27	5100	102	5080	101	.393	30	72 - 127
3,5-Dinitroaniline	5000	0	5310	106	5230	105	1.52	30	73 - 129

#Column to be used to flag recovery and RPD values with an asterisk

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 01-MAR-10 15:33

GEL Data File: EXP0301001a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	506.135
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	544.922

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 1 of 65

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\030110expa.mdb, Time: Tue Mar 02 09:26:02 2010

Calibration: Untitled, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301001a

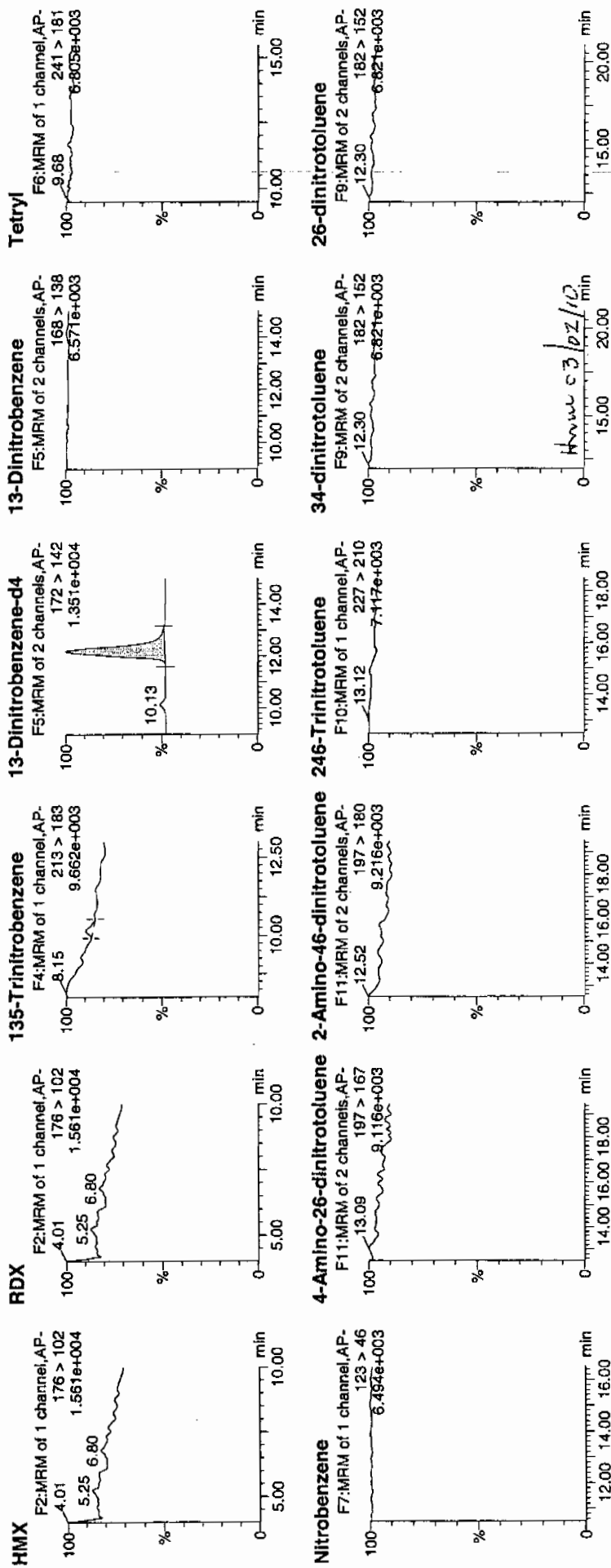
Date: 01-Mar-2010

Time: 15:33:10

ID: XIBLK01

Vial: 1:1,A

10/17
3/2/10

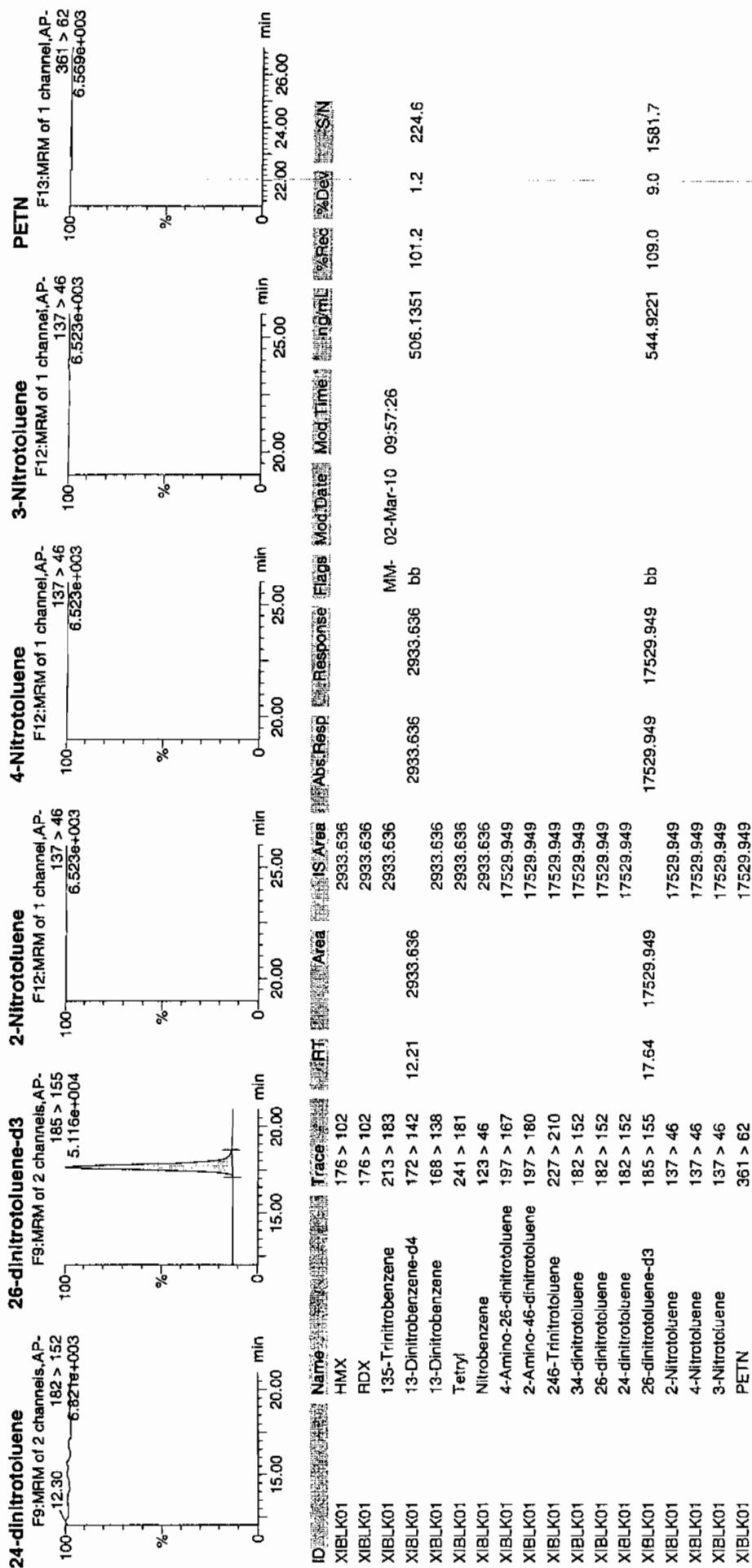


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 2 of 65

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 01-MAR-10 16:02

GEL Data File: EXP0301002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	482.107
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	528.54
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0301002a

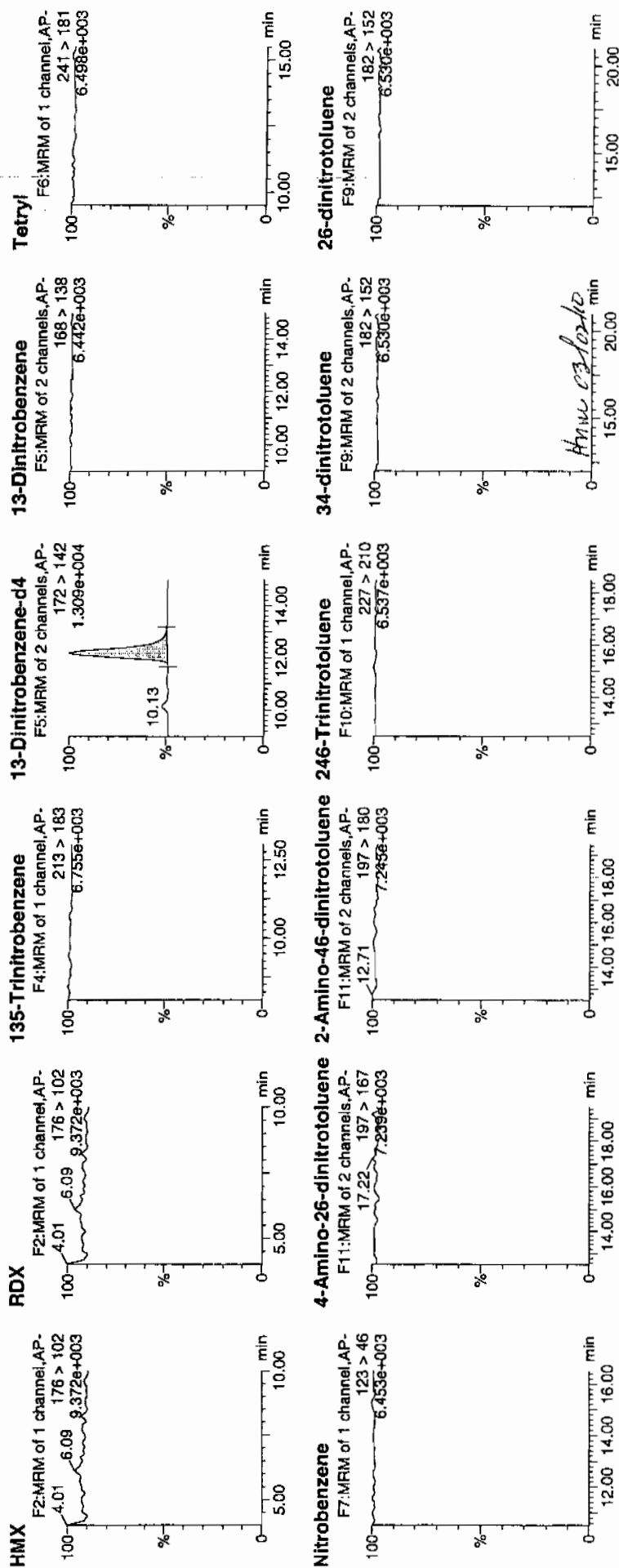
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Time: 16:02:42

ID: XIBLK01

Vial: 1:1,A

3/2/10

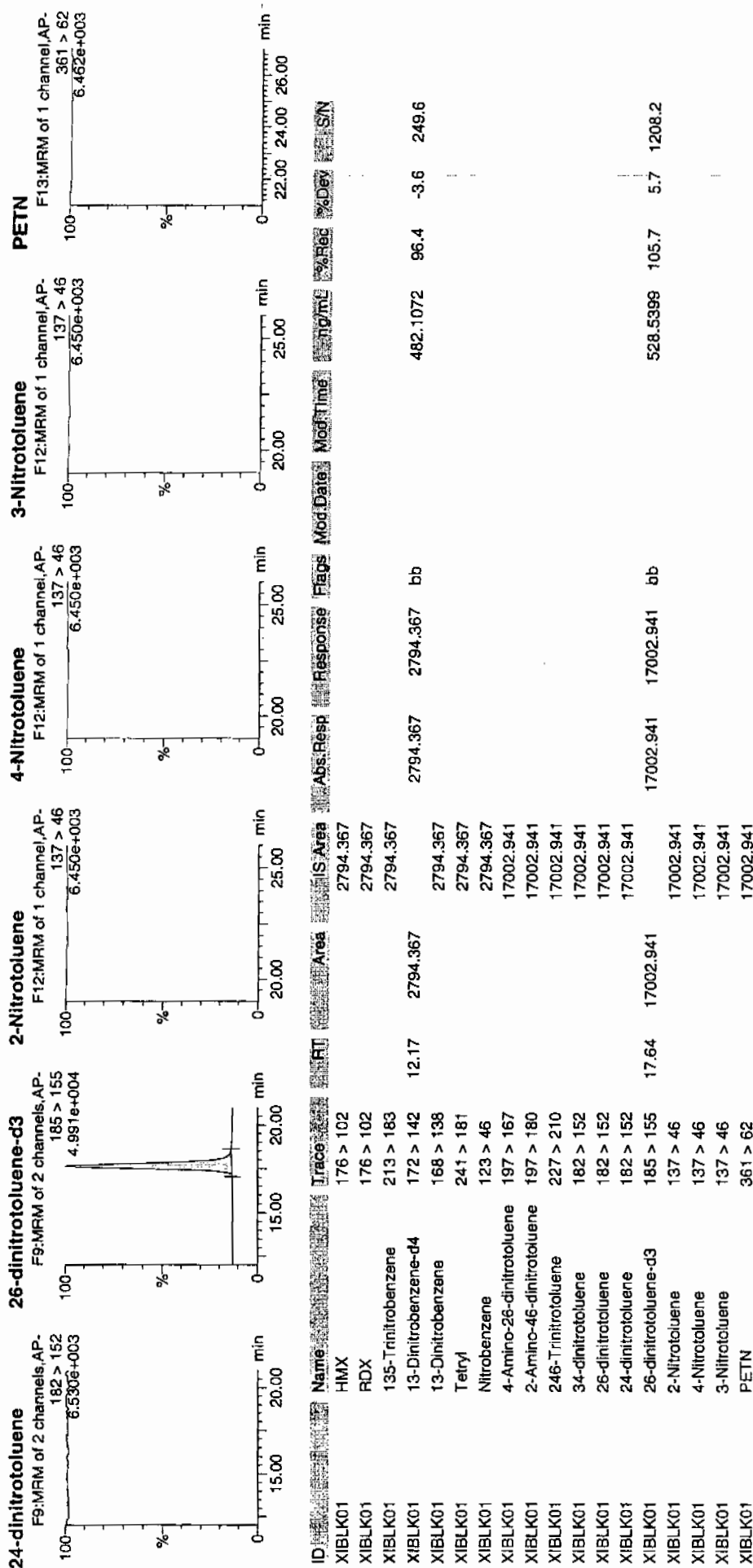


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 4 of 65

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 22-FEB-10 17:01

GEL Data File: EXS02220001.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.87
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 2/23/10

Sample Name: "XIBLK01" Sample ID: "11LER" File: "EXS02220001.wif"

Peak Name: "TATB" Mass(es): "257.2704.9 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

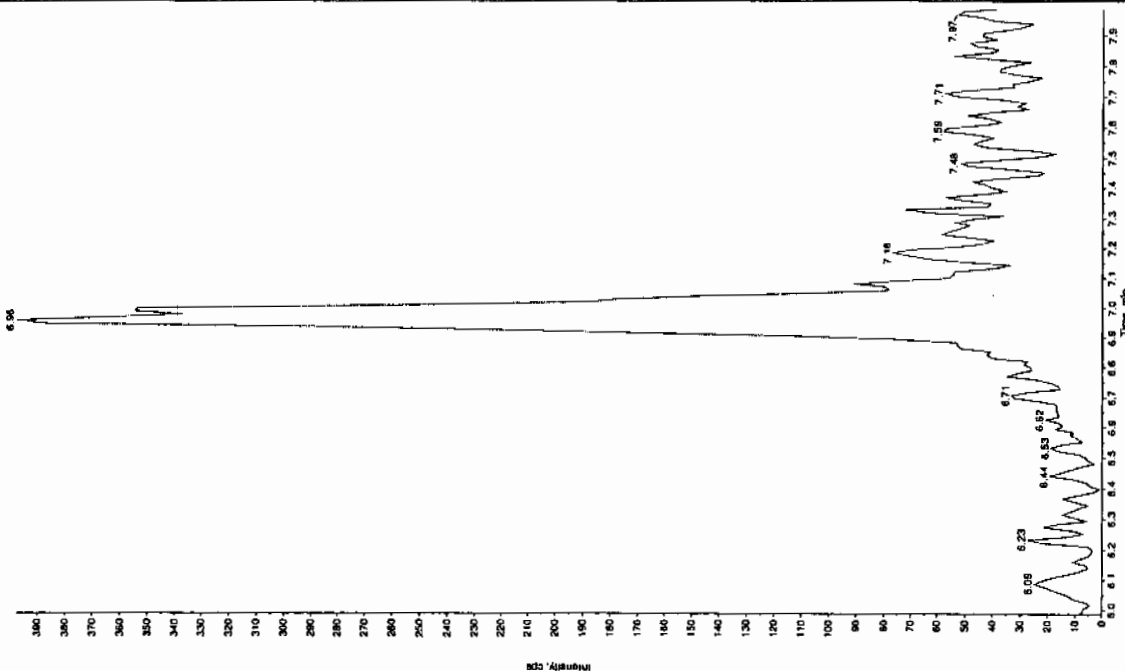
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 2/22/2010

Acq. Time: 5:01:50 PM

Modified: No



Sample Name: "XIBLK01" Sample ID: "11LER" File: "EXS02220003.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

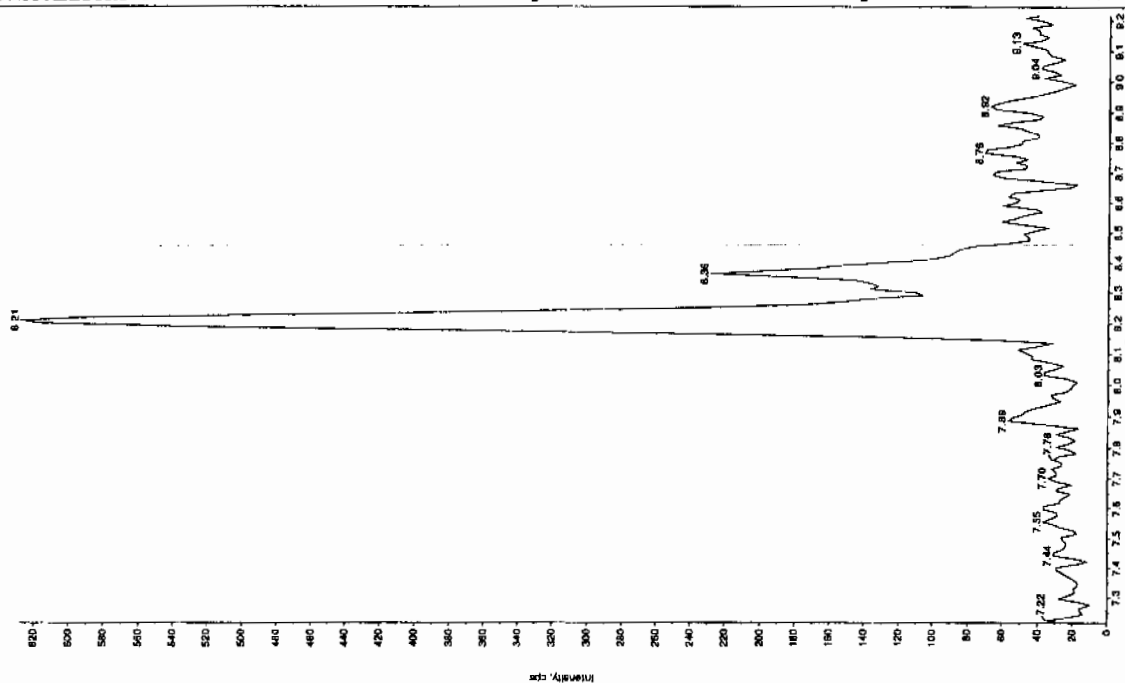
Concentration: N/A

Calculated Conc: 0.00 ng/mL

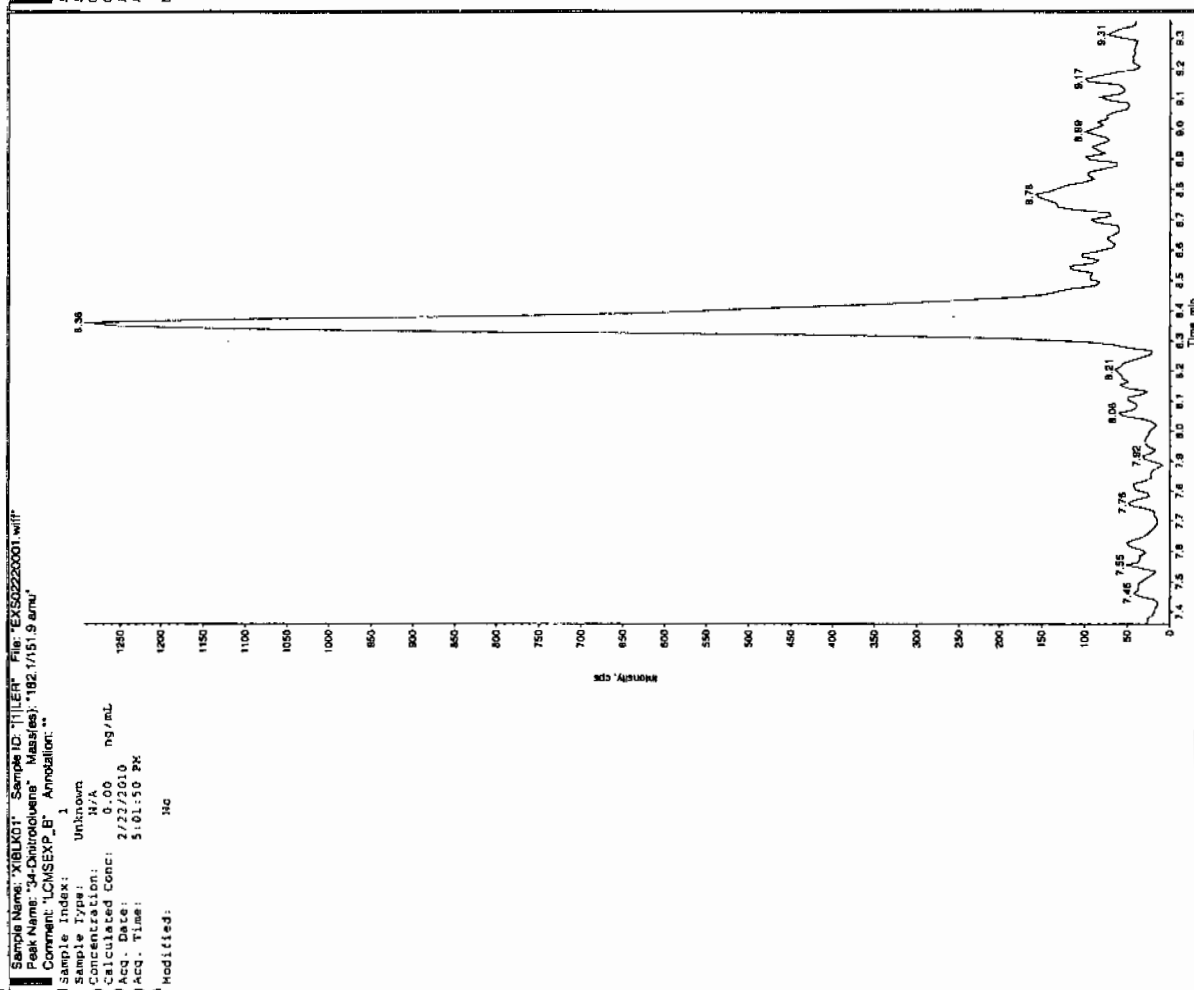
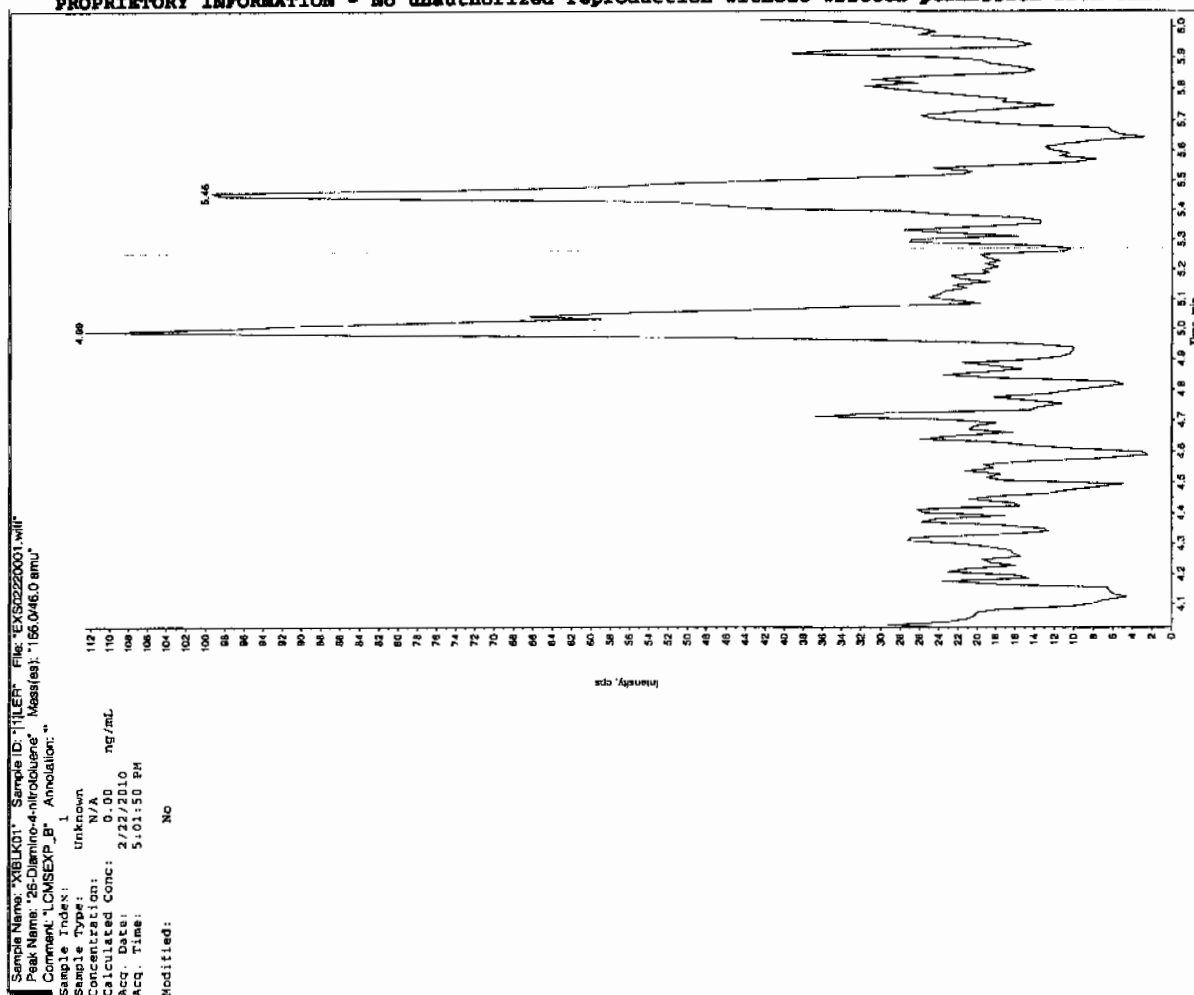
Acq. Date: 2/22/2010

Acq. Time: 5:01:50 PM

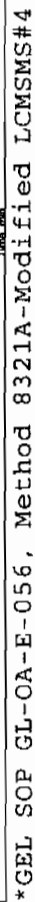
Modified: No



HM 02/23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 22-FEB-10 17:17

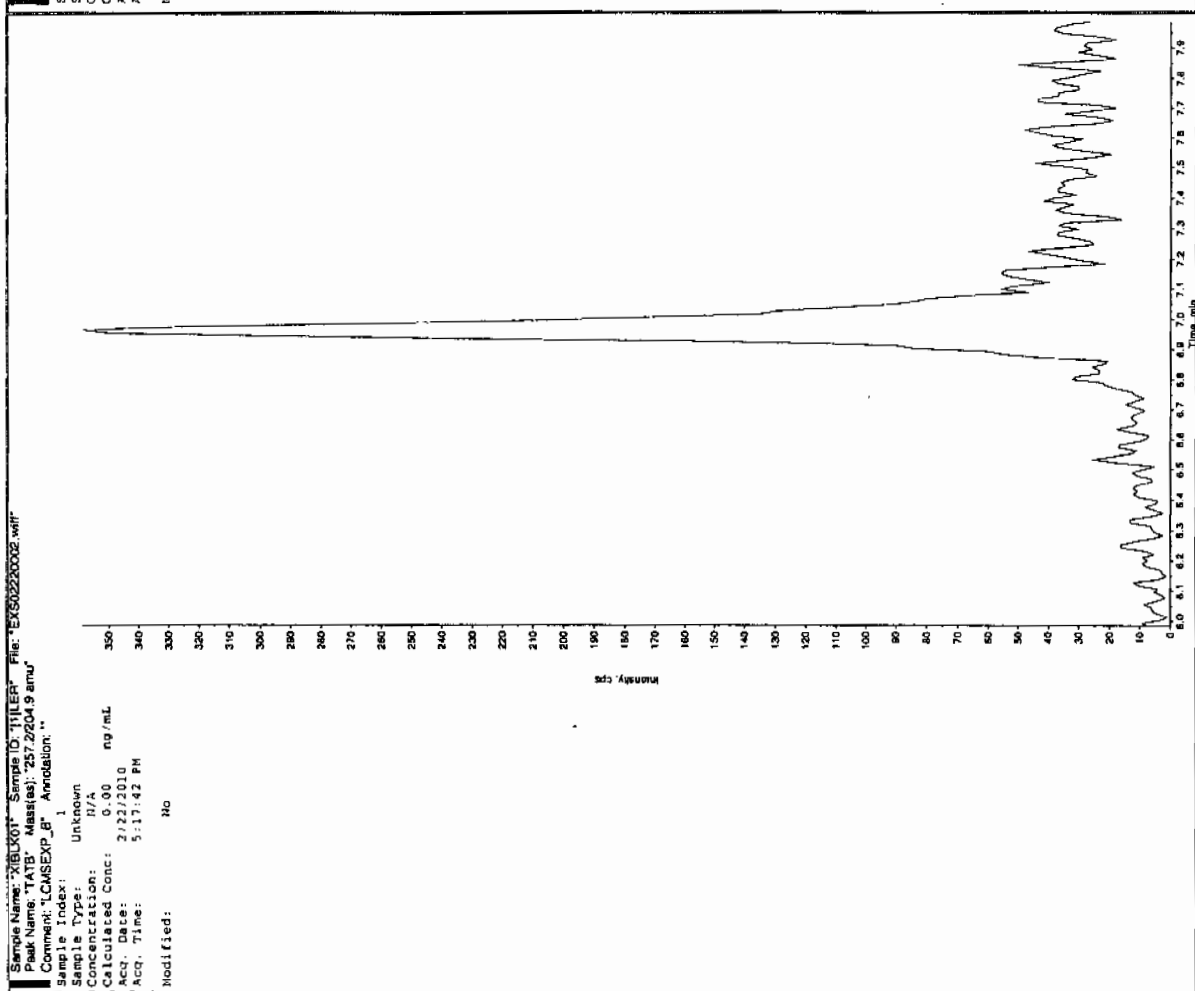
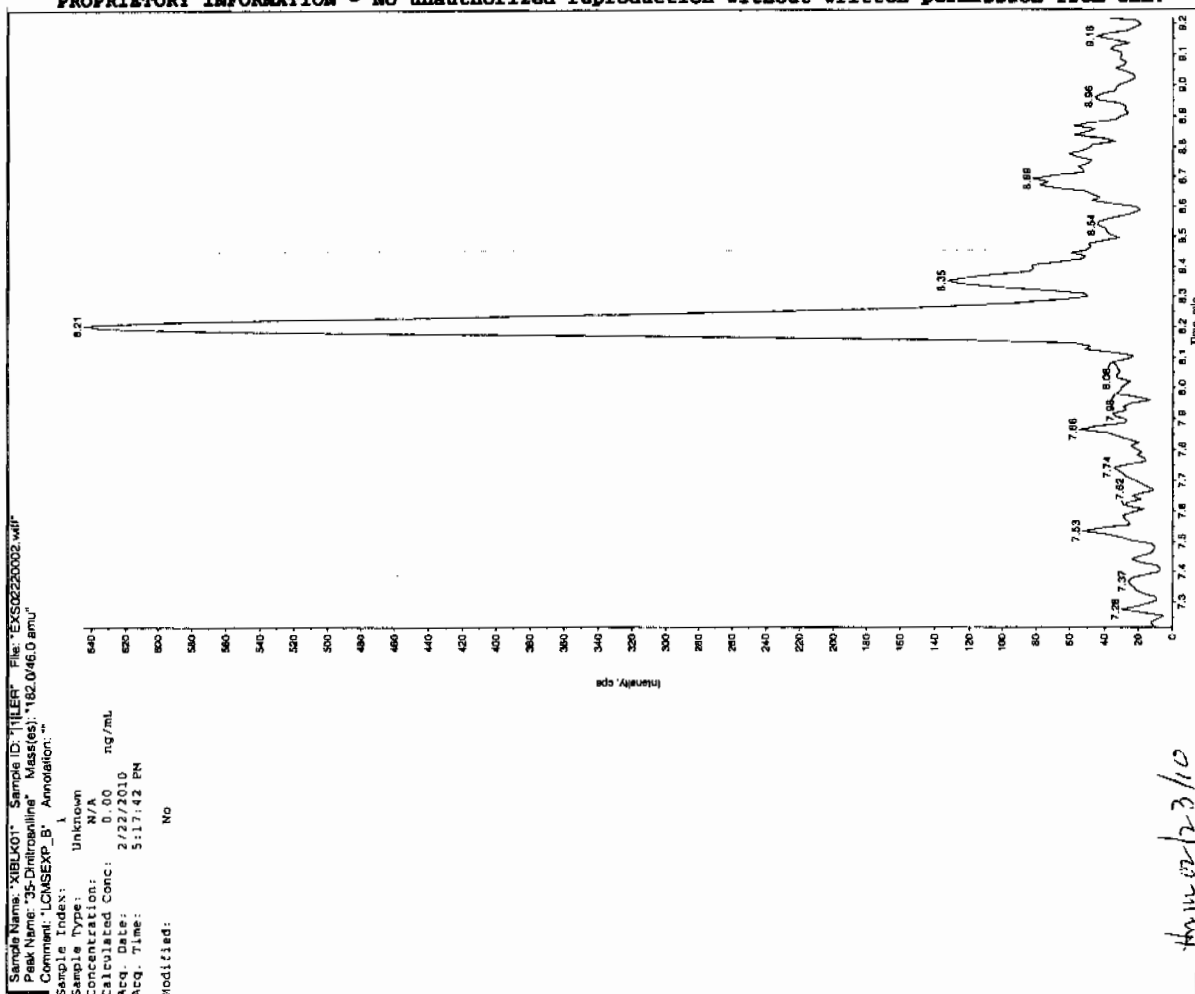
GEL Data File: EXS02220002.wiff

Instrument ID: LCMSMS

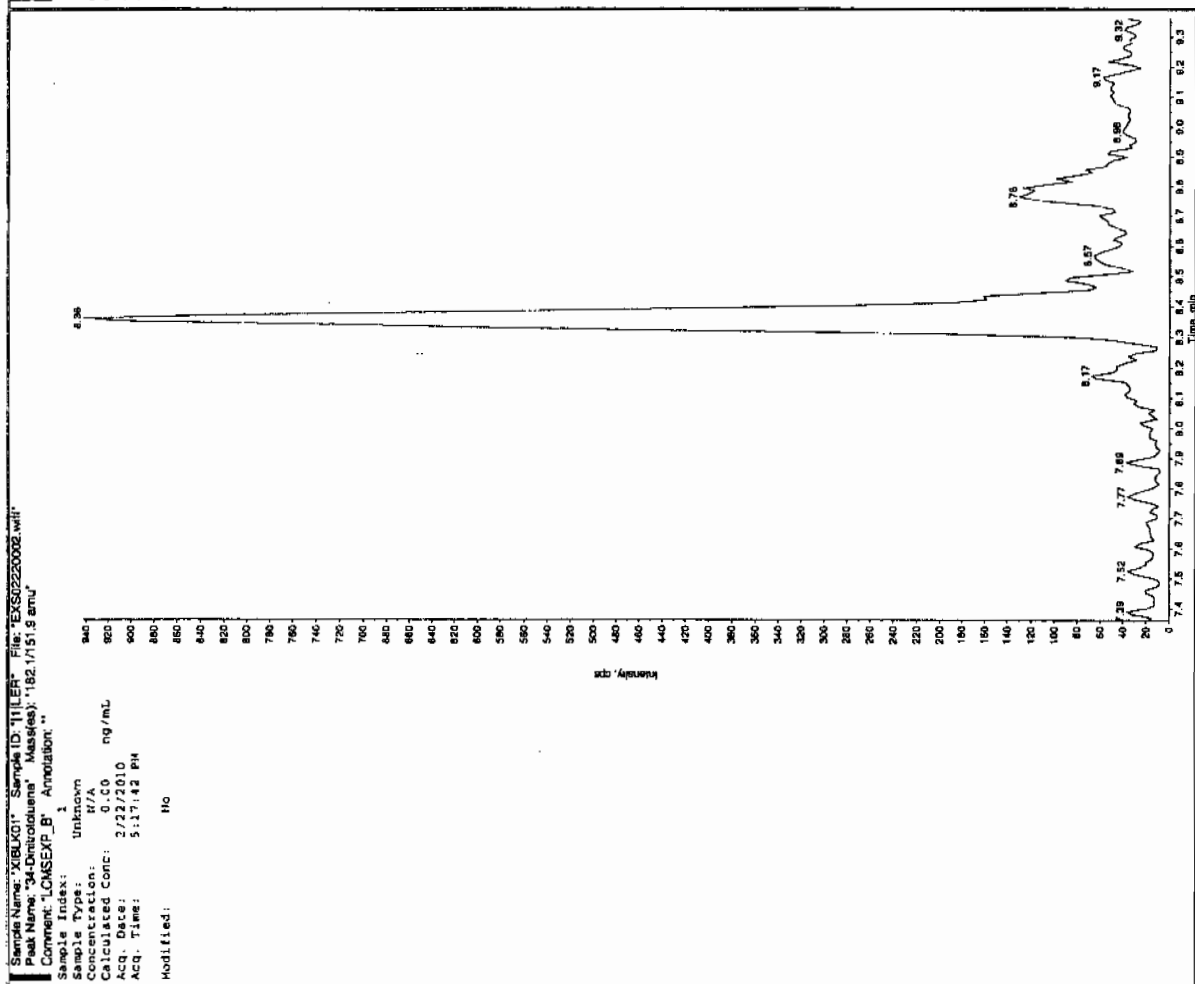
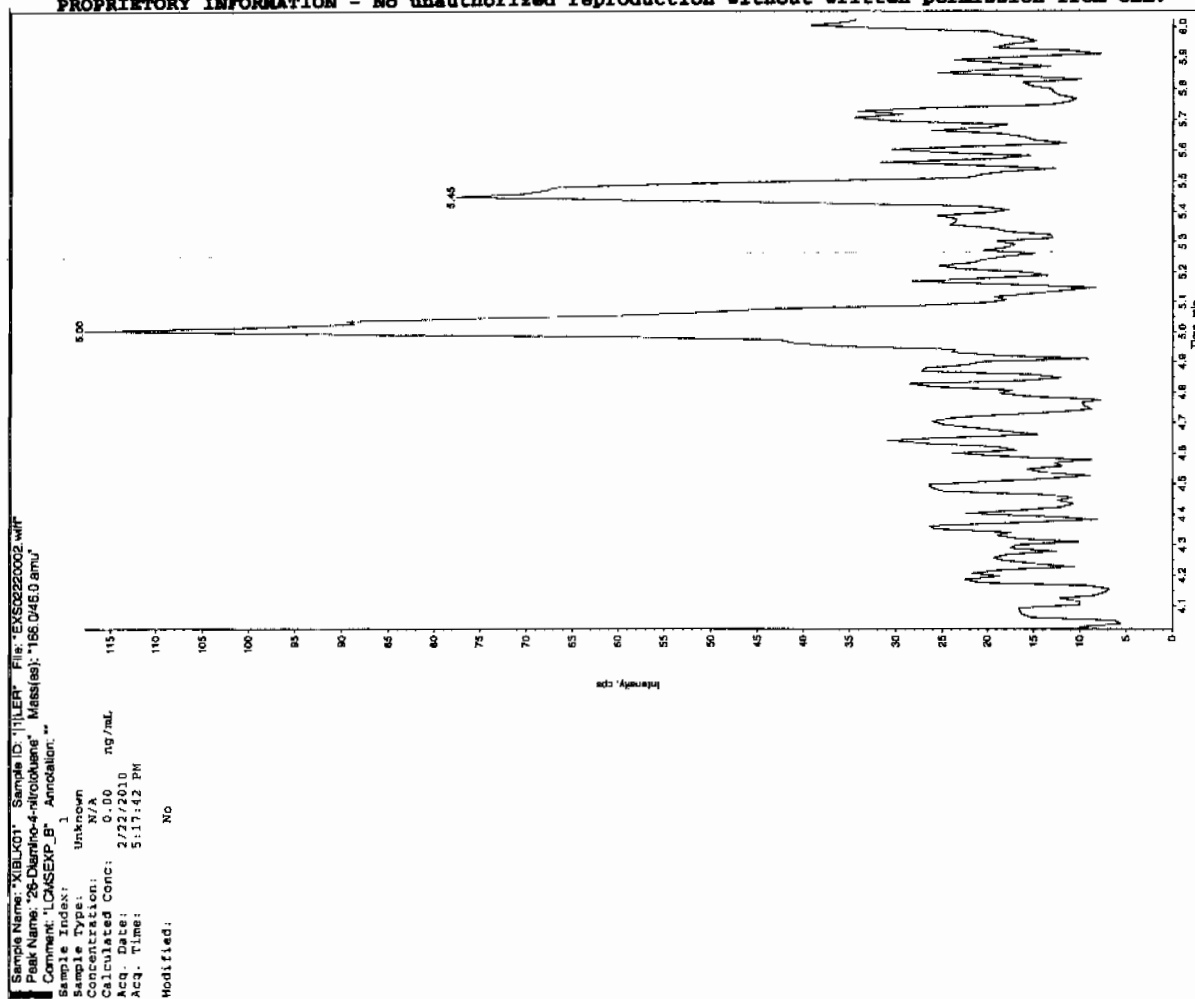
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.84
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



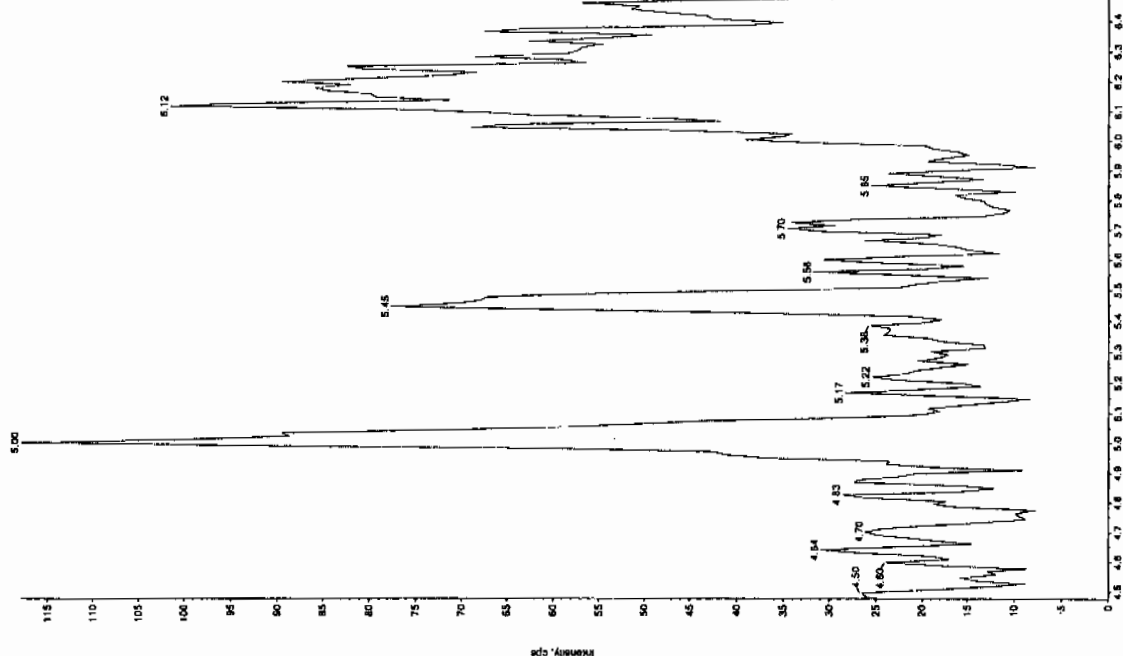
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: 'XBL001' Sample ID: '111111' File: 'EVS0220002.wif'
 Peak Name: '10-(cresyl) phosphate' Mass(es): '355.191.0 amu'
 Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1.84 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 5:17:42 PM

Modified: No
 Proc. Algorithm: IntelliQuan - TOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 10.8 min
 Area: 8.25e+004 counts
 Height: 19183.148 cps
 Start Time: 10.7 min
 End Time: 11.1 min



Sample Name: 'XBL001' Sample ID: '111111' File: 'EVS0220002.wif'
 Peak Name: '24-Diamino-6-nitrotoluene' Mass(es): '165.046.0 amu'
 Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 5:17:42 PM

Modified: No

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 24-FEB-10 09:58

GEL Data File: EXS02240001.wiff

Instrument ID: LCMSMS

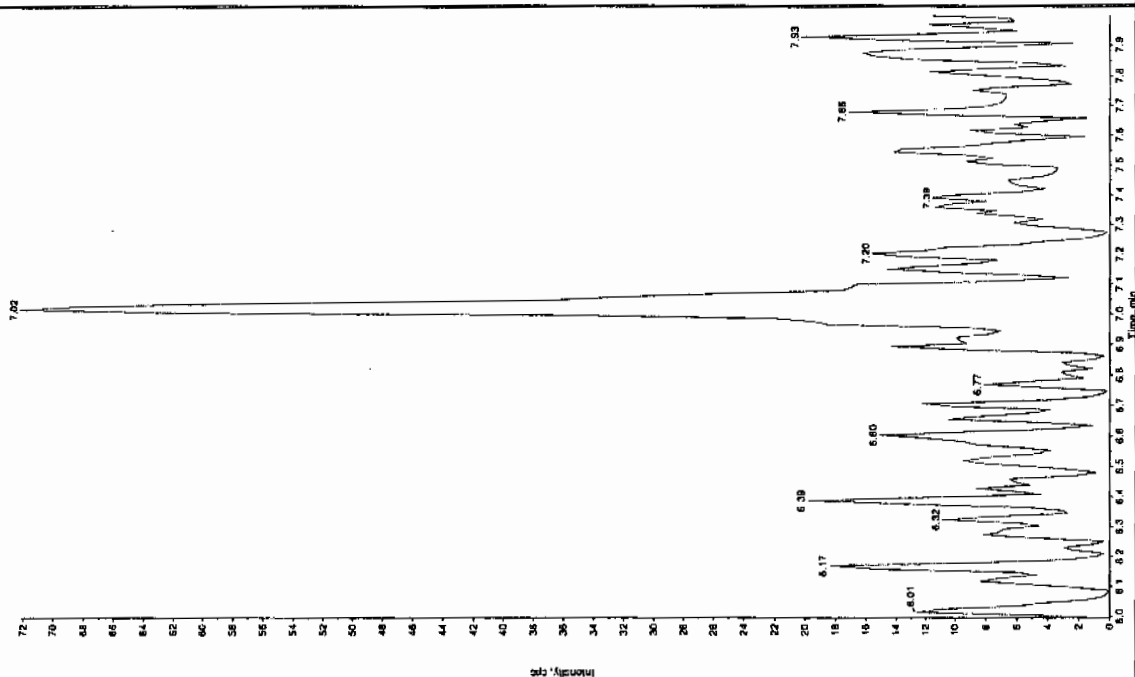
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/28/10

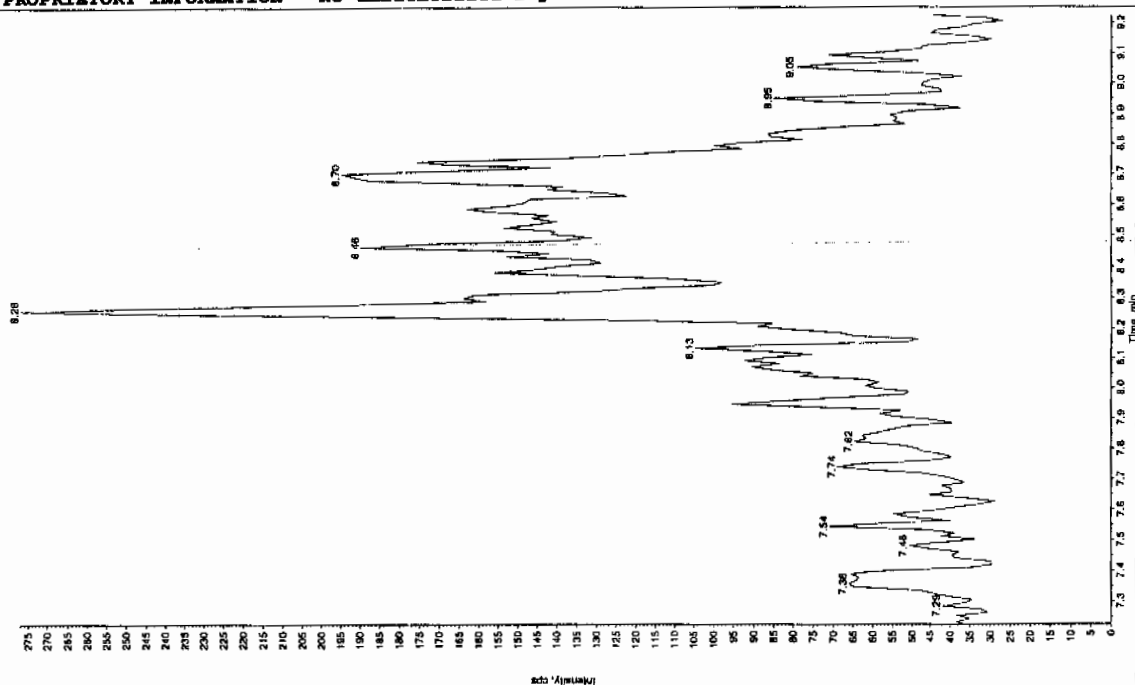
Sample Name: "VIBL001" Sample ID: "VIBL001" File: "EX02240001.mrt"
 Peak Name: "TATB" Mass(es): "267.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 9:58:05 AM
 Modified: No



Sample Name: "VIBL001" Sample ID: "VIBL001" File: "EX02240001.mrt"
 Peak Name: "TATB" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

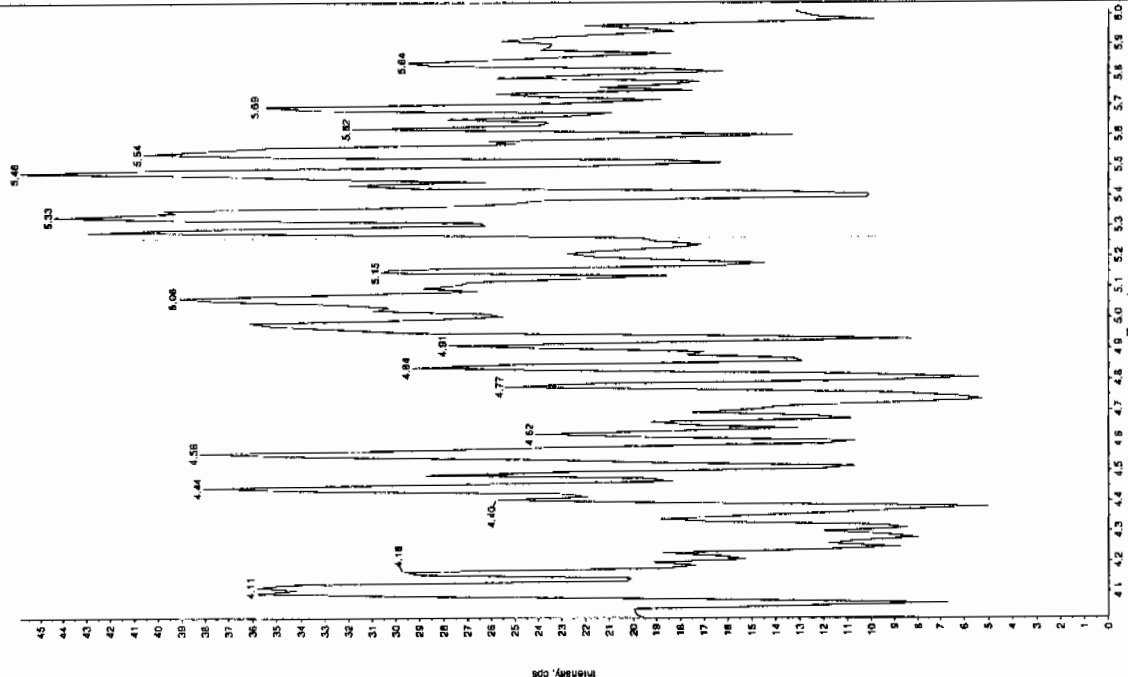
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 9:58:05 AM
 Modified: No



Amw 02/25/10

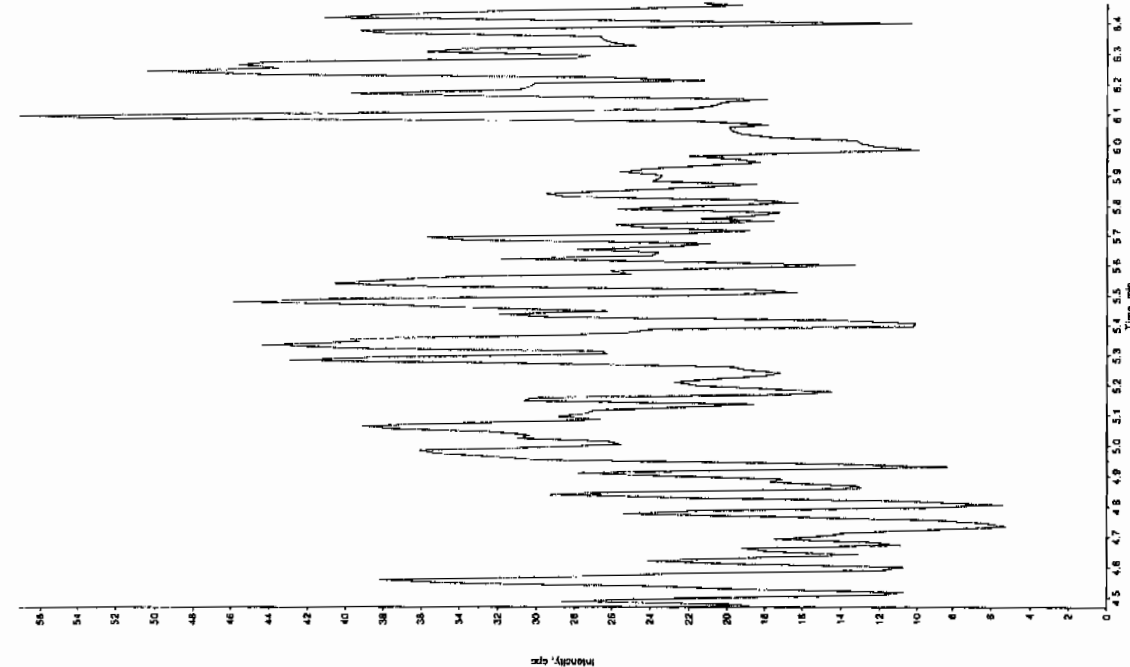
Sample Name: "XIBL001" Sample ID: "HILLER" File: "EX050240001.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166 046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 9:58:05 AM
 Modified: No

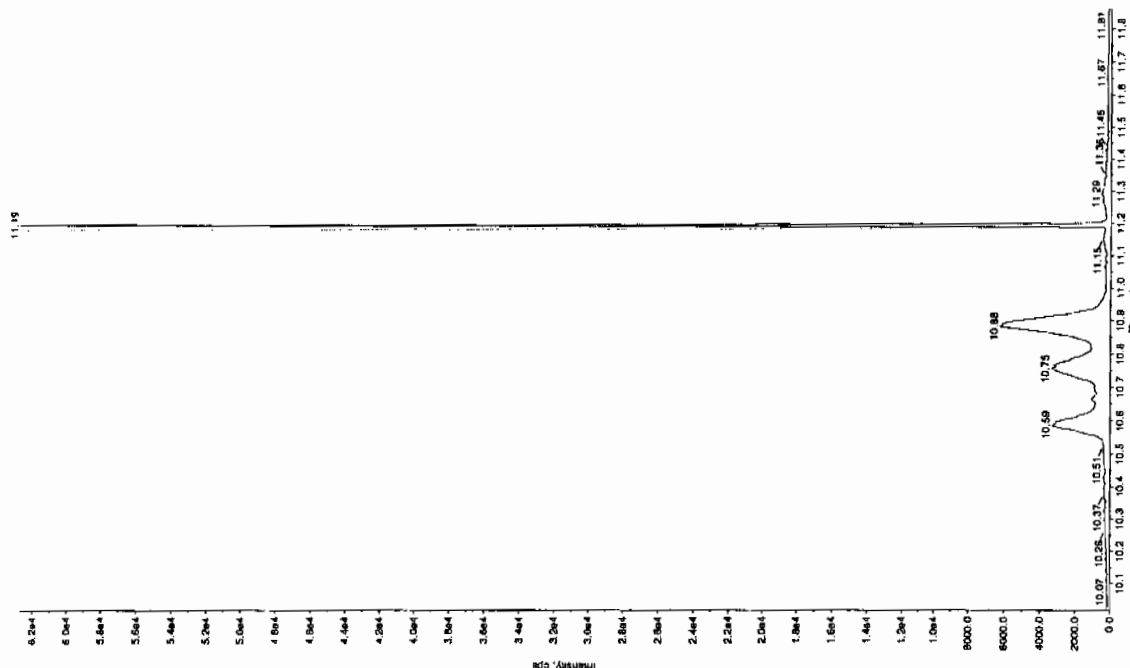


Sample Name: "YB1K01" Sample ID: "YB1K01" File: "EXS0240001.wif"
 Peak Name: "High-molecular-weight phosphate" Mass(es): "369 1791.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 9:58:05 AM
 Modified: No



Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 9:58:05 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 24-FEB-10 10:13

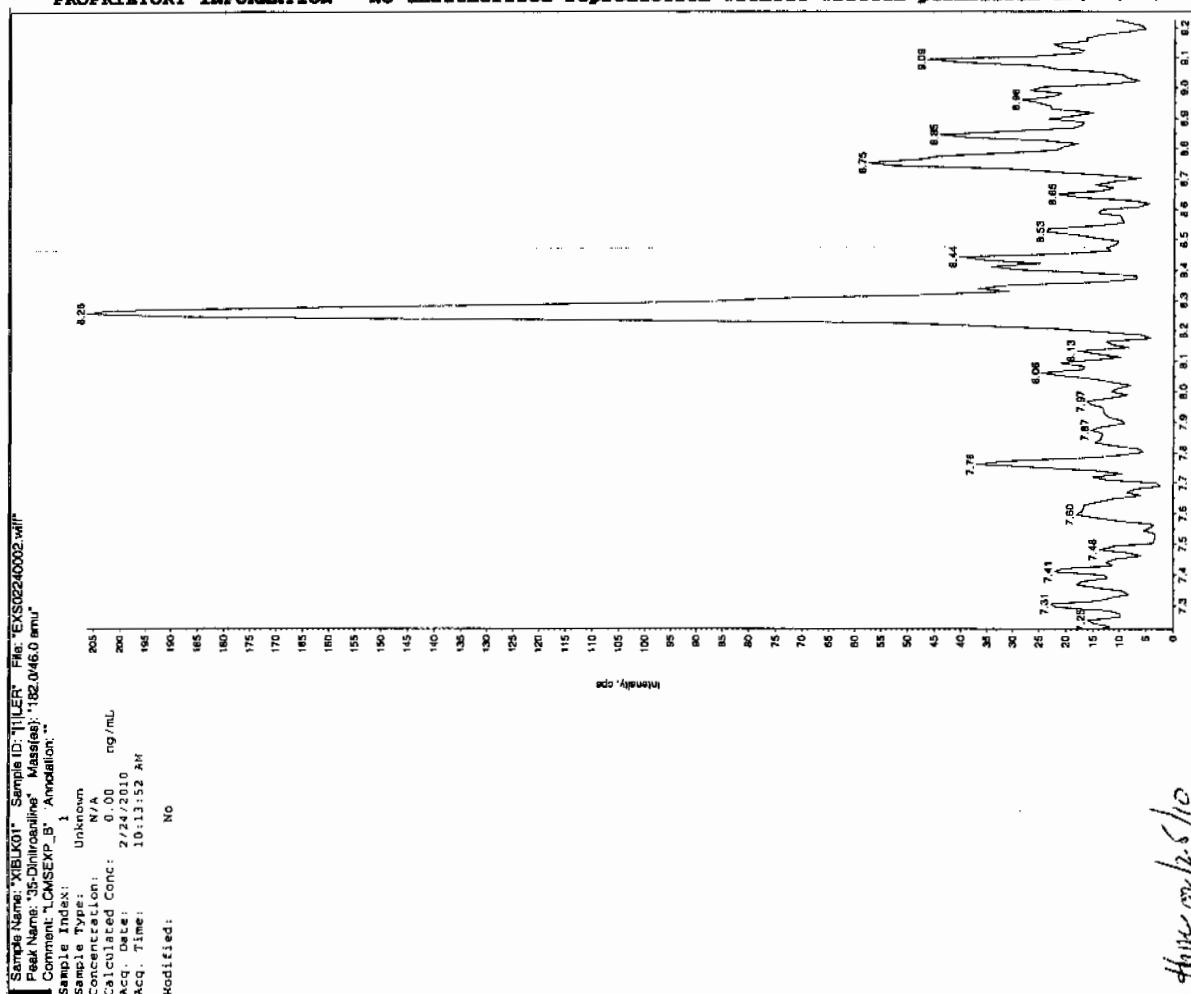
GEL Data File: EXS02240002.wiff

Instrument ID: LCMSMS

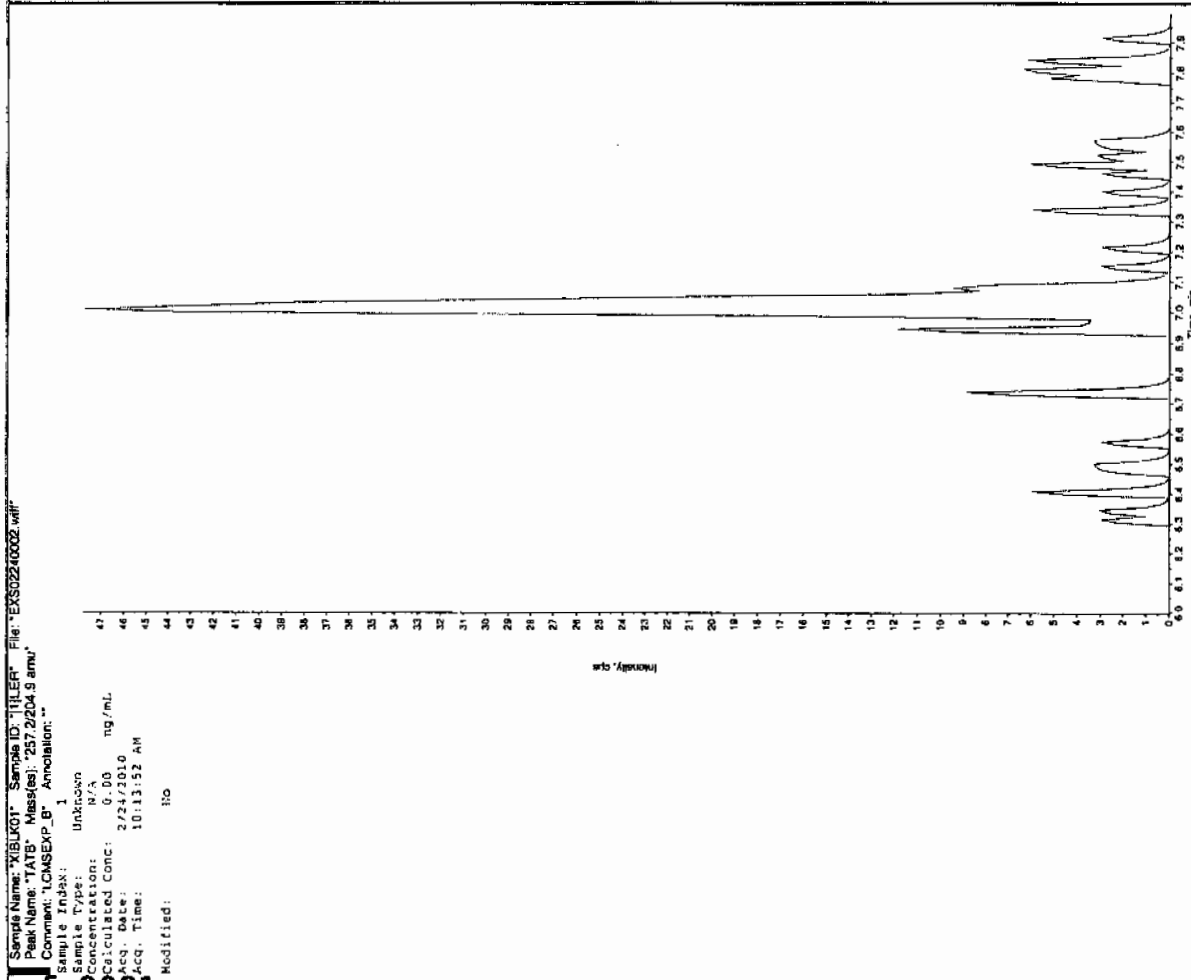
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 2/25/10



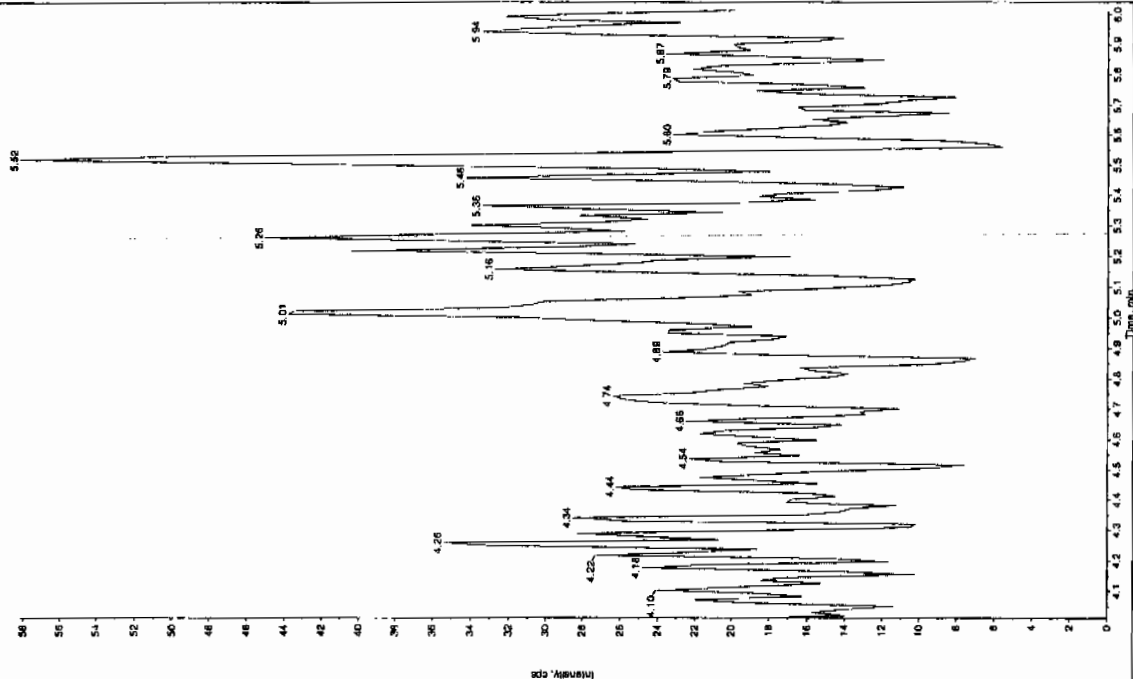
Jan 2/25/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

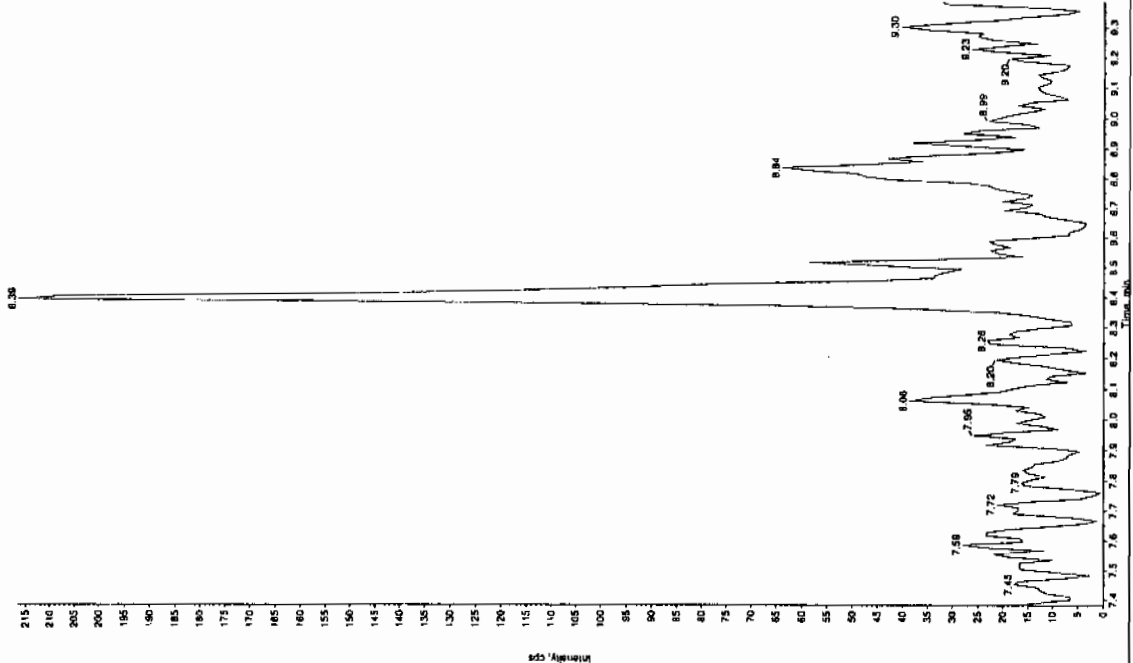
Sample Name: "XBLK01" Sample ID: "T1LER" File: "EX50220002.wif"
 Peak Name: "26-Dimino-4-nitrotoluene" Mass(es): "165.046.0 amu"
 Comment: "LCMSEXP_9" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 10:13:52 AM
 Modified: No



Sample Name: "XBLK01" Sample ID: "T1LER" File: "EX50220002.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "192.1151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

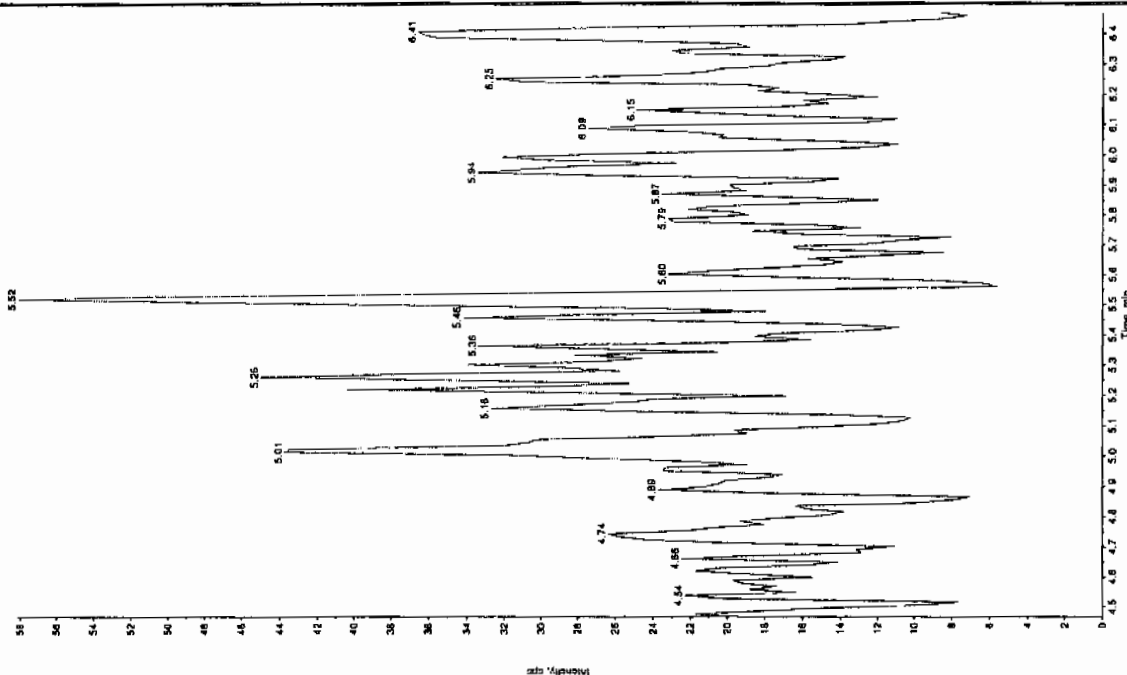
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 10:13:52 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK01" Sample ID: "JILLER" File: "EX02240002.wif"
 Peak Name: "tris(cresyl) phosphate" Mass(es): "369.151.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 10:13:52 AM
 Modified: No



Sample Name: "XBLK01" Sample ID: "JILLER" File: "EX02240002.wif"
 Peak Name: "24-Diamino-5-nitrodeane" Mass(es): "156.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 10:13:52 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XJBLK02

Analysis Date: 01-MAR-10 19:28

GEL Data File: EXP0301009a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Dinitrotoluene-d3	500	463.845
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	489.394
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0301009a

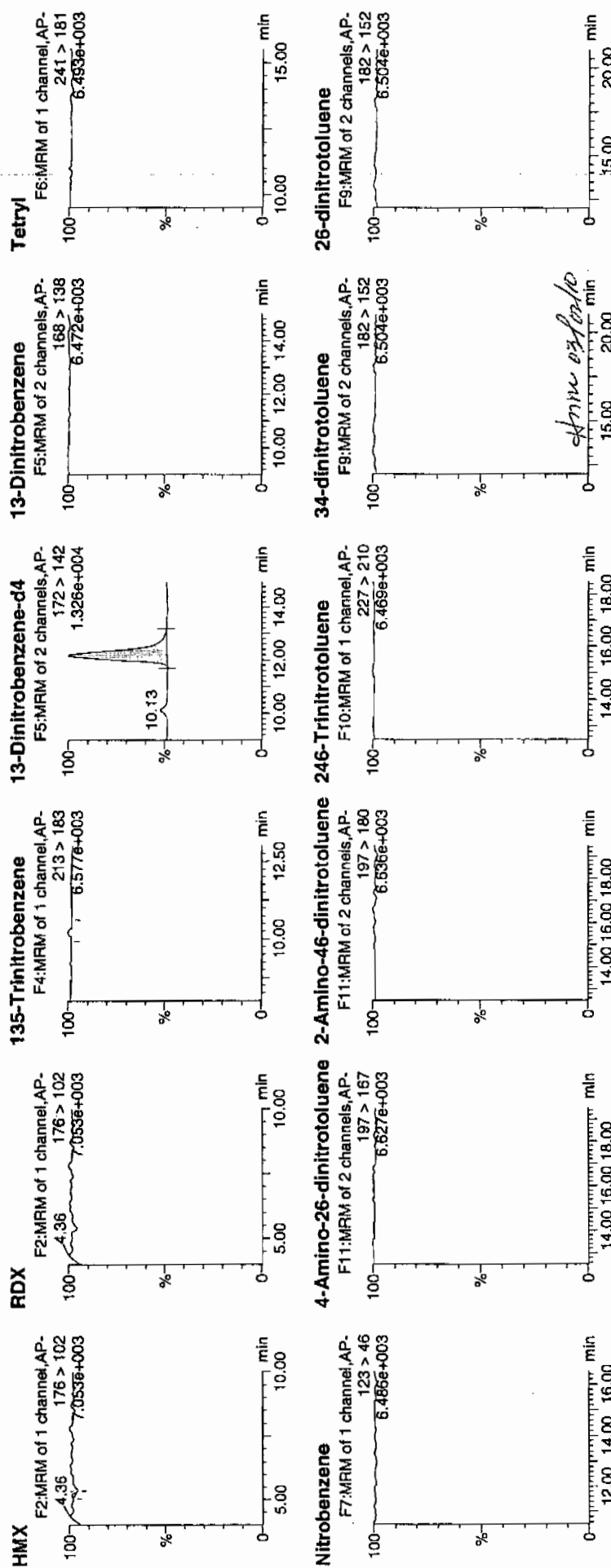
Date: 01-Mar-2010

Time: 19:28:59

ID: XIBLK02

Vial: 1:1,A

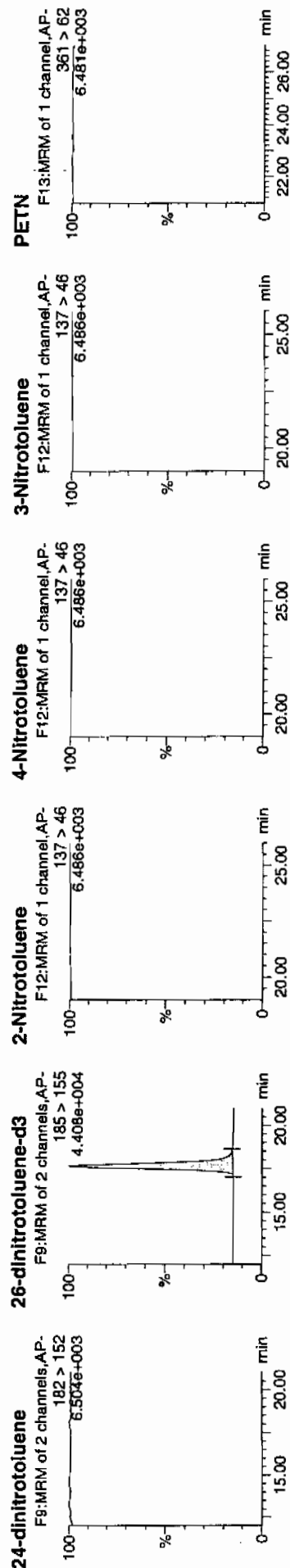
17
3/2/10



Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 01-MAR-10 20:27

GEL Data File: EXP0301011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	593.284
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	629.492
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301011a

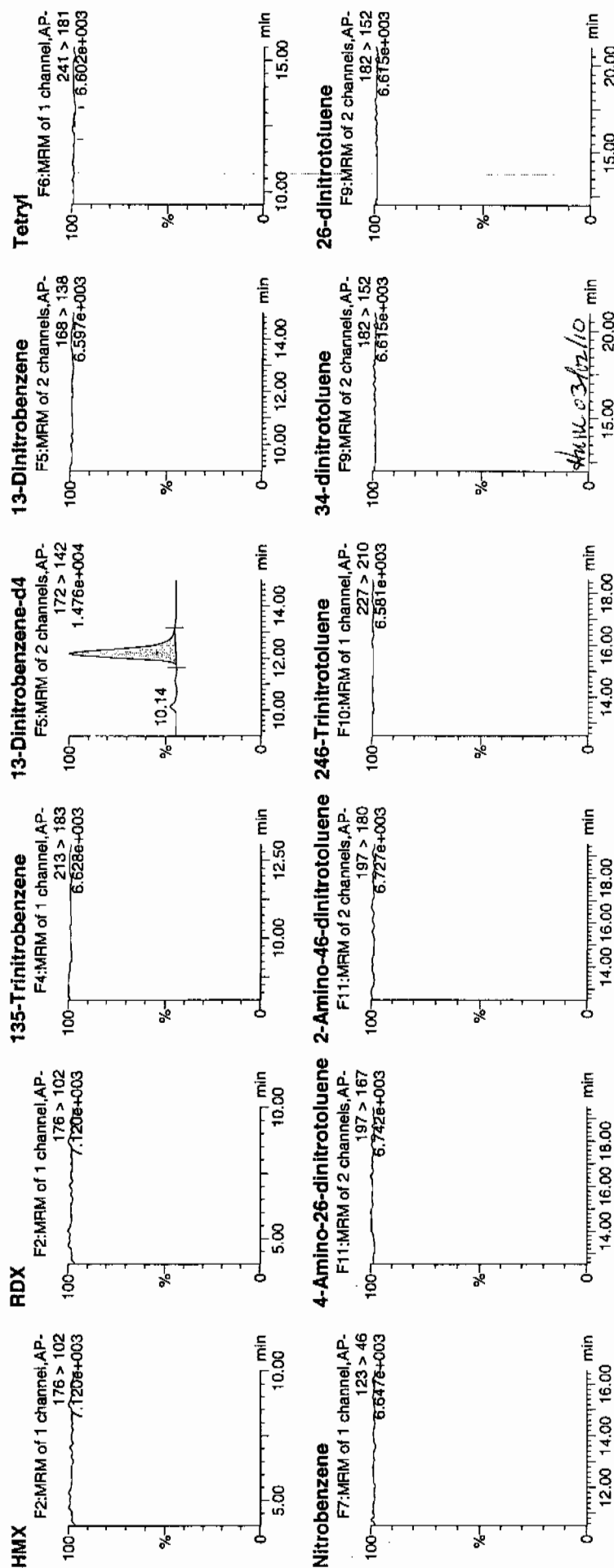
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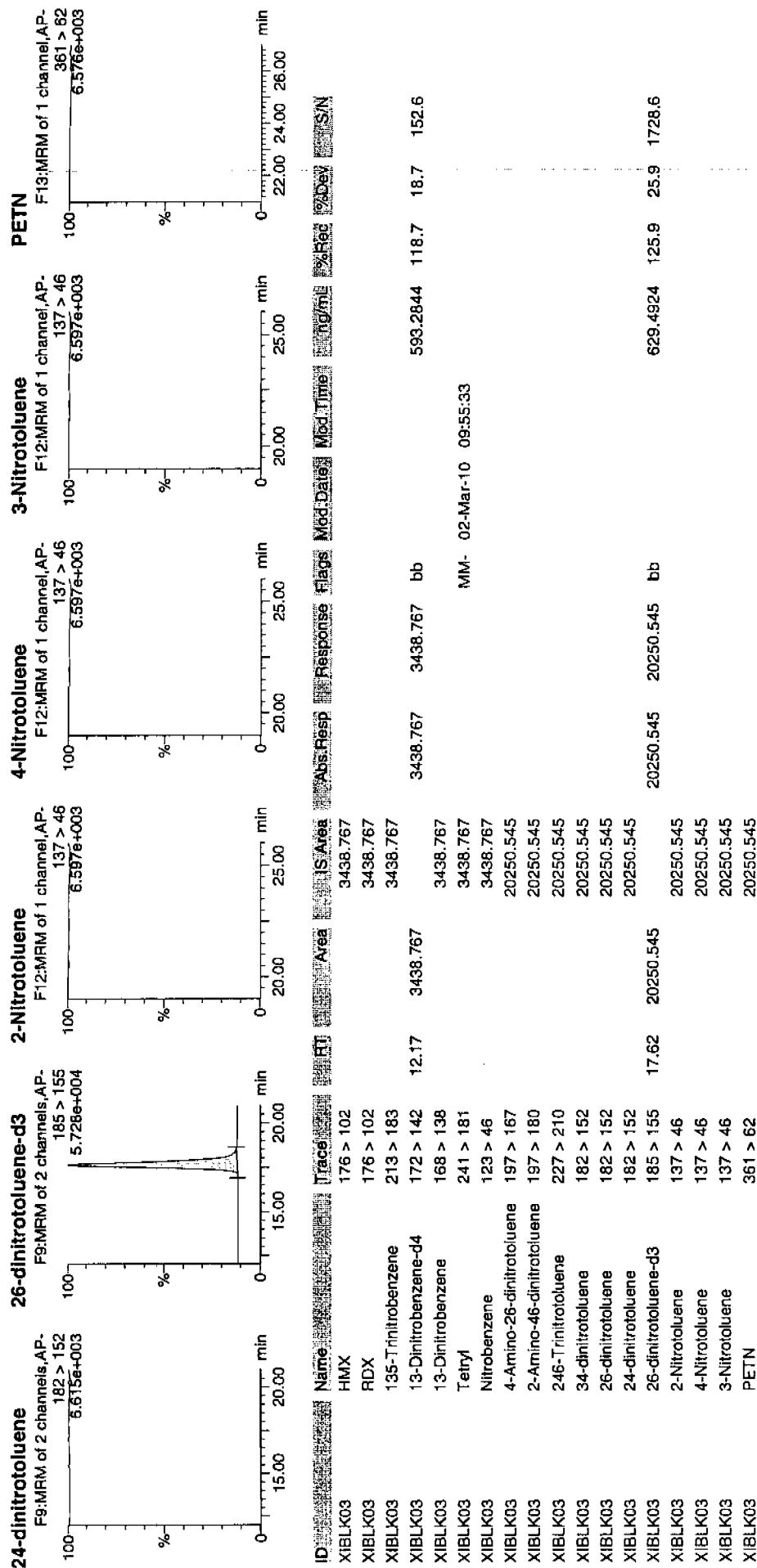
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Vial: 1:1,A

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3/2/10



Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 01-MAR-10 23:54

GEL Data File: EXP0301018a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	606.462
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	554.129
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0301018a

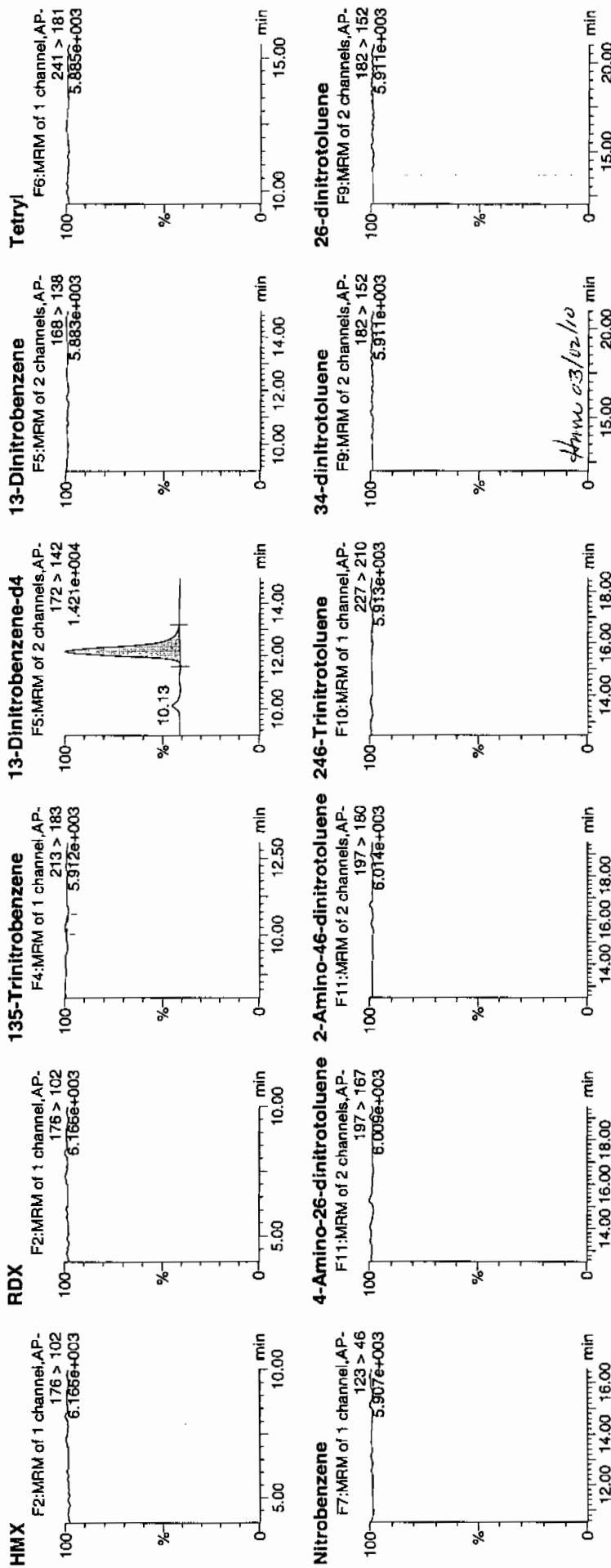
Date: 01-Mar-2010

Time: 23:54:20

ID: XIBLK04

Vial: 1:1,A

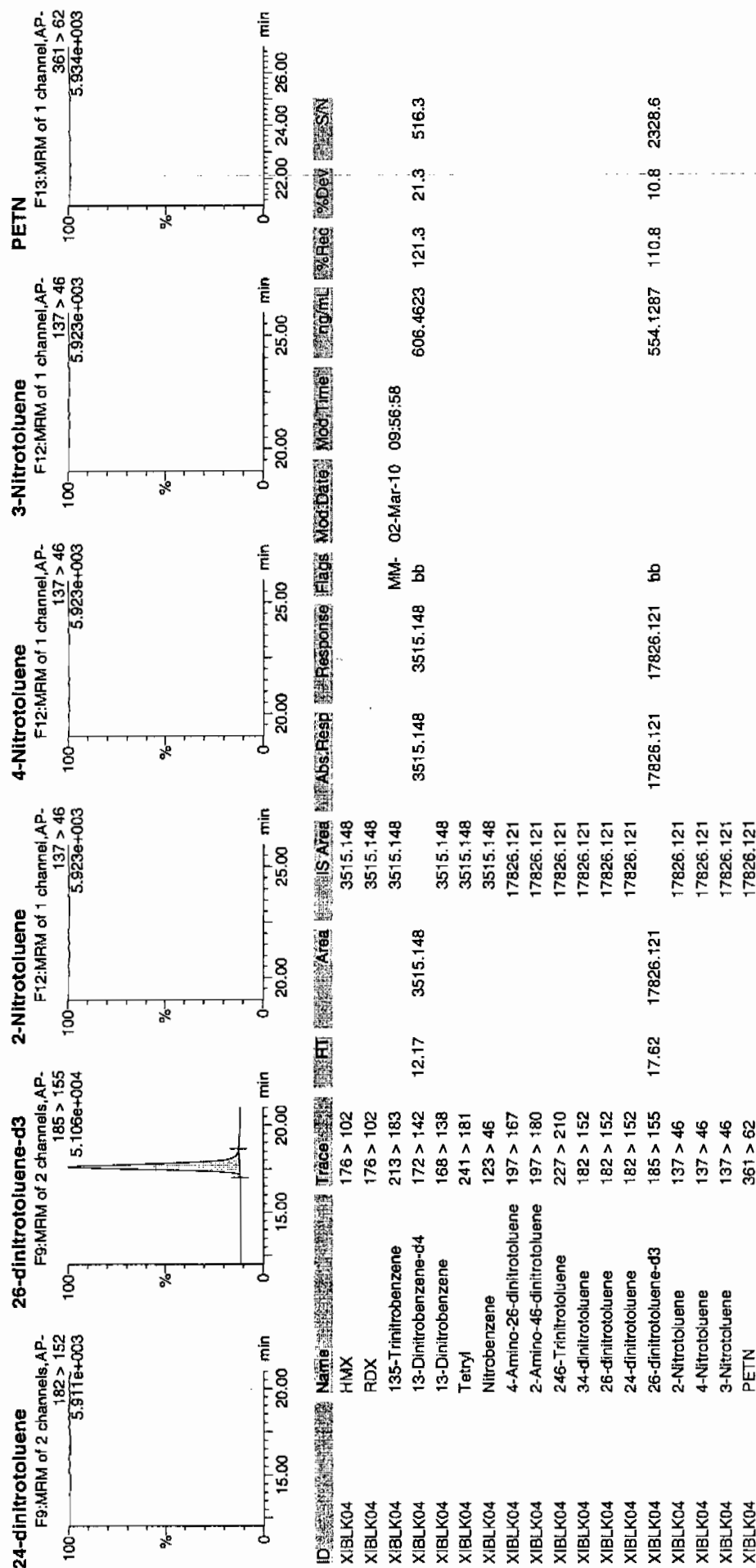
3/2/10



Printed: Tue Mar 02 10:00:11 2010, Page 36 of 65

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 02-MAR-10 06:17

GEL Data File: EXP0301031a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
HMX	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	455.251
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	499.31
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0

Printed: Tue Mar 02 10:00:11 2010, Page 61 of 65

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0301031a

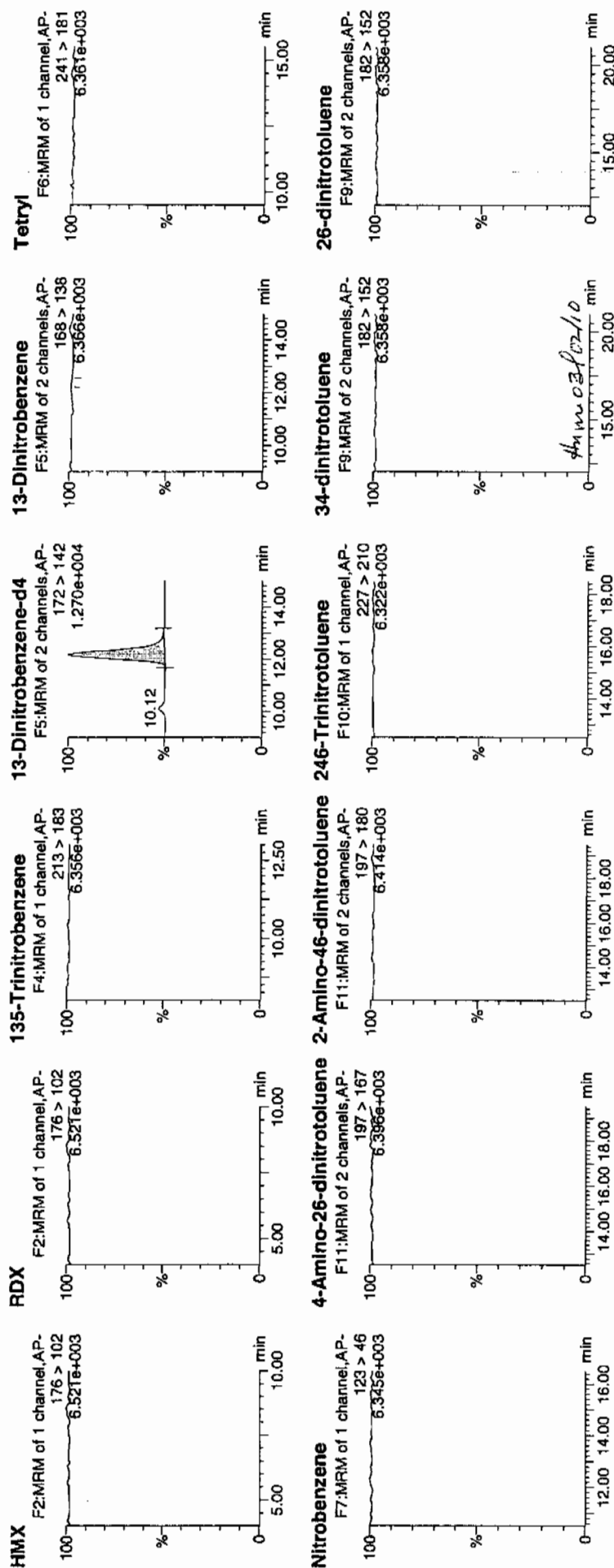
Date: 02-Mar-2010

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ID: XIBLK05

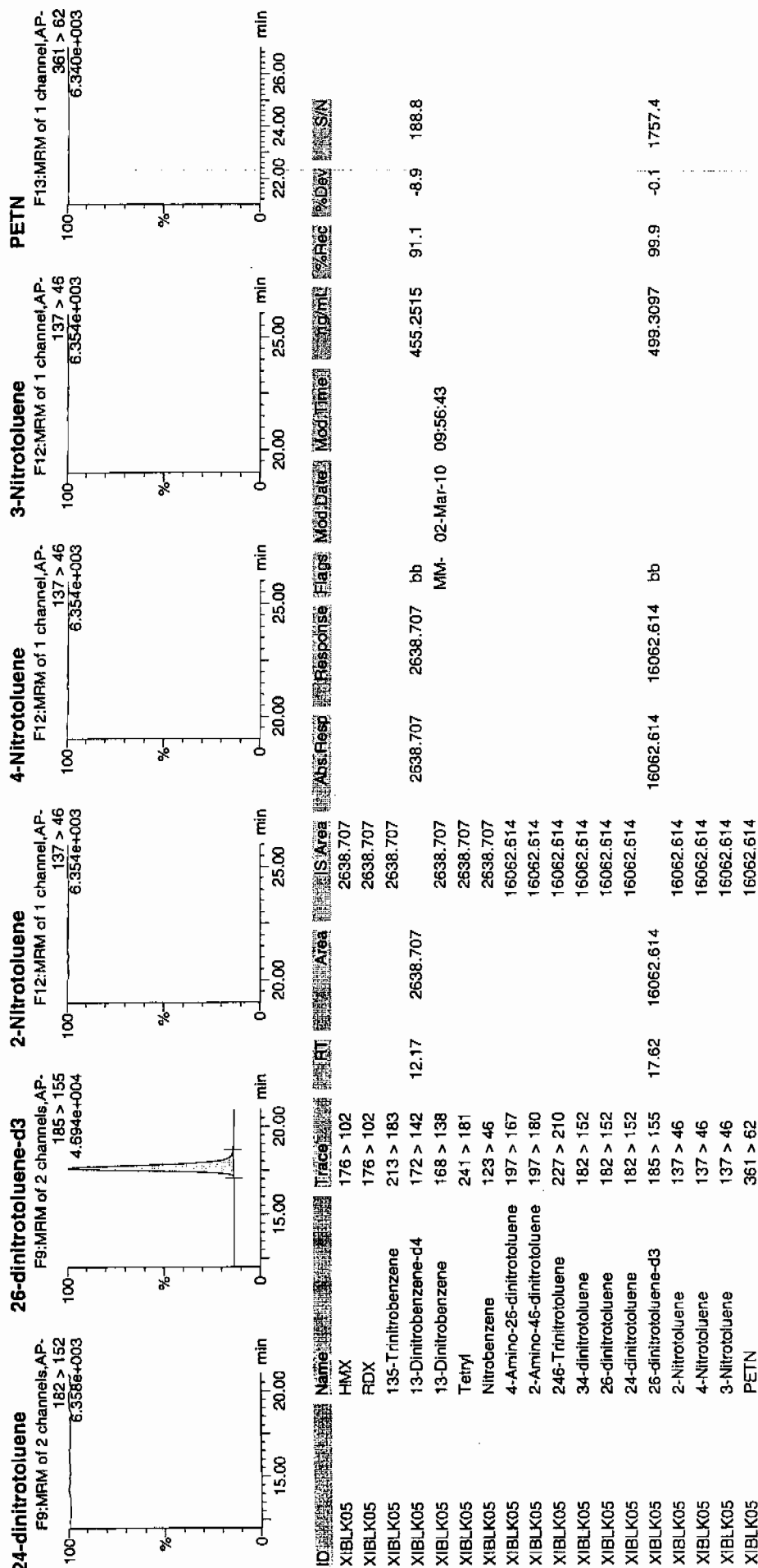
Vial: 1:1,A

4/11
3/12/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110\expA.qld, Time: Tue Mar 02 09:59:16 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 02-MAR-10 12:41

GEL Data File: EXP0301044a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	507.1
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	517.389
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Wed Mar 03 09:10:52 2010, Page 23 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP\PROData\EXP0301044a

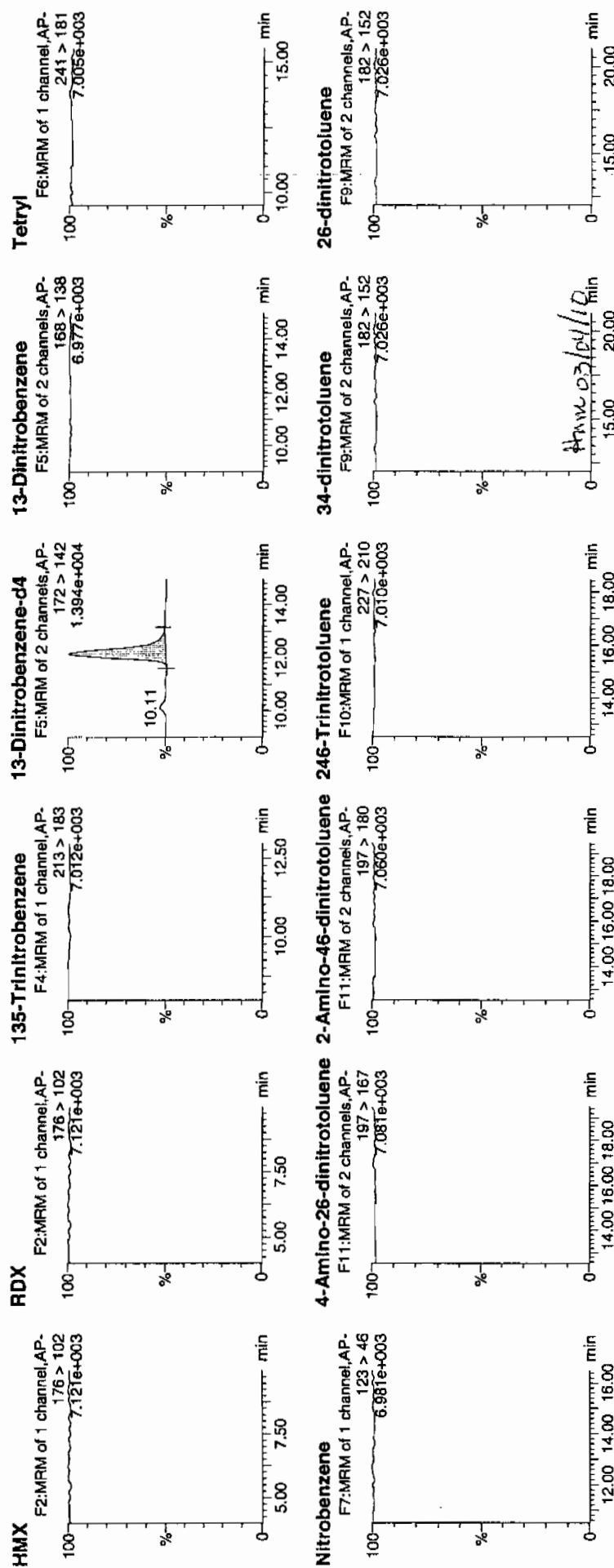
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Time: 12:41:52

ID: XIBLK06

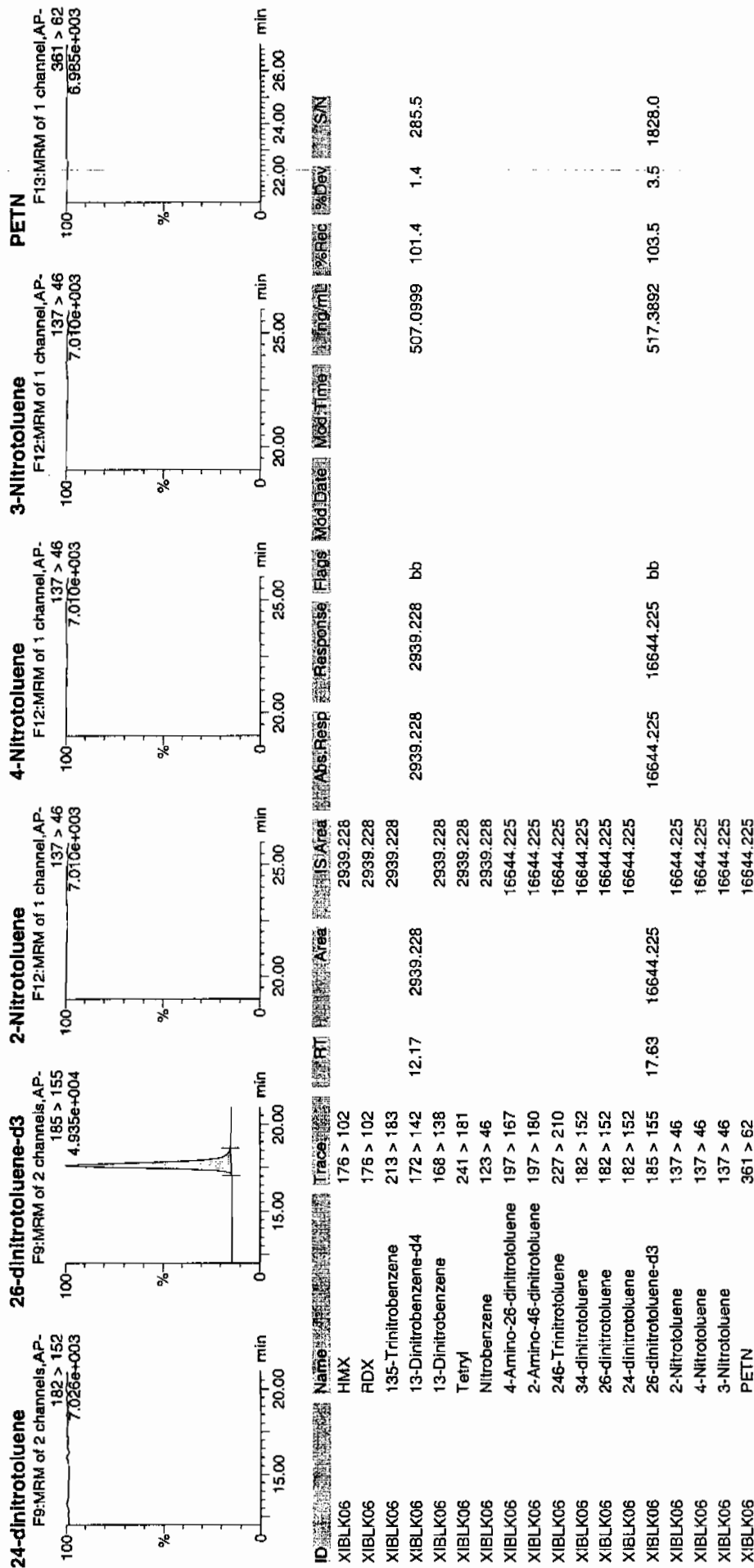
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10/11
3/3/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 02-MAR-10 19:12

GEL Data File: EXP0301057a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	498.442
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	513.169
2-Amino-4,6-dinitrotoluene	0	0

Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301057a

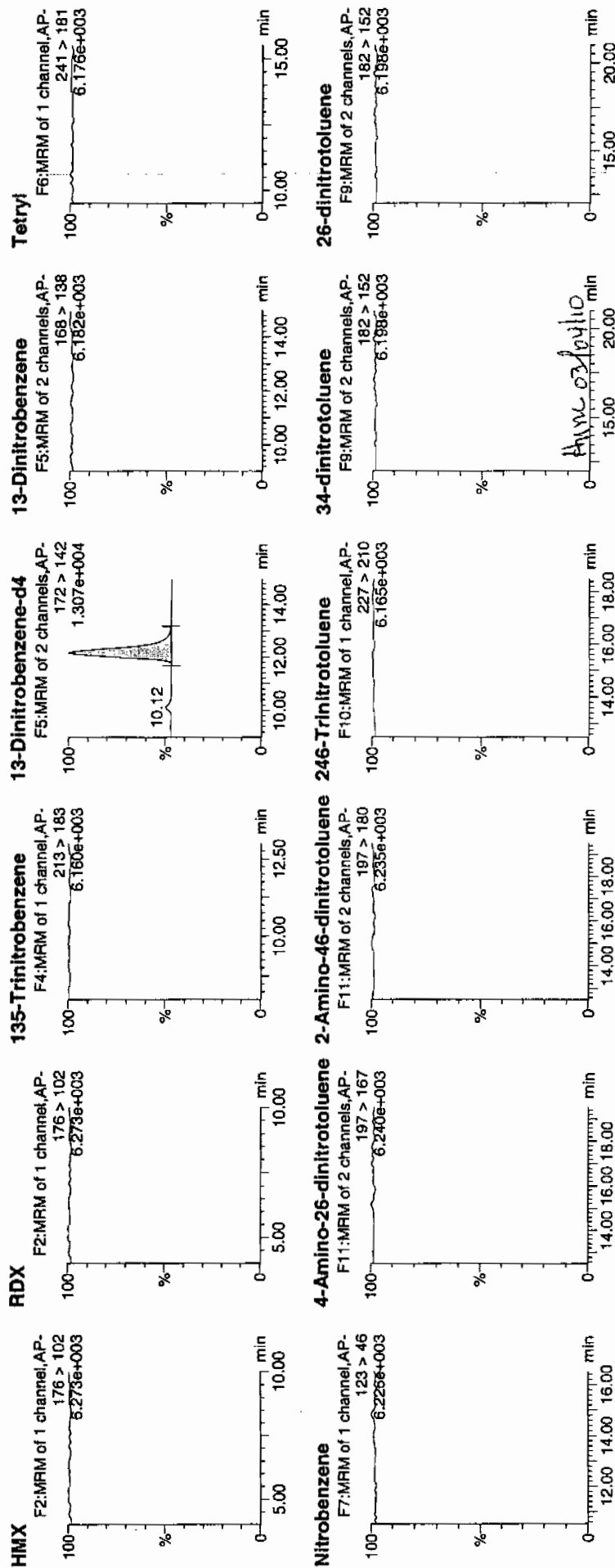
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ID: XIBLK07

Vial: 1:1,A

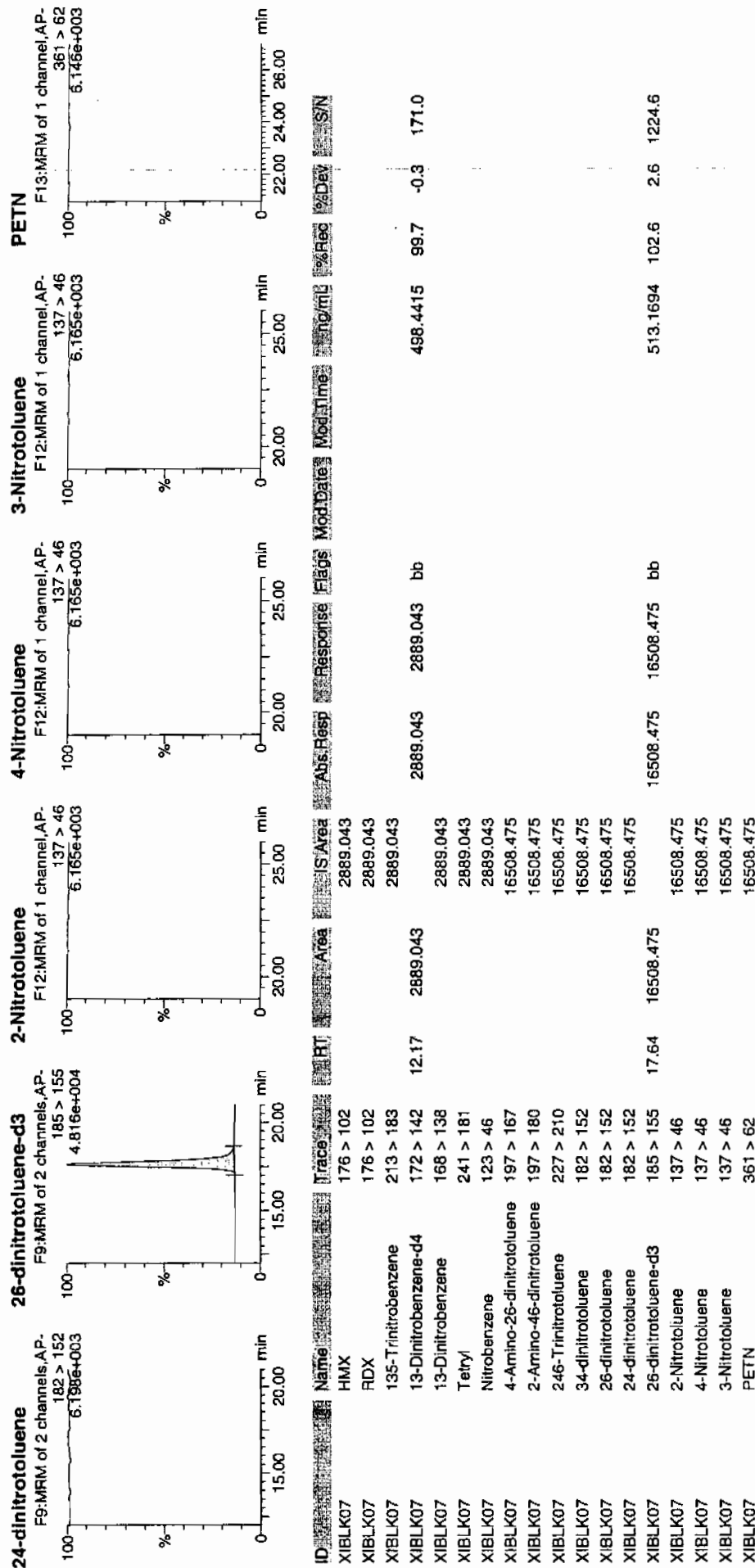
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3/3/10



Printed: Wed Mar 03 09:10:52 2010, Page 50 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 03-MAR-10 01:06

GEL Data File: EXP0301069a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	575.51
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	589.51
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Wed Mar 03 09:10:52 2010, Page 73 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301059a

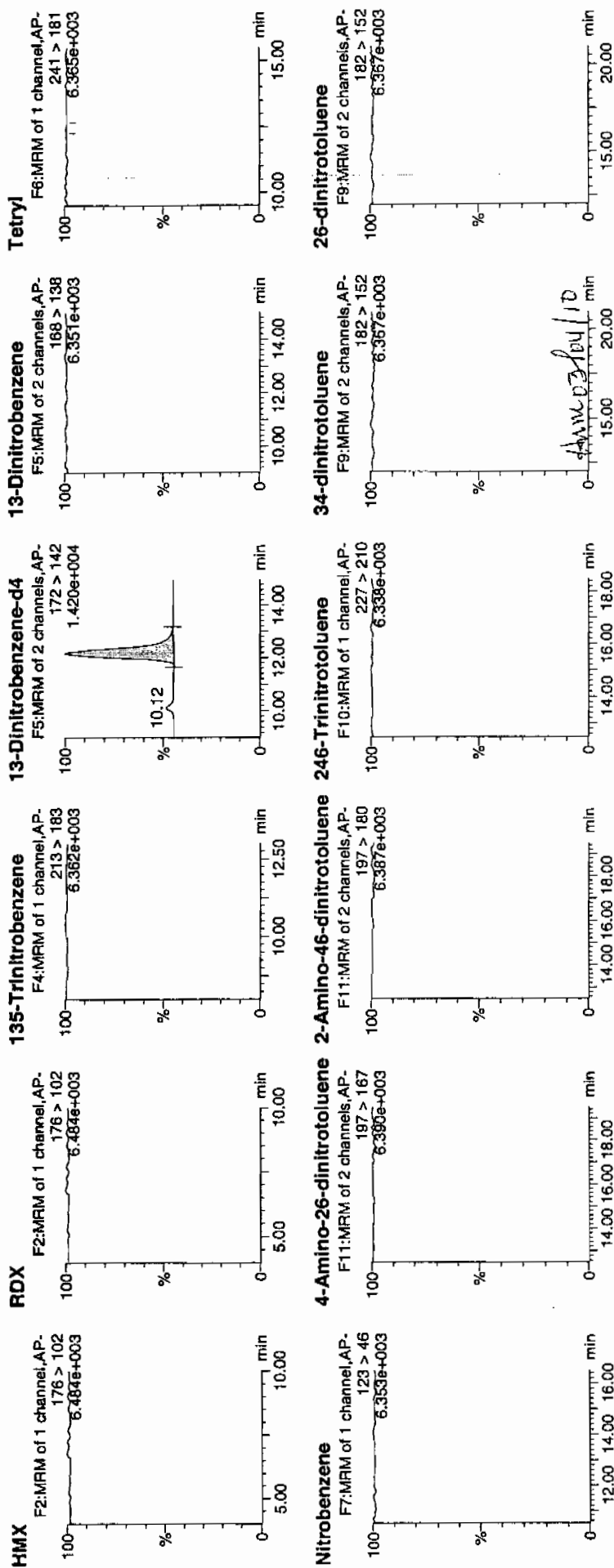
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Time: 01:06:20

ID: XIBLK08

Vial: 1:1,A

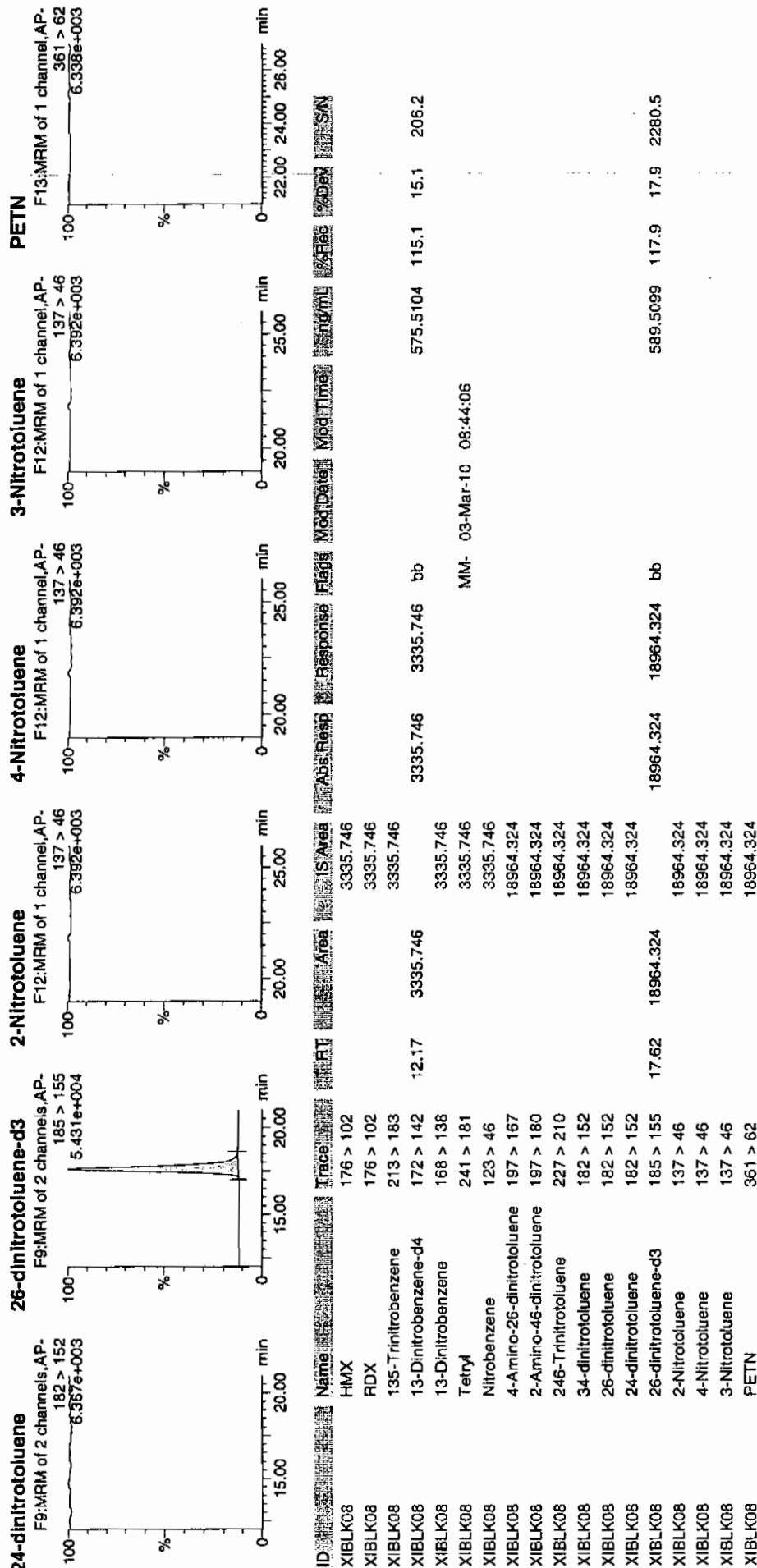
4/13/10
MJP



Printed: Wed Mar 03 09:10:52 2010, Page 74 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO1030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 03-MAR-10 07:29

GEL Data File: EXP0301082a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	554.089
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	556.508
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0

Printed: Wed Mar 03 09:10:52 2010, Page 99 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301082a

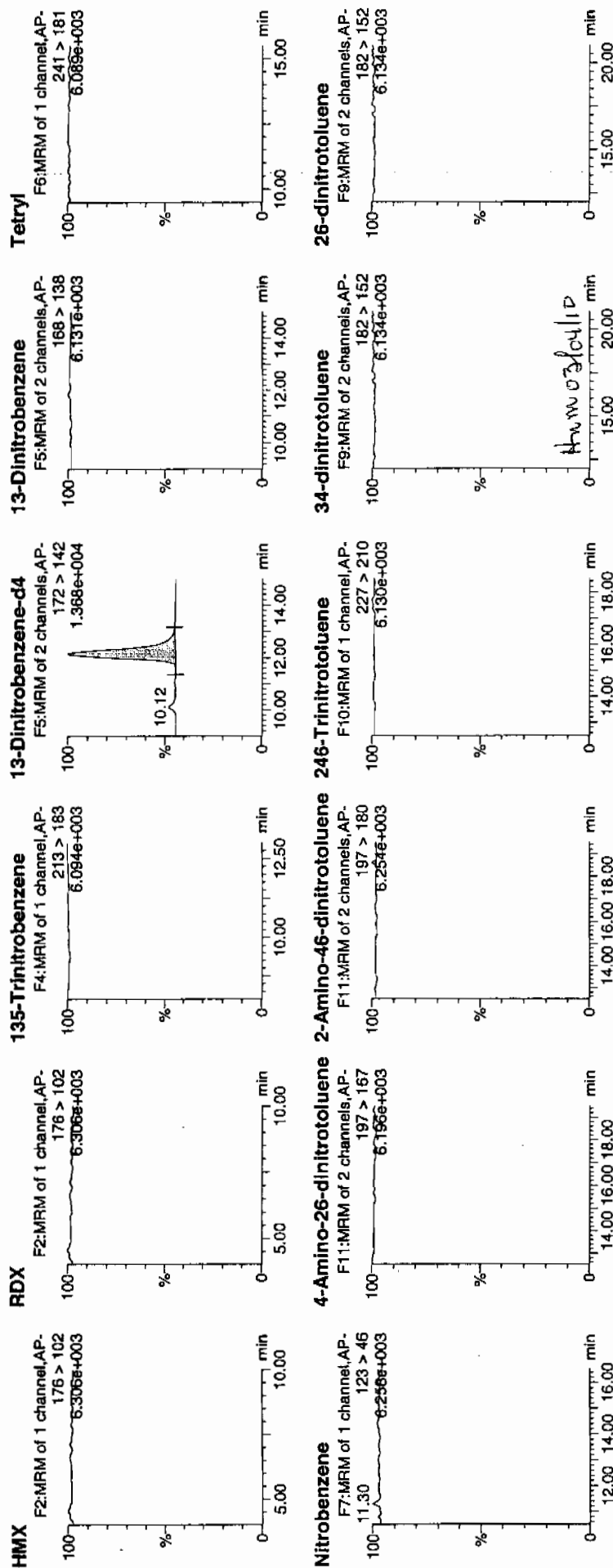
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ID: XIBLK09

Vial: 1:1,A

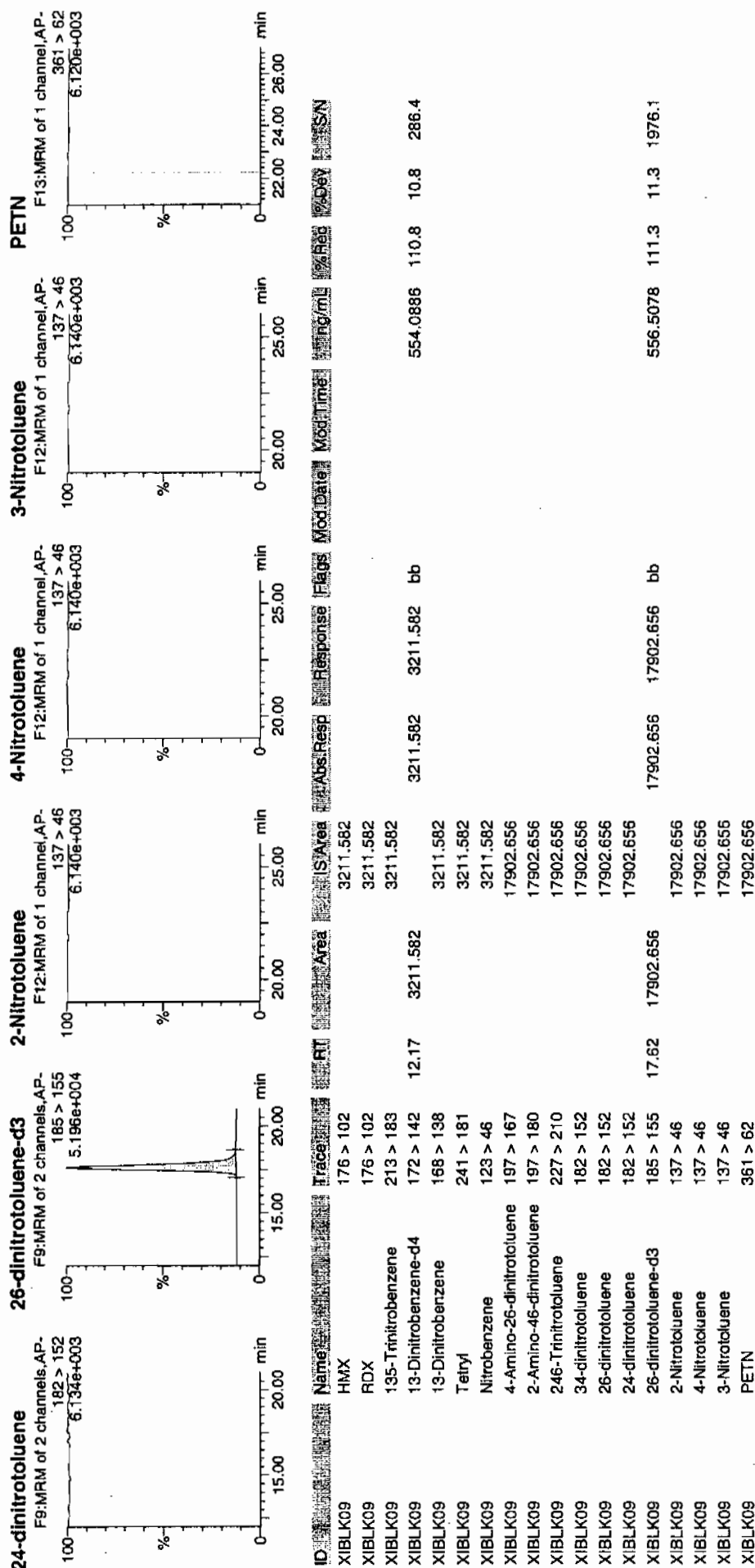
10/17
3/3/10



Printed: Wed Mar 03 09:10:52 2010, Page 100 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 03-MAR-10 11:26

GEL Data File: EXP0301090a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	577.198
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	590.189
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\030110expa.mdb, Time: Tue Mar 02 09:26:02 2010
Calibration: C:\MASSLYNX\New_Exp.PRO\CurveDB\030110expa.cdb, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301090a

Date: 03-Mar-2010

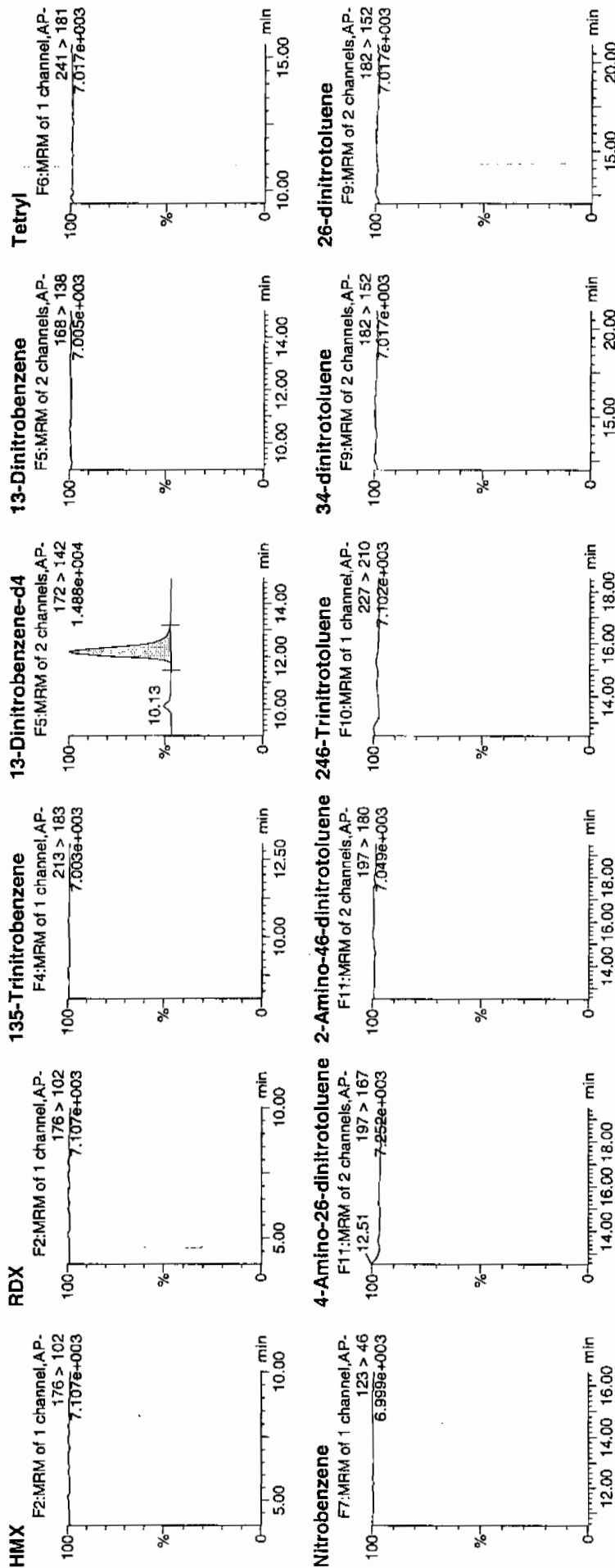
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Vial: 1:1,A

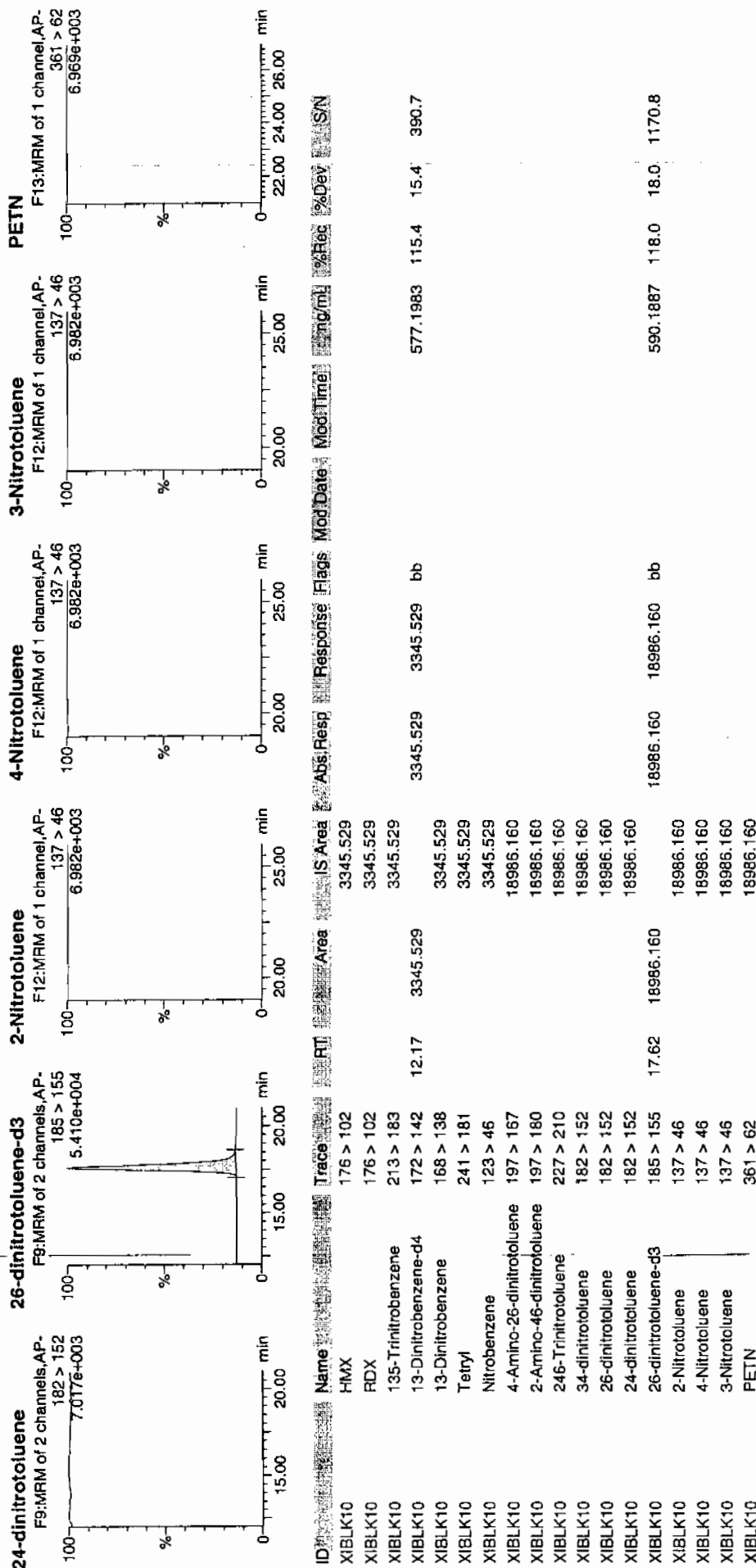
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Handwritten: 3/5/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 03-MAR-10 12:55

GEL Data File: EXP0301093a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	593.435
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	676.398
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Thu Mar 04 09:56:46 2010, Page 19 of 81

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301093a

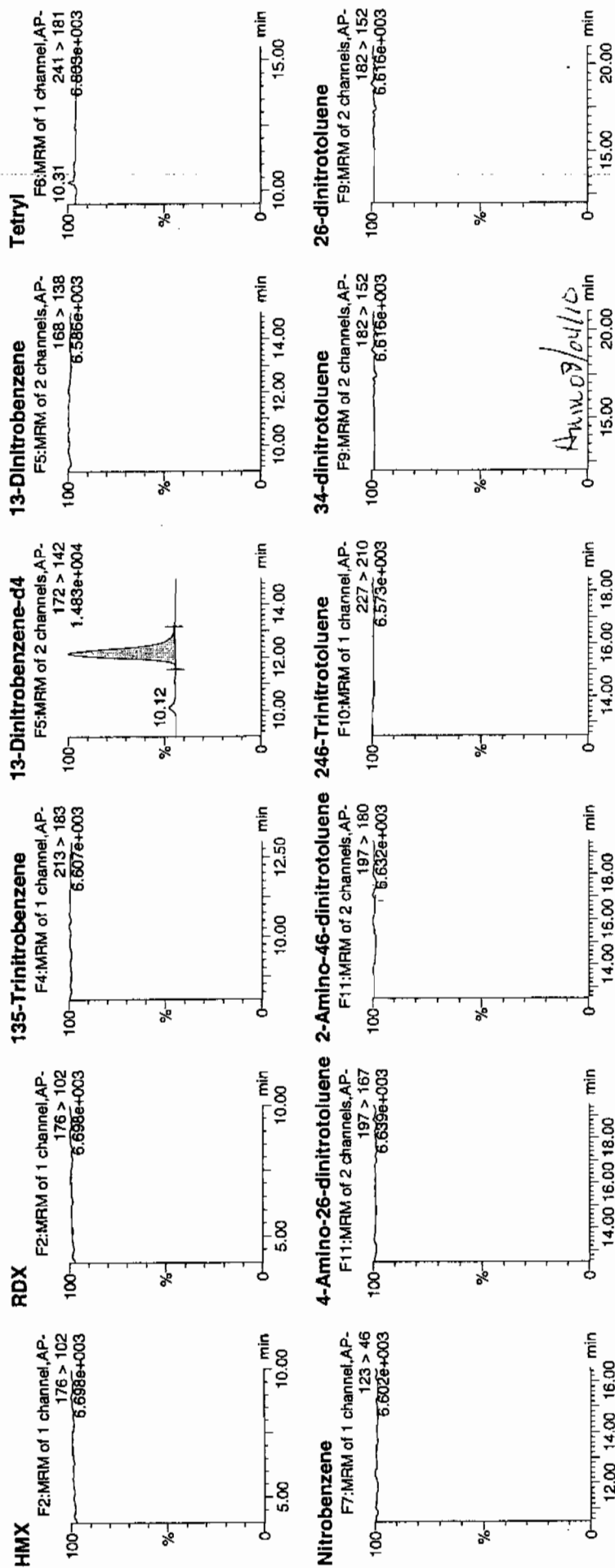
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Time: 12:55:15

ID: XIBLK11

Vial: 1:1,A

Not
3/4/10

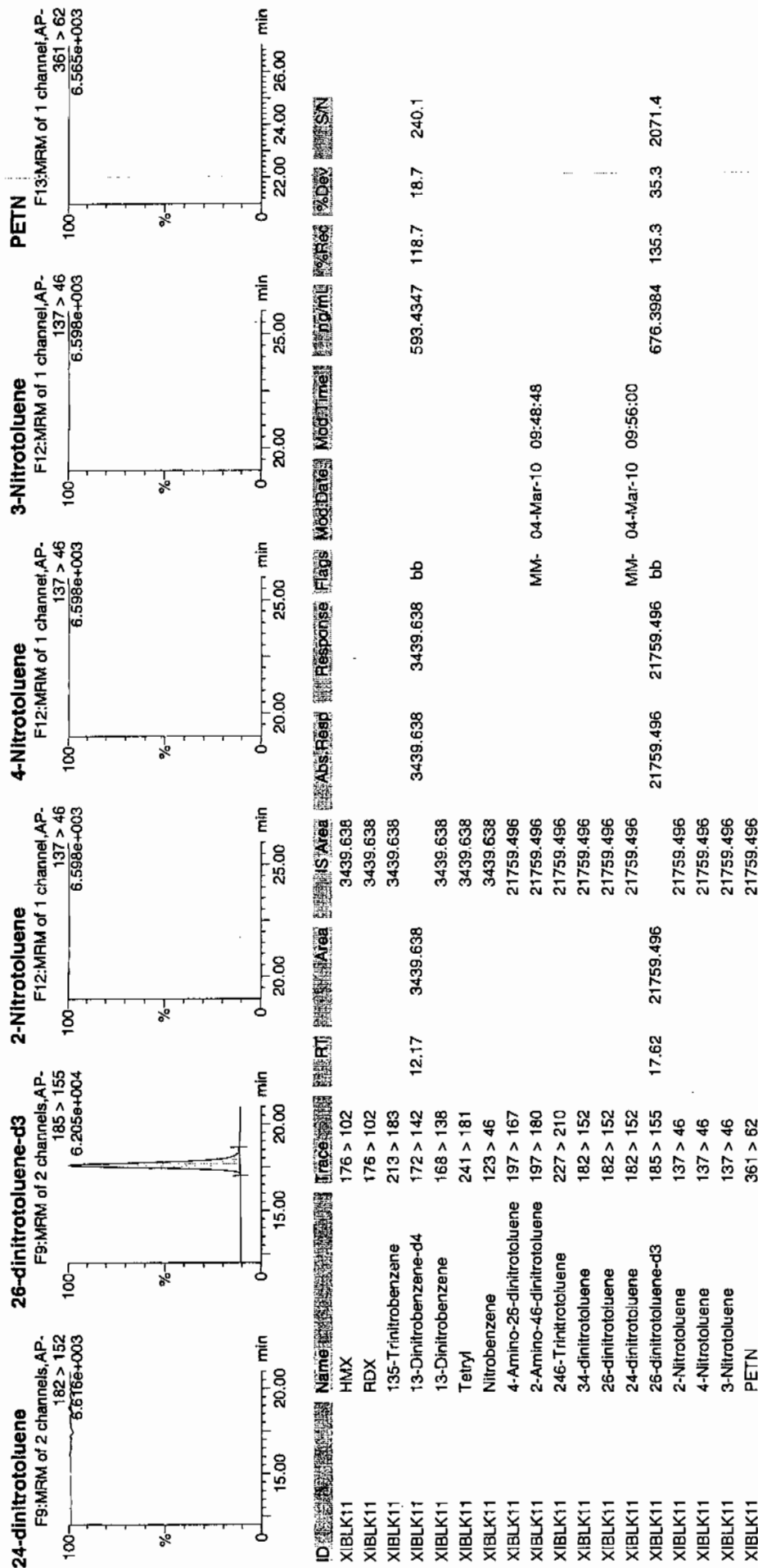


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 04 09:56:46 2010, Page 20 of 81

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 03-MAR-10 14:53

GEL Data File: EXP0301097a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
HMX	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	626.501
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	660.044
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0

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Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0301097a

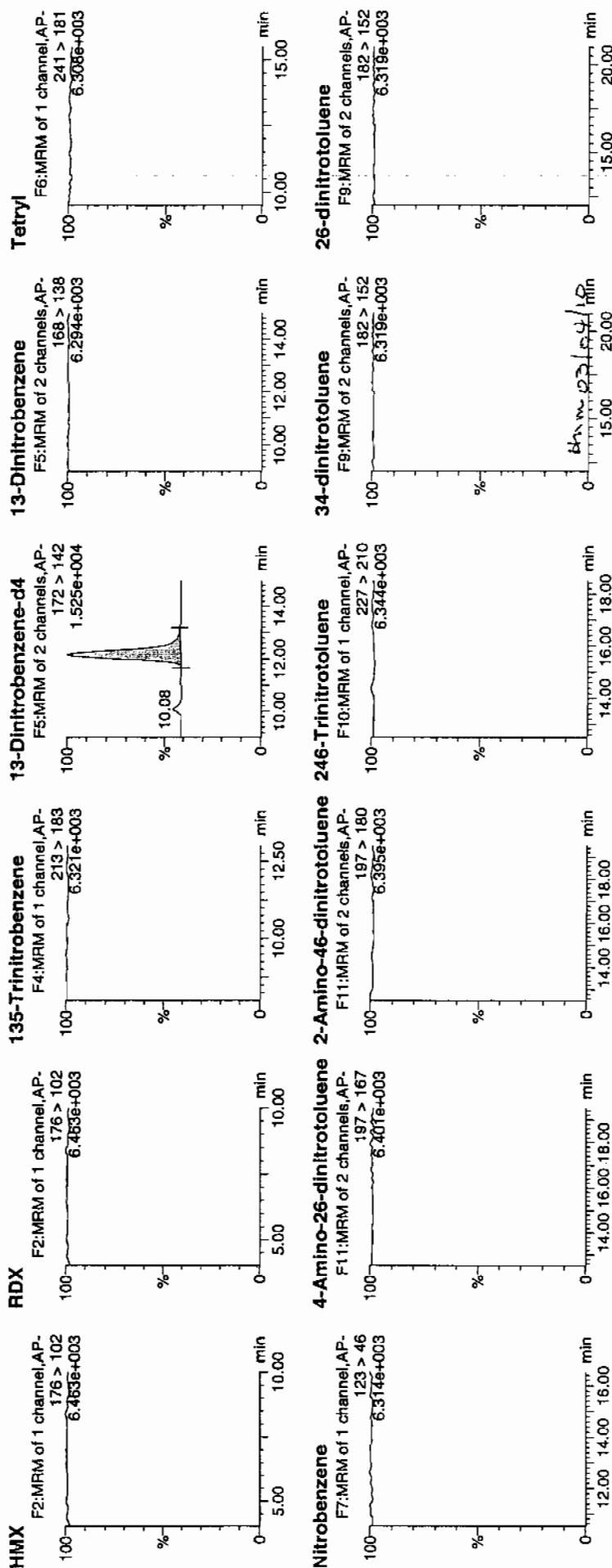
Date: 03-Mar-2010

Time: 14:53:21

ID: XIBLK12

Vial: 1:1,A

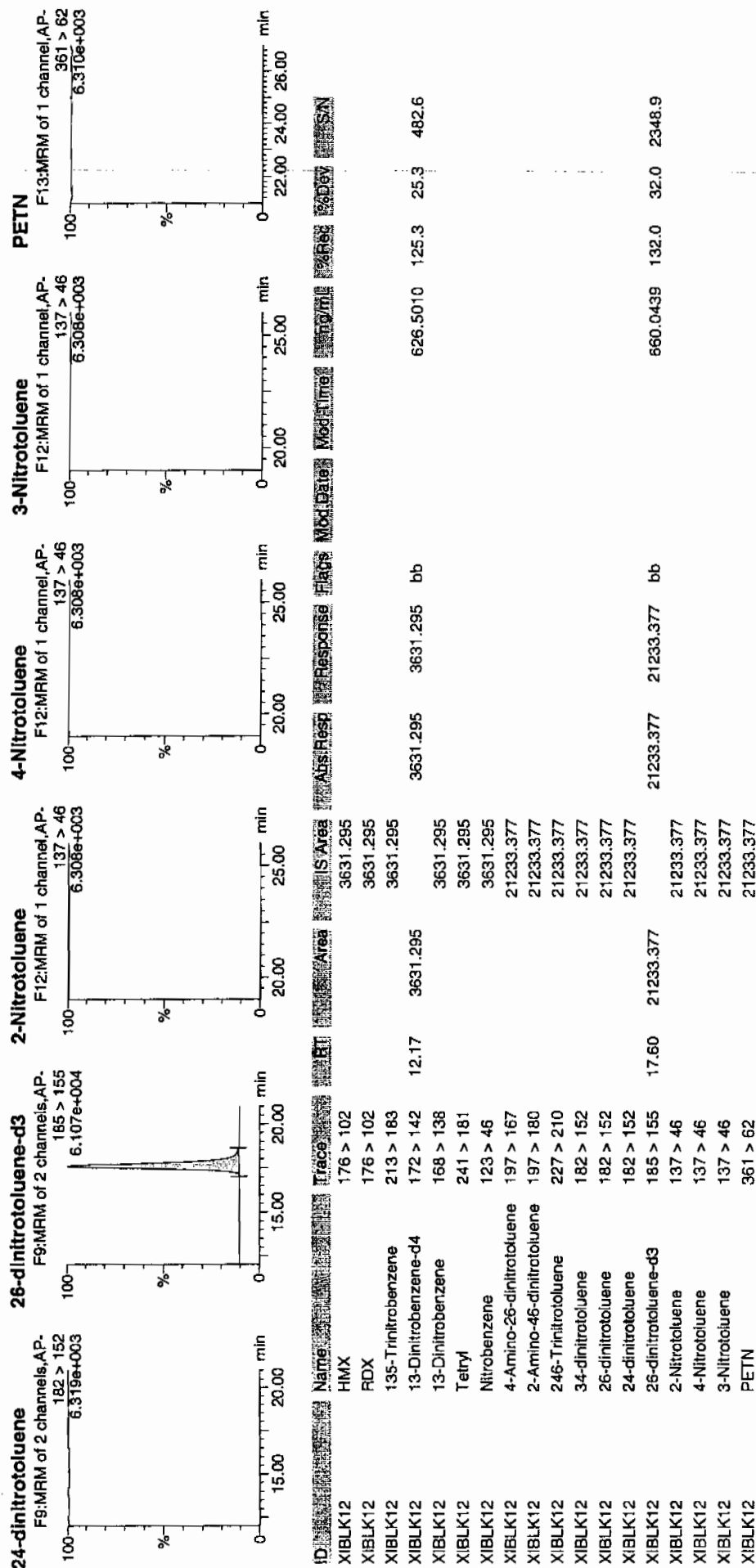
3/4/10
3/4/10



Printed: Thu Mar 04 09:56:46 2010, Page 28 of 81

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 03-MAR-10 19:48

GEL Data File: EXP0301107a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	592.73
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	616.274
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301107a

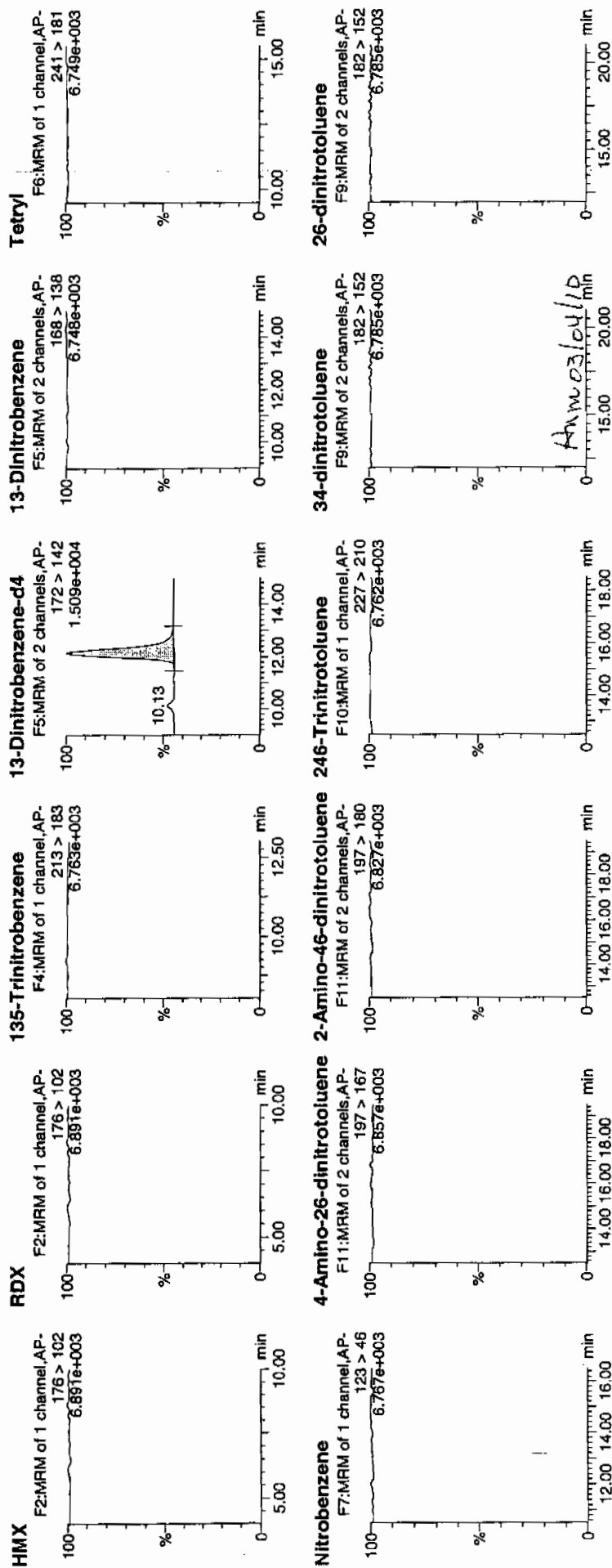
Date: 03-Mar-2010

Time: 19:48:30

ID: XIBLK13

Vial: 1:1,A

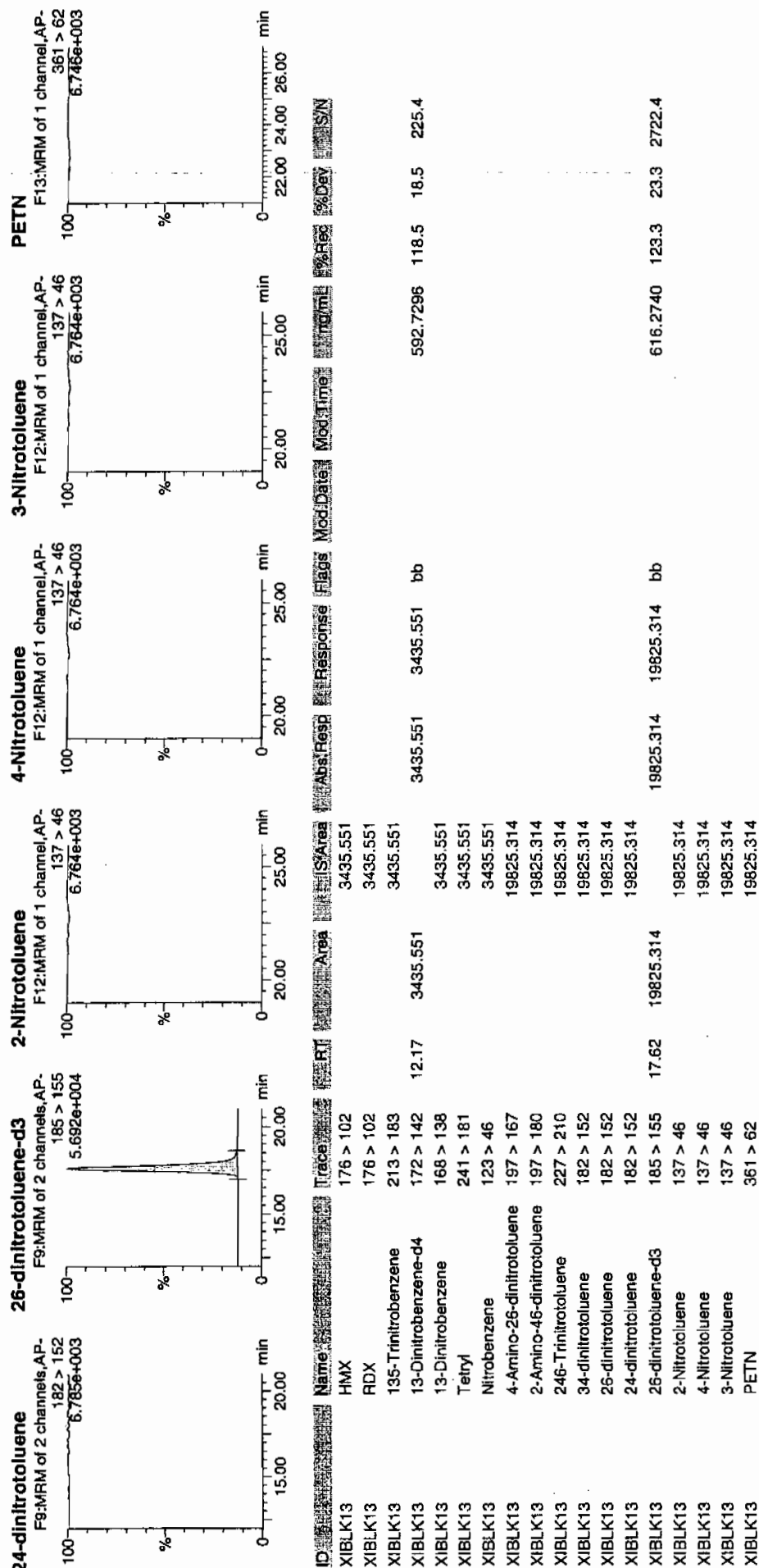
WAT
3/4/10



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Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 03-MAR-10 20:47

GEL Data File: EXP0301109a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	559.252
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	578.588
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301109a

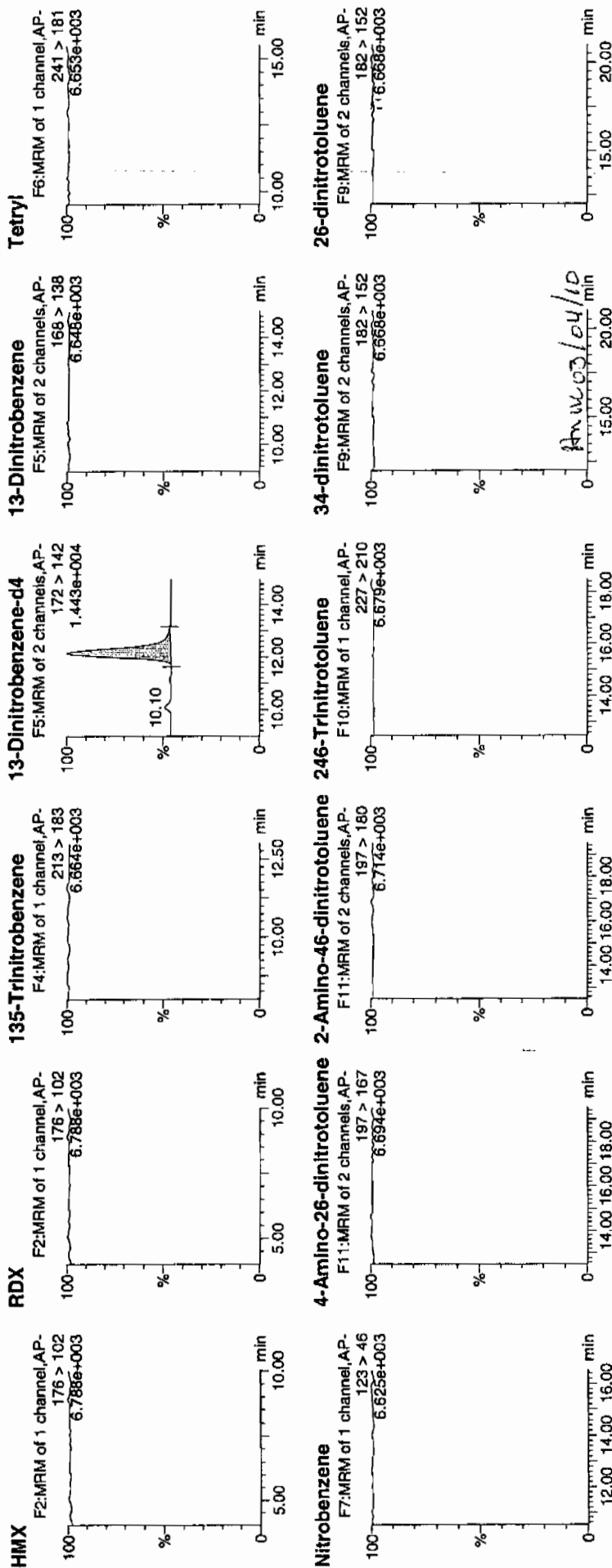
Date: 03-Mar-2010

Time: 20:47:27

ID: XIBLK14

Vial: 1:1,A

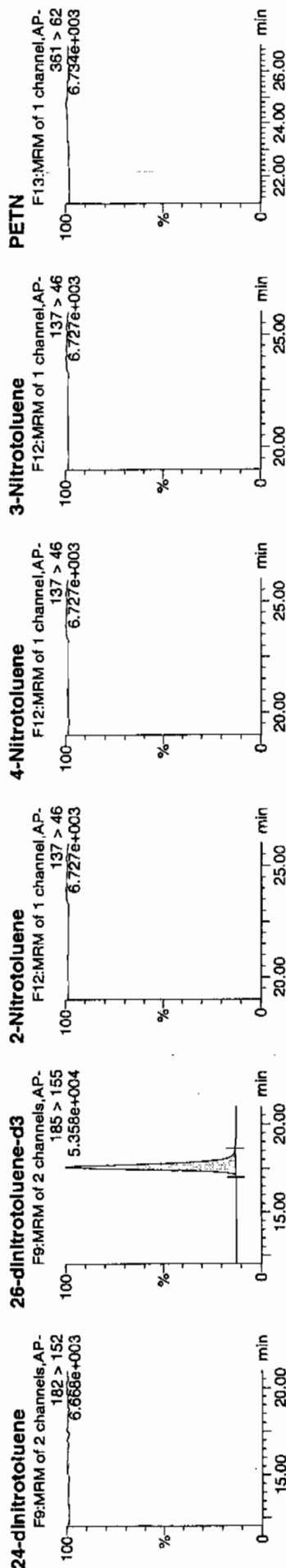
11/17
3/4/10



Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

[illegible]

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 22-FEB-10 19:23

GEL Data File: EXS02220010.wiff

Instrument ID: LCMSMS

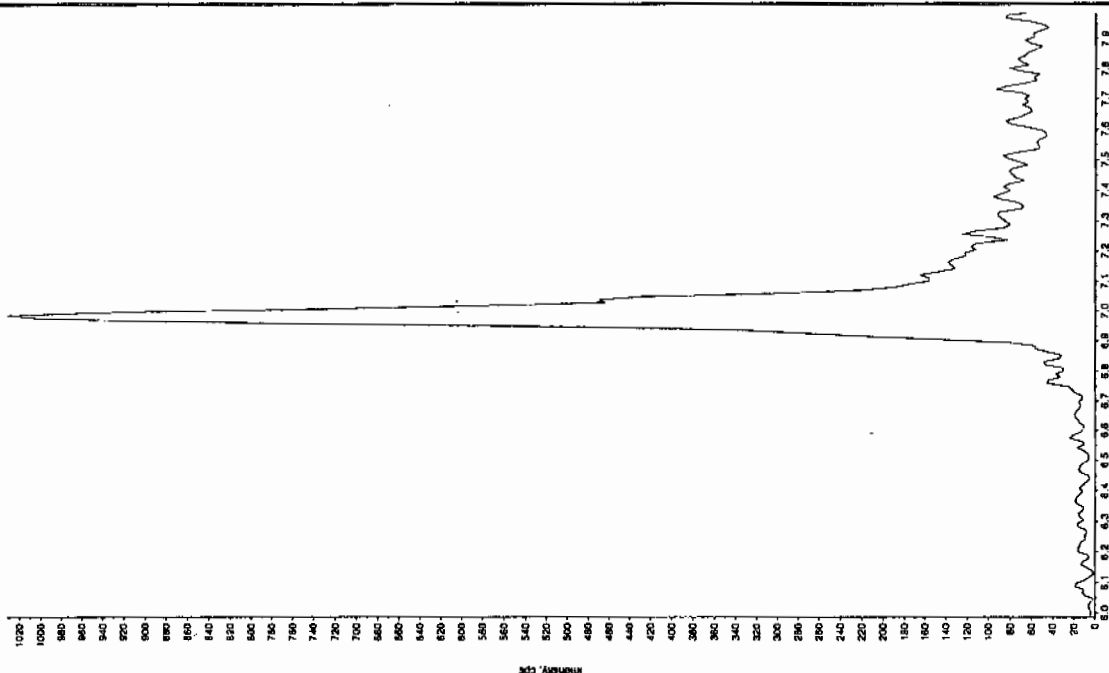
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	1.35
tris(o-cresyl) phosphate	0	10.7
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 2/23/10

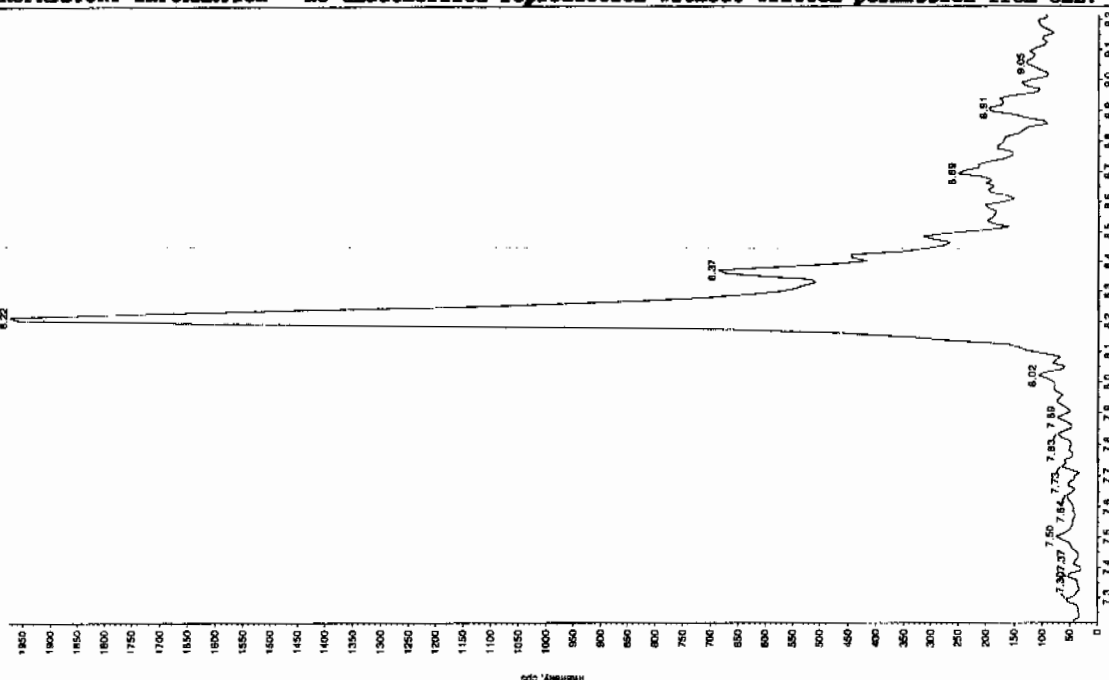
Sample Name: "YIELK02" Sample ID: "YIELK02" File: "EXS02220010.wif"
 Peak Name: "TATB" Mass(es): "257.2204.8 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:23:15 PM
 Modified: No



Sample Name: "YIELK02" Sample ID: "YIELK02" File: "EXS02220010.wif"
 Peak Name: "35-Dichloroaniline" Mass(es): "182.0450 amu"
 Comment: "LCMSEXP_B" Annotation: ""

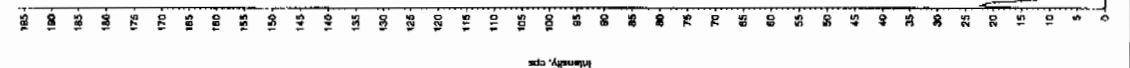
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:23:15 PM
 Modified: No



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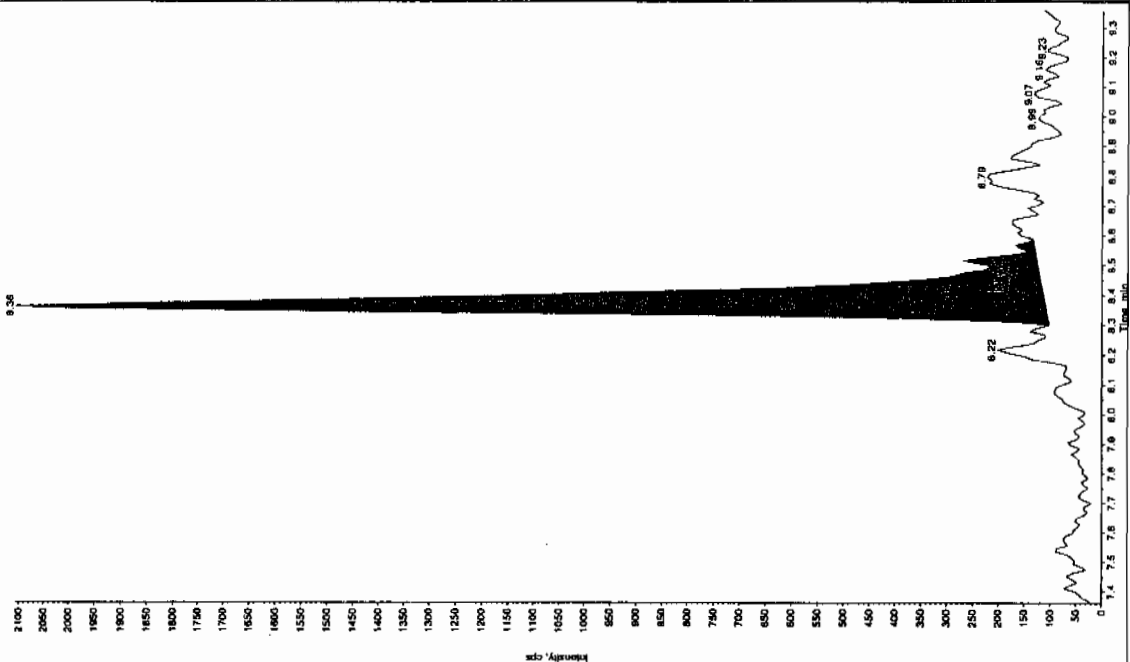
Sample Name: "XIBLK02" Sample ID: "TILLER" File: "EX502220010.wif"
 Peak Name: "26-Diantho-4-nitrodiene" Mass(es): "186.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:23:15 PM
 Modified: No



Sample Name: "XIBLK02" Sample ID: "TILLER" File: "EX502220010.wif"
 Peak Name: "34-Dinitrodiene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

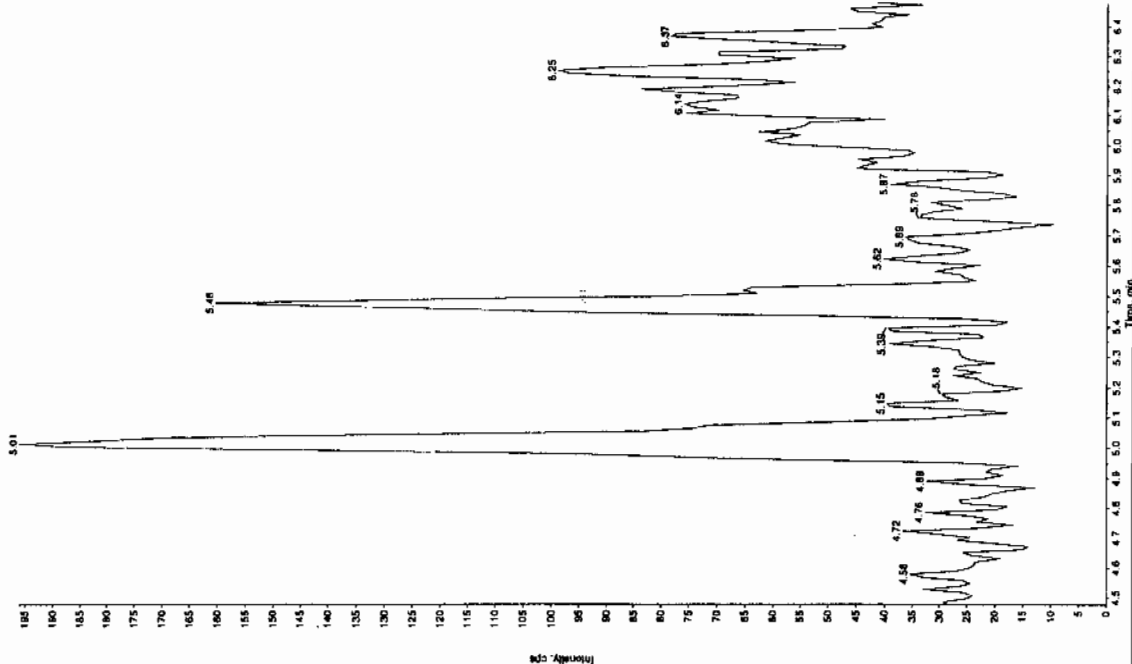
Sample Index: 1
 Sample Type: Unknown
 Concentration: 1.35 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:23:15 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1400.00 cps
 Min. Peak Width: 3.00 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.36 min
 Area: 9.14e-003 counts
 Height: 1997.357 cps
 Start Time: 8.30 min
 End Time: 8.59 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

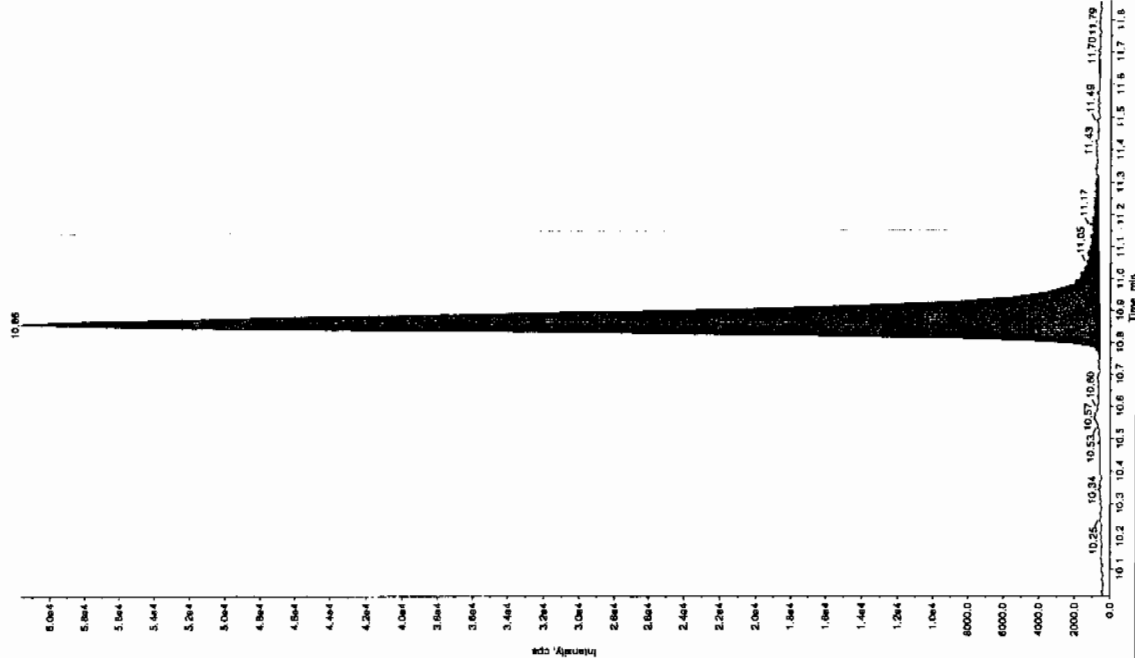
Sample Name: "XIBU02" Sample ID: "11111" File: "EX502220010.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:23:15 PM
 Modified: No



Sample Name: "XIBU02" Sample ID: "11111" File: "EX502220010.wif"
 Peak Name: "tris(cis-9) phosphat" Mass(es): "359.191.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 10.7 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:23:15 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 Resolution: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 2.72e+035 counts
 Height: 61036.366 cps
 Start Time: 10.8 min
 End Time: 11.3 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 22-FEB-10 19:54

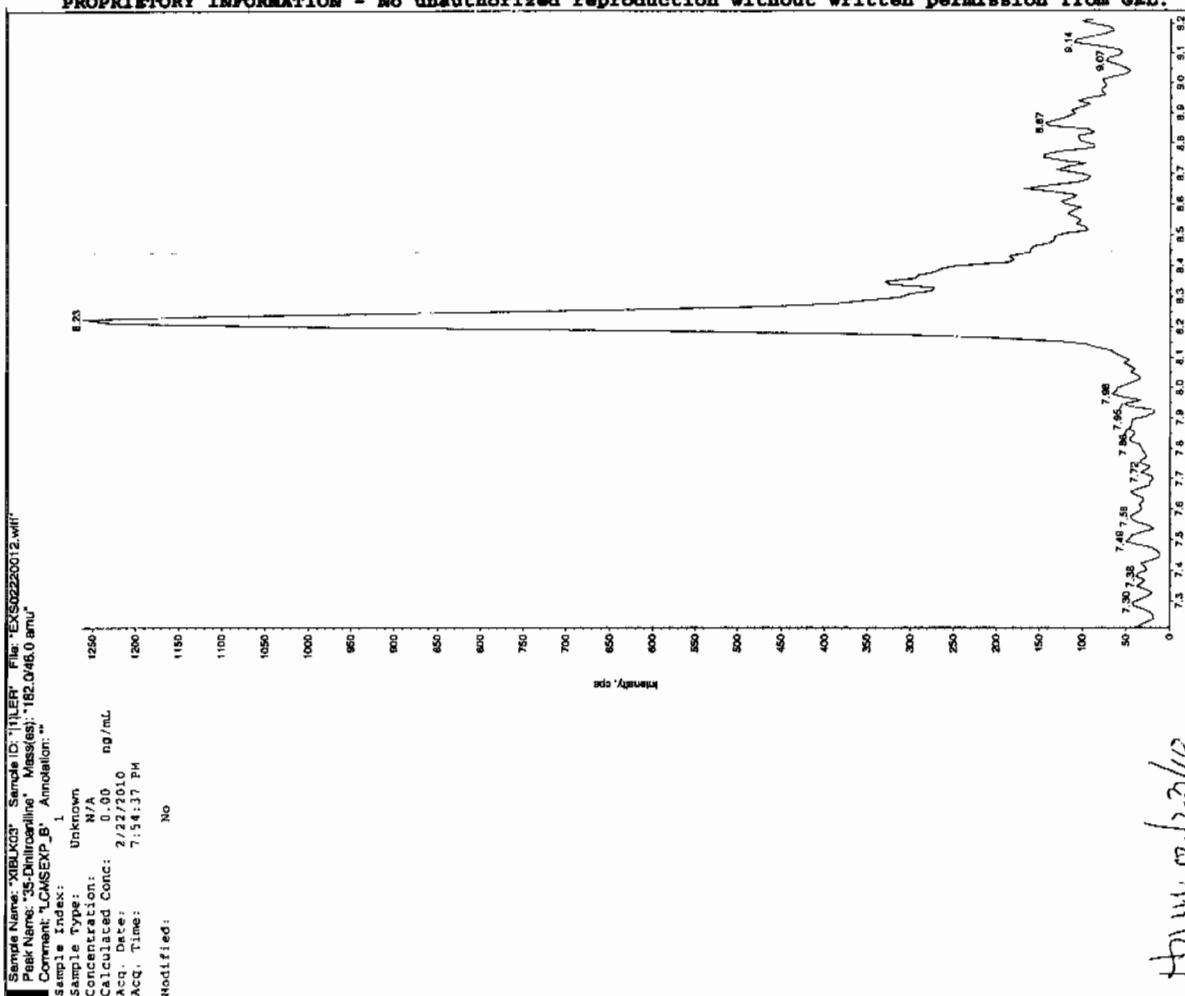
GEL Data File: EXS02220012.wiff

Instrument ID: LCMSMS

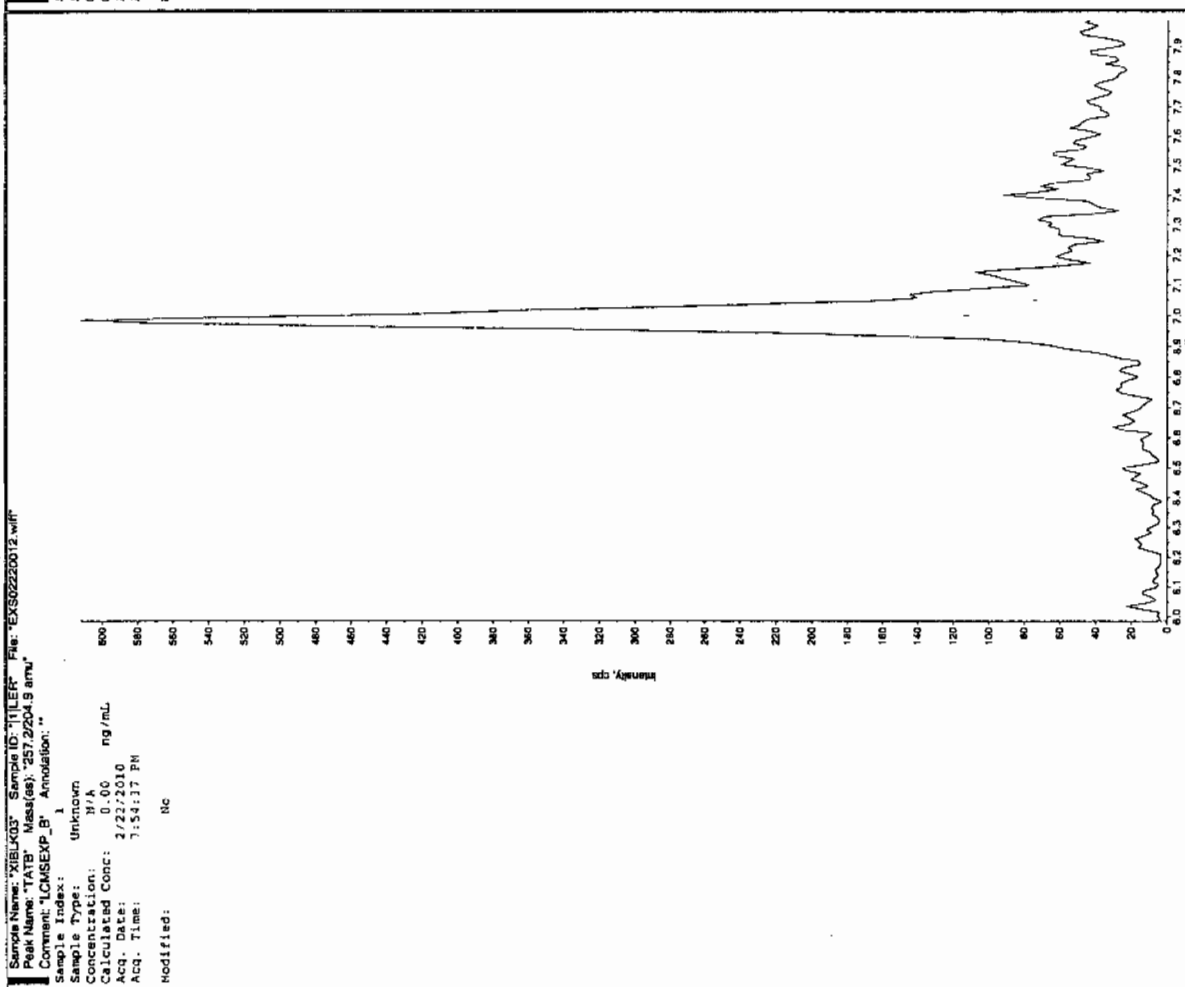
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	7.18
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/23/10



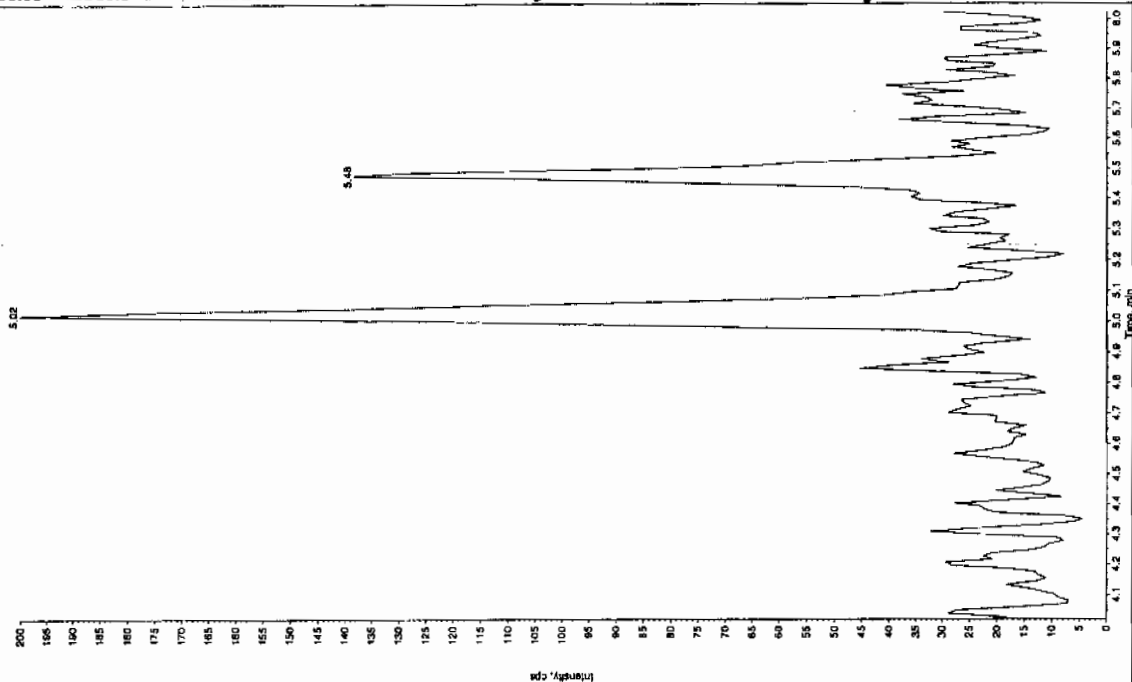
See 2/23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

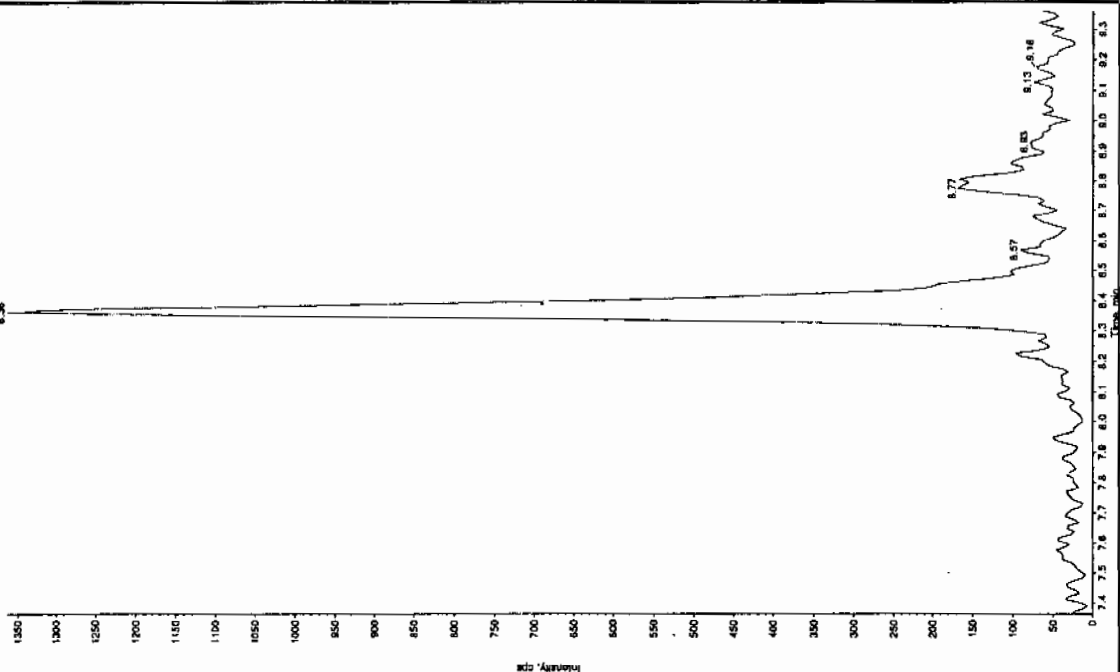
Sample Name: 'XBLK03' Sample ID: 'TILER' File: 'EX50220012.wit'
 Peak Name: '26-Oxamino-4-nitrofluorene' Mass(es): '166.046.0 amu'
 Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:54:37 PM
 Modified: No



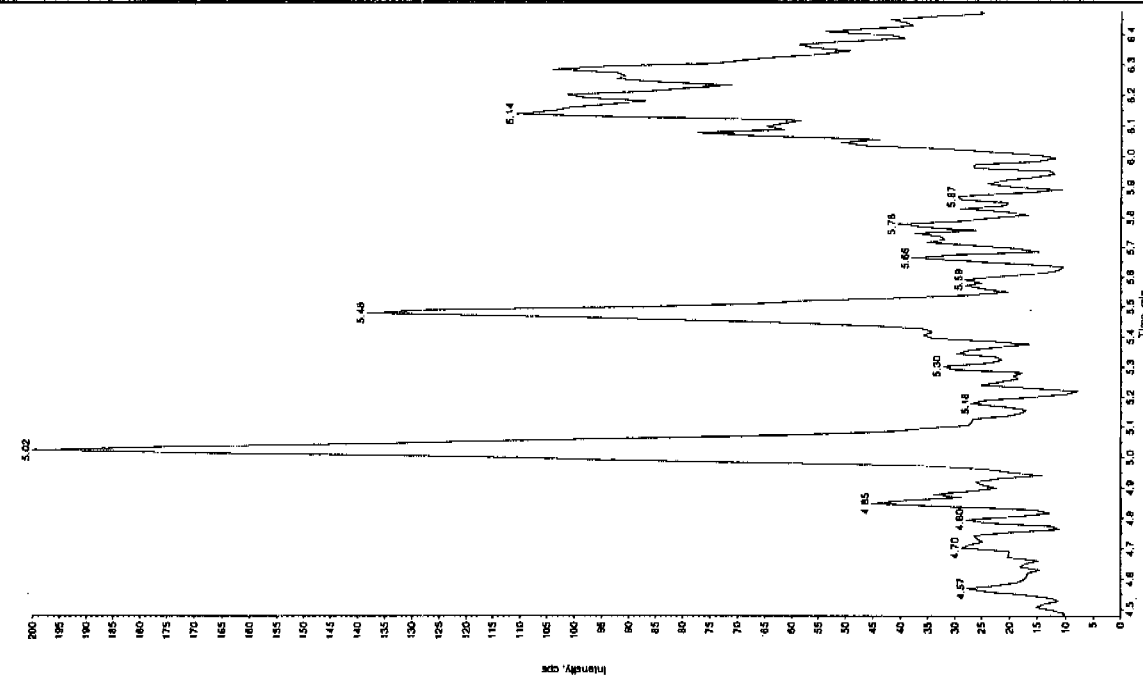
Sample Name: 'XBLK03' Sample ID: 'TILER' File: 'EX50220012.wit'
 Peak Name: '34-Dinitrofluorene' Mass(es): '182.1751.9 amu'
 Comment: 'LCMSEXP_B' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:54:37 PM
 Modified: No



Sample Name: "XIBUK03" Sample ID: "JILER" File: "EXS02220012.wif"
 Peak Name: "24-Oxobutanoic acid" Mass(es): "166.046.0 amu"
 Comment: "LCMSXP_B" Annotation: ""

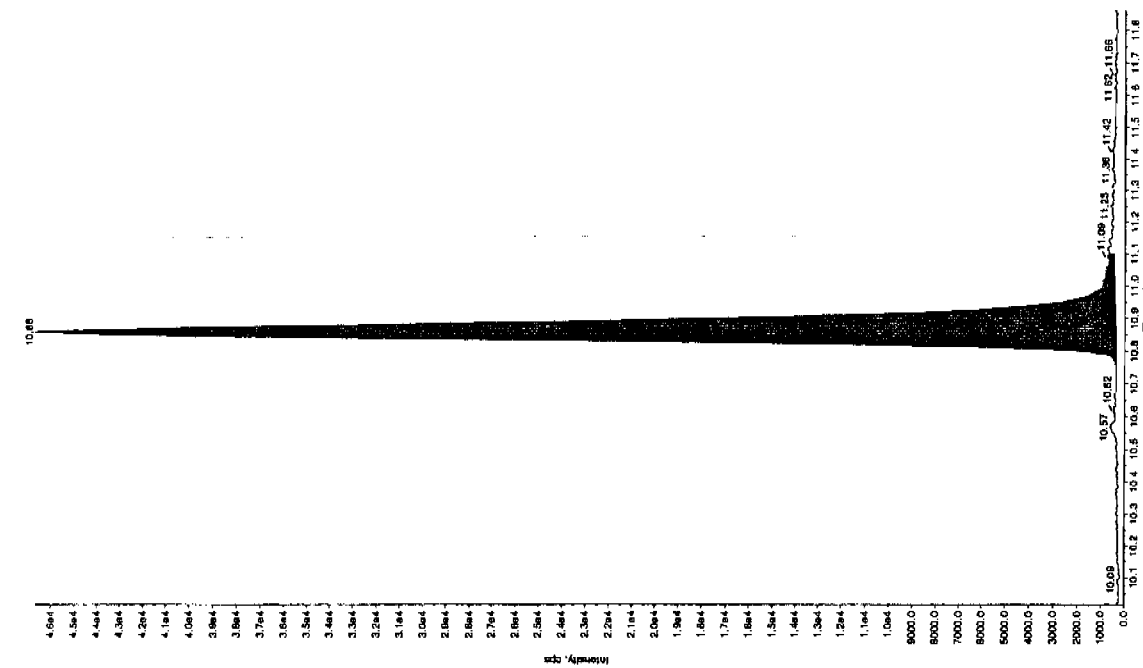
Sample Index: 1
 Sample Type: Unknown
 Concentrated Conc: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:54:37 PM
 Modified: No



Sample Name: "XIBUK03" Sample ID: "JILER" File: "EXS02220012.wif"
 Peak Name: "tris(trimethylsilyl) phosphite" Mass(es): "368.1910 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentrated Conc: 7.18 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 7:54:37 PM
 Modified: No

Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Resolution: 1.97e+005
 Height: 46330.444
 Start Time: 10.7 min
 End Time: 11.1 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 22-FEB-10 21:13

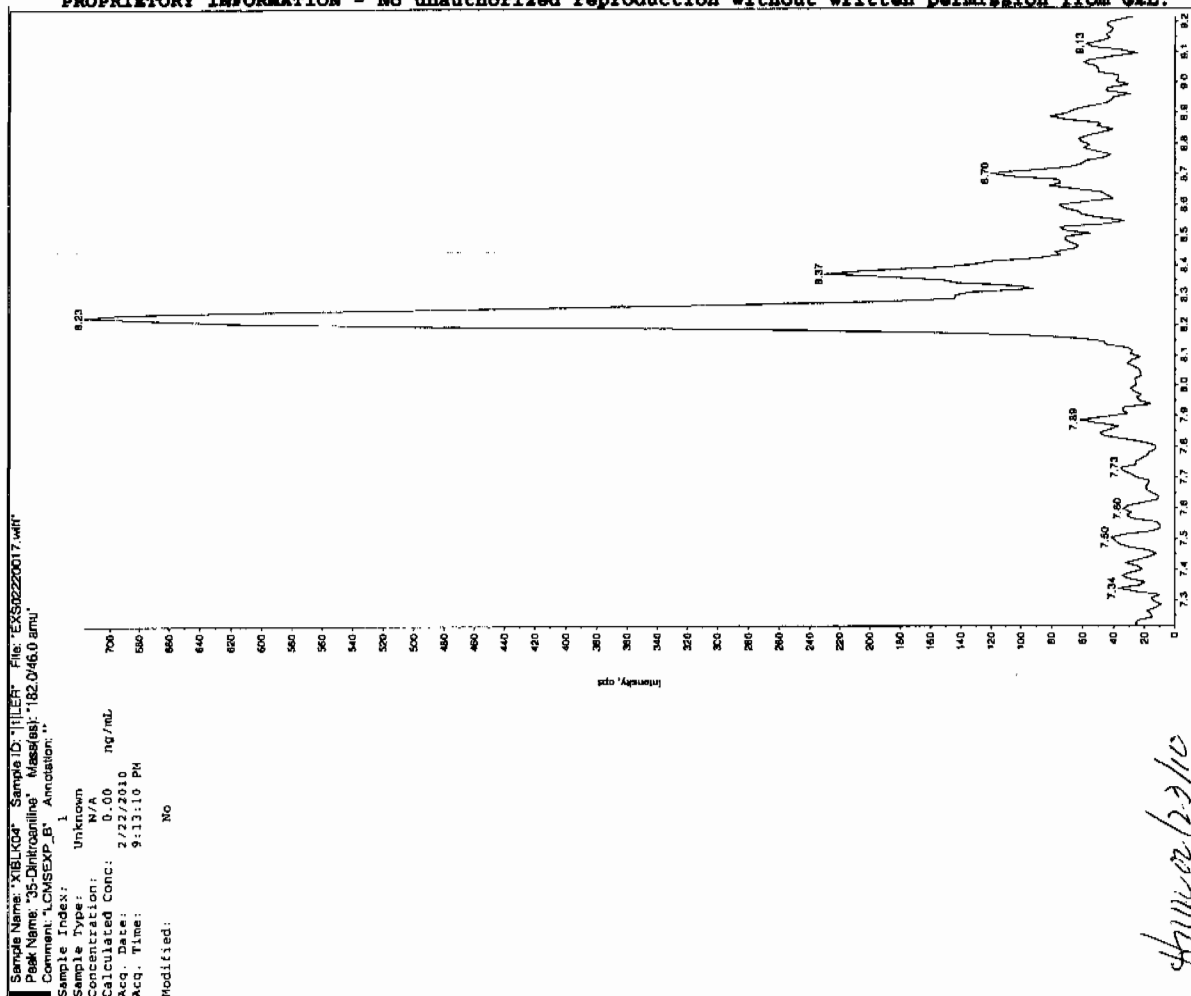
GEL Data File: EXS02220017.wiff

Instrument ID: LCMSMS

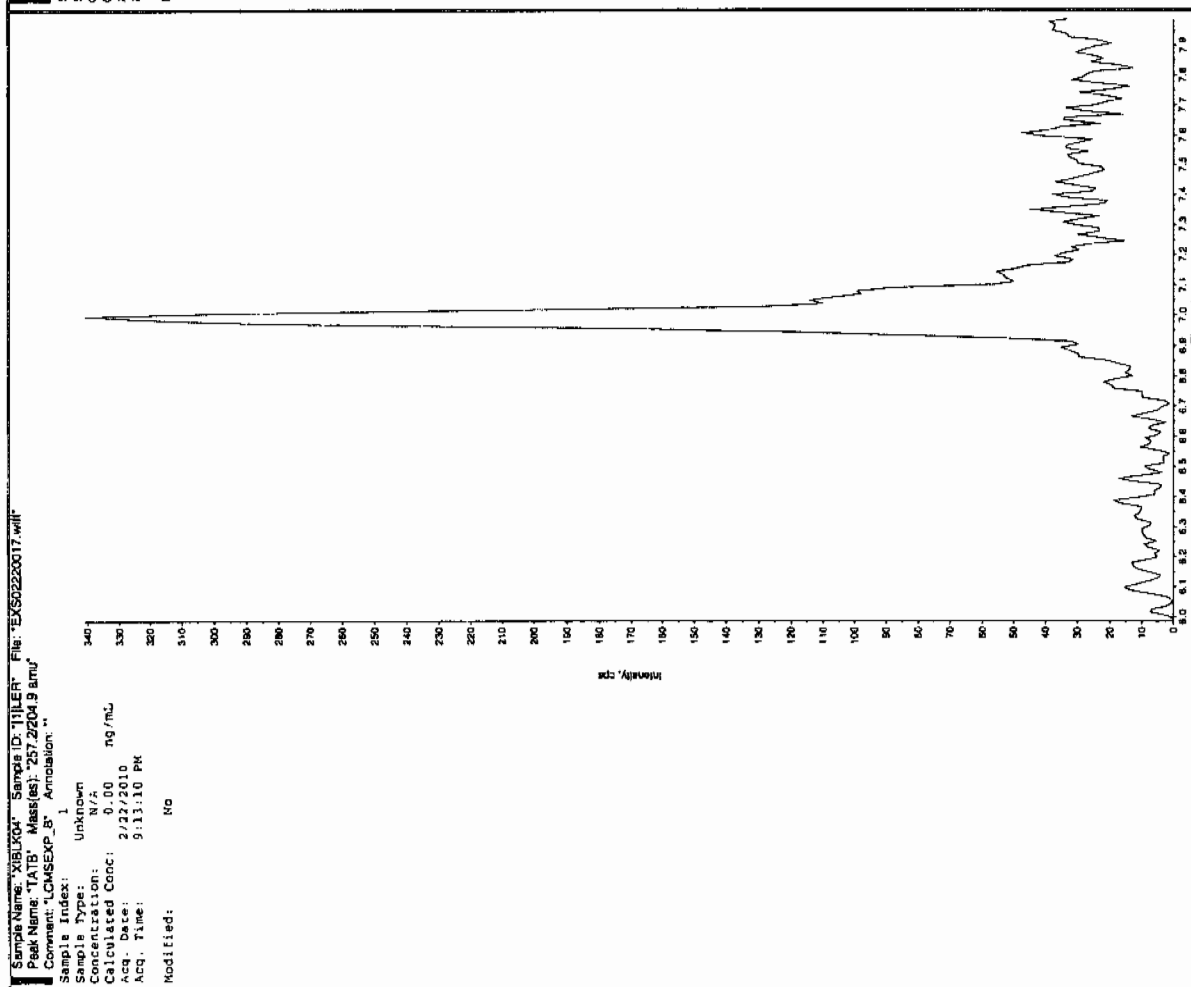
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	1.15
tris(o-cresyl) phosphate	0	2.53
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0

Jan 2/23/10



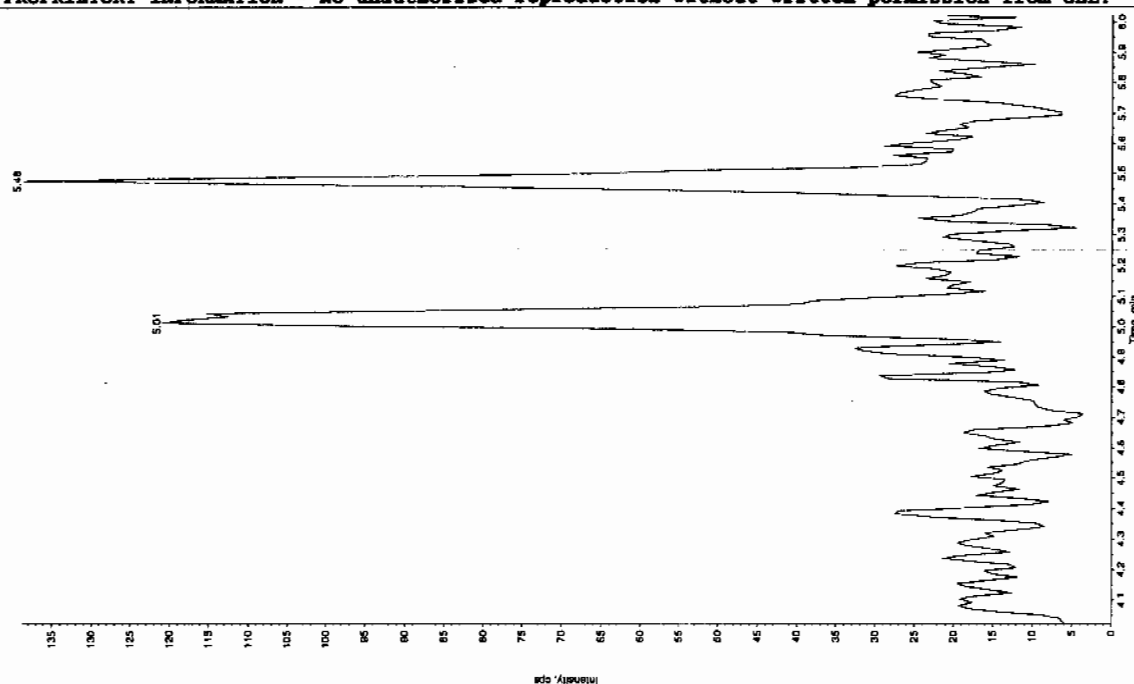
Jan 2/23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLX04" Sample ID: "J11ER" File: "EX502220017.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "165.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

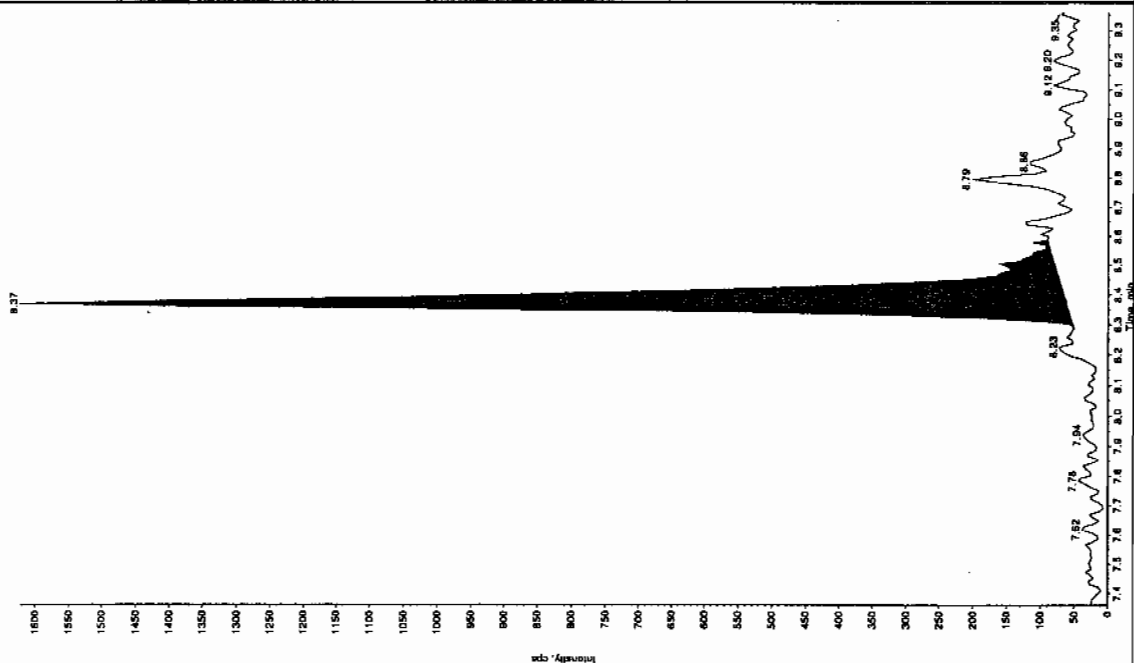
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 9:13:10 PM
 Modified: No



Sample Name: "XIBLX04" Sample ID: "J11ER" File: "EX502220017.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1751.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 1.15 ng/mL
 Calculated Conc: 1.15 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 9:13:10 PM
 Modified: No

Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 3.00 points
 RT Minus: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 6.37e+003 counts
 Height: 1560.241 cps
 Start Time: 8.29 min
 End Time: 8.59 min



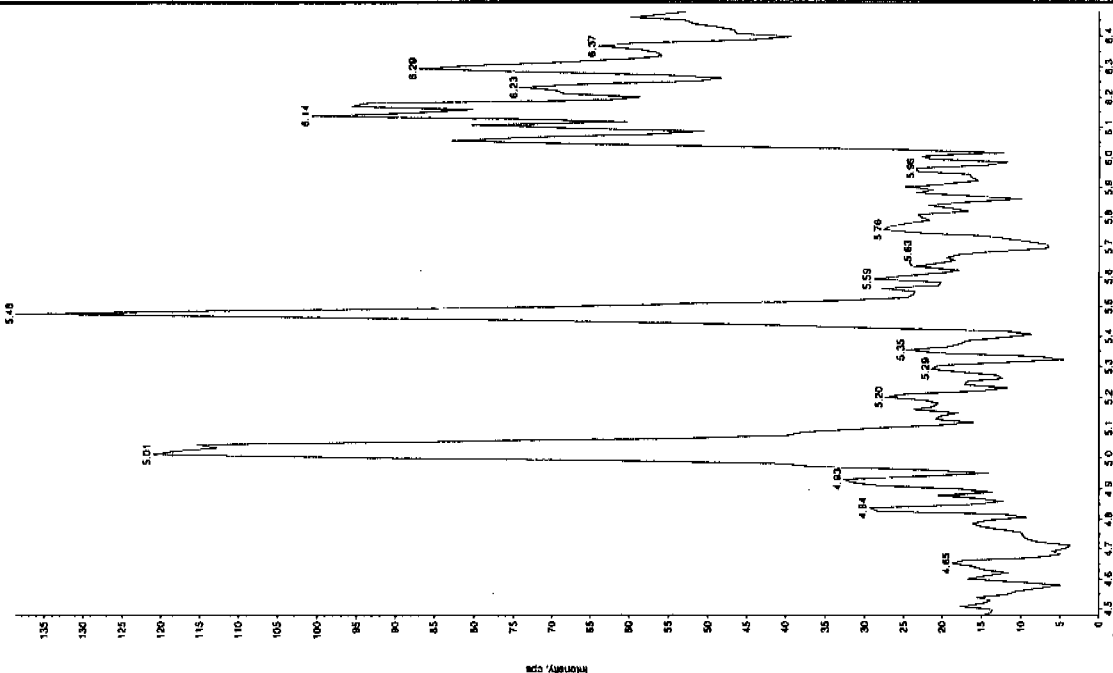
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK04" Sample ID: "TILER" File: "EX50220017.wht"
 Peak Name: "tris(2-oxo-5-nitrophenyl) phosphite" Mass(es): "359.1791.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2.53 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 9:13:10 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 10.9 min
 Area: 9.75e+0081 counts
 Height: 23541891 cps
 Start Time: 10.8 min
 End Time: 11.0 min



Sample Name: "XIBLK04" Sample ID: "TILER" File: "EX50220017.wht"
 Peak Name: "24-Diamino-6-nitrocouline" Mass(es): "156.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 2.53 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 9:13:10 PM

Modified: No

Int. Type: Valley
 Retention Time: 10.9 min
 Area: 9.75e+0081 counts
 Height: 23541891 cps
 Start Time: 10.8 min
 End Time: 11.0 min

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 22-FEB-10 23:19

GEL Data File: EXS02220025.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	4.52
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

San 2/23/10

Sample Name: "XIBU05" Sample ID: "J11ER" File: "EXS0220025.wif"

Peak Name: "TATB" Mass(es): "237.204.9 amu"

Comment: "LCMSXP_B" Annotation: "

Sample Index: 1

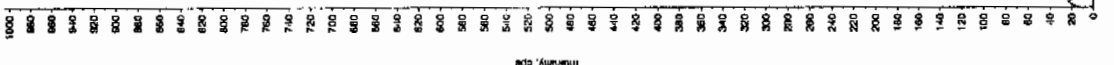
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 2/22/2010

Acq. Time: 11:19:04 PM

Modified: No



San 2/23/10

Sample Name: "XIBU05" Sample ID: "J11ER" File: "EXS0220025.wif"

Peak Name: "TATB" Mass(es): "237.204.9 amu"

Comment: "LCMSXP_B" Annotation: "

Sample Index: 1

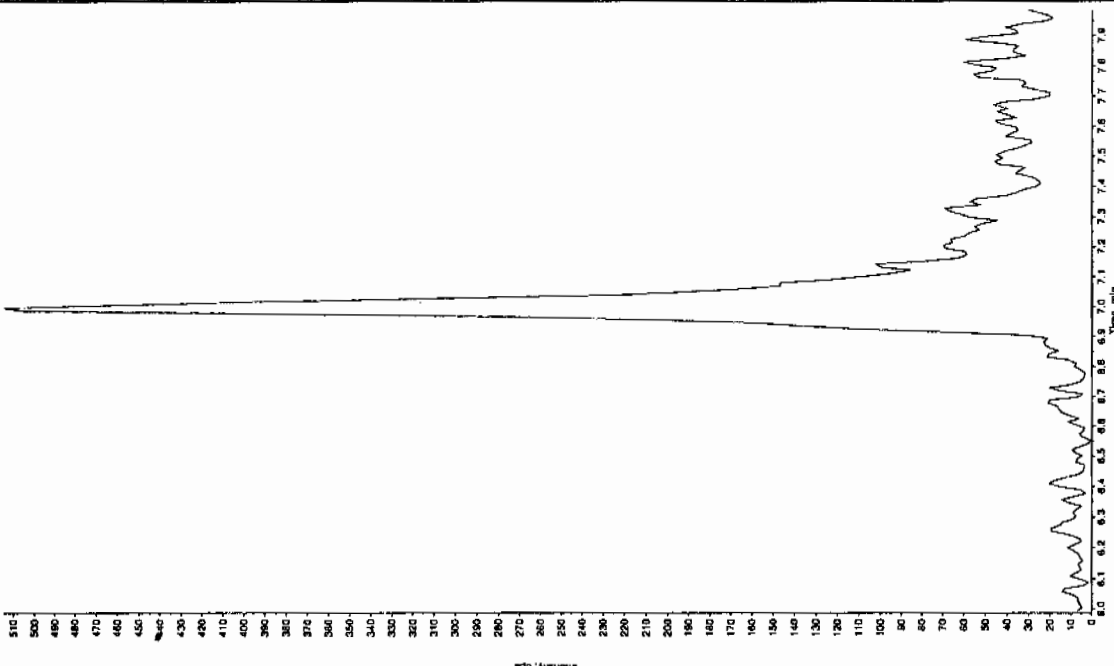
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 2/22/2010

Acq. Time: 11:19:04 PM

Modified: No

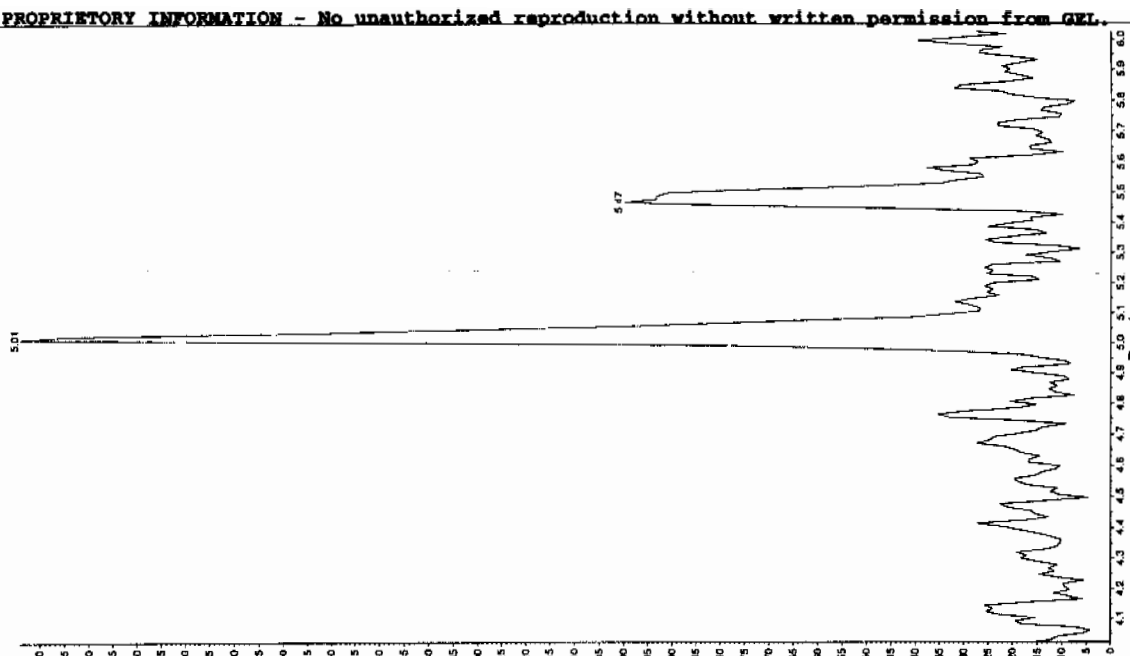


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLK05" Sample ID: "111ER" File: "EXS0220025.wif"
 Peak Name: "28-Diamino-4-nitrobenzoic" Mass(es): "166.046.0 amu"
 Comment: "LCMS-EXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/22/2010
 Acq. Date: 11:19:04 PM
 Acq. Time: 11:19:04 PM
 Modified: No

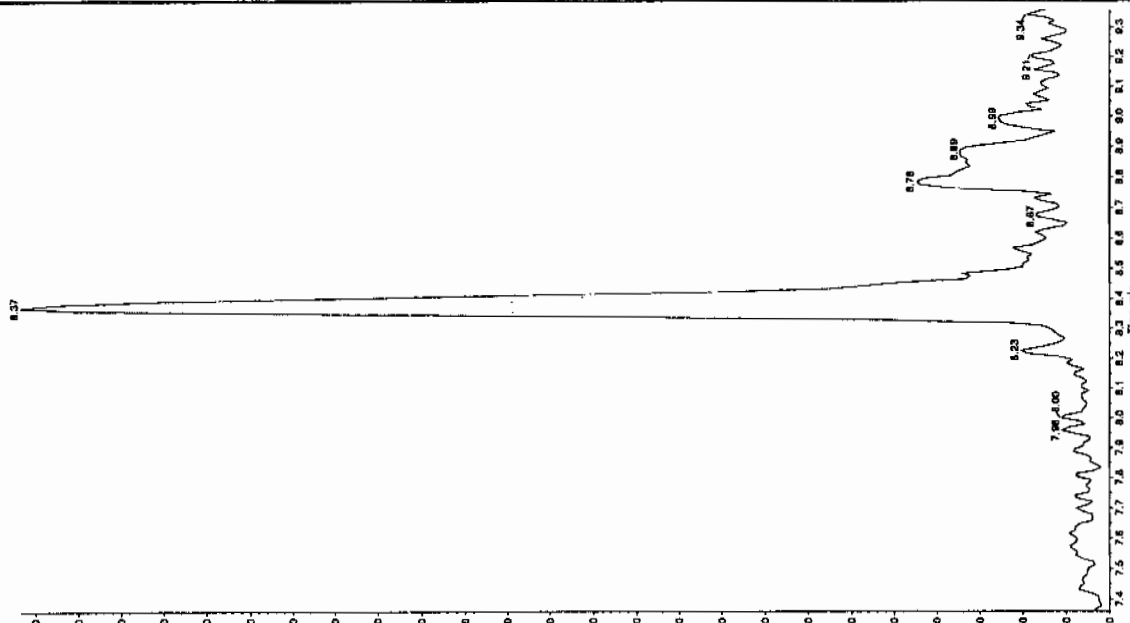
Intensity, cps



Sample Name: "XBLK05" Sample ID: "111ER" File: "EXS0220025.wif"
 Peak Name: "34-Dinitrobenzoic" Mass(es): "182.0151.9 amu"
 Comment: "LCMS-EXP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/22/2010
 Acq. Date: 11:19:04 PM
 Acq. Time: 11:19:04 PM
 Modified: No

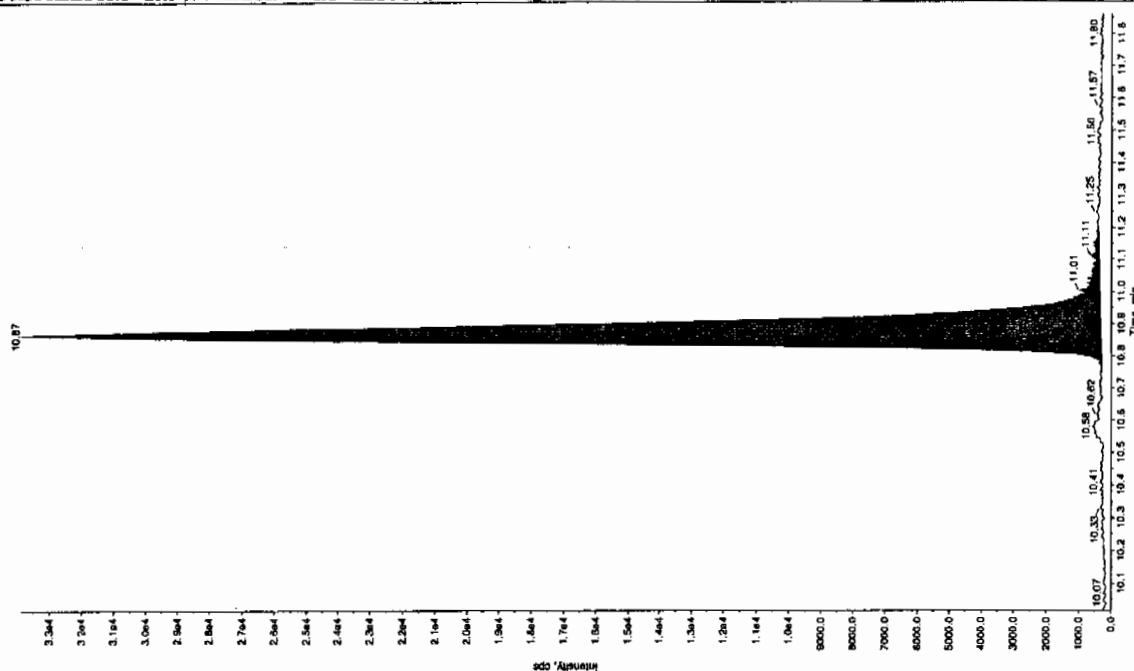
Intensity, cps



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

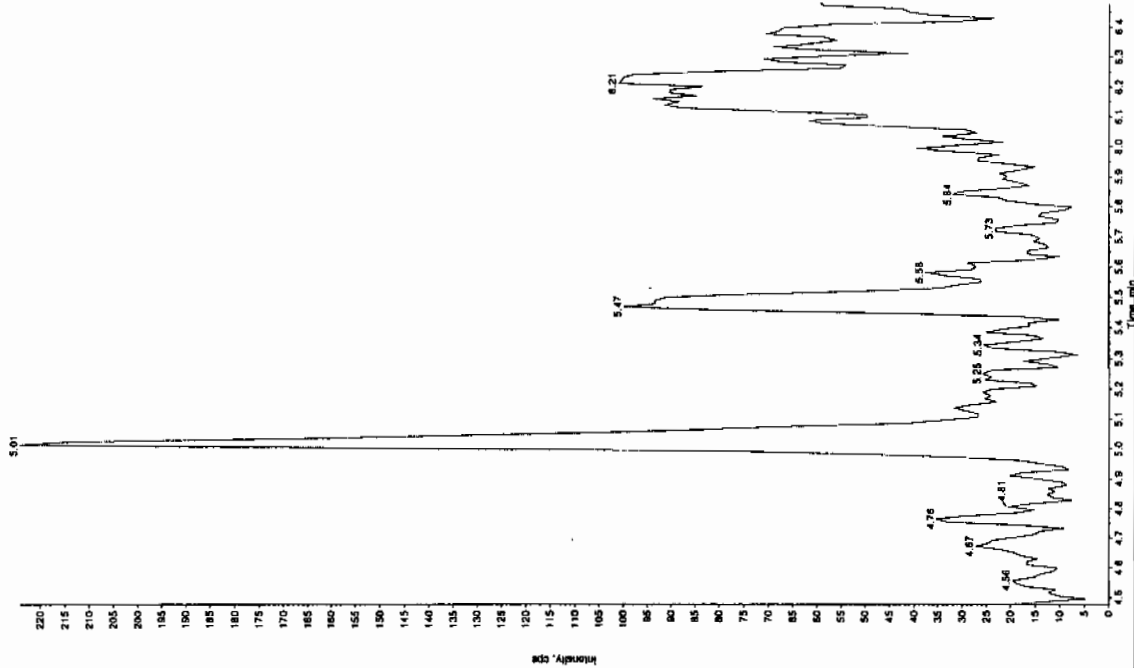
Sample Name: "XBLX05" Sample ID: "TILER" File: "EX50220025.wil"
 Peak Name: "Iris(ocraay) phosphate" Mass(es): "565.181.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 4.52 ng/mL
 Calculated Conc: 2/22/2010
 Acq. Date: 11:19:04 PM
 Acq. Time: 11:19:04 PM
 Modified: No
 Proc. Algorithm: IntellQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.40e+005 counts
 Height: 33527.149 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "XBLX05" Sample ID: "TILER" File: "EX50220025.wil"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/22/2010
 Acq. Date: 11:19:04 PM
 Acq. Time: 11:19:04 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 23-FEB-10 02:43

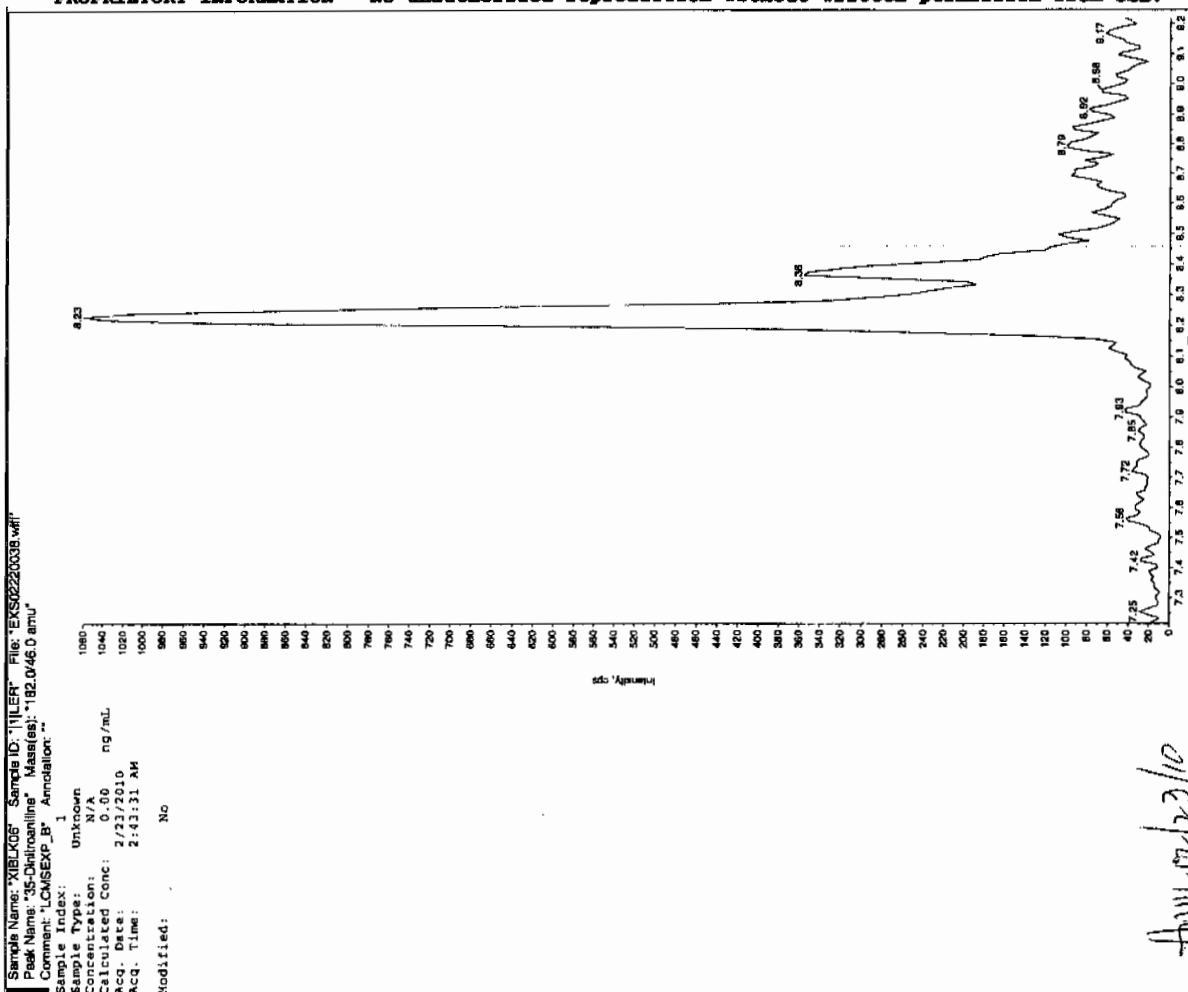
GEL Data File: EXS02220038.wiff

Instrument ID: LCMSMS

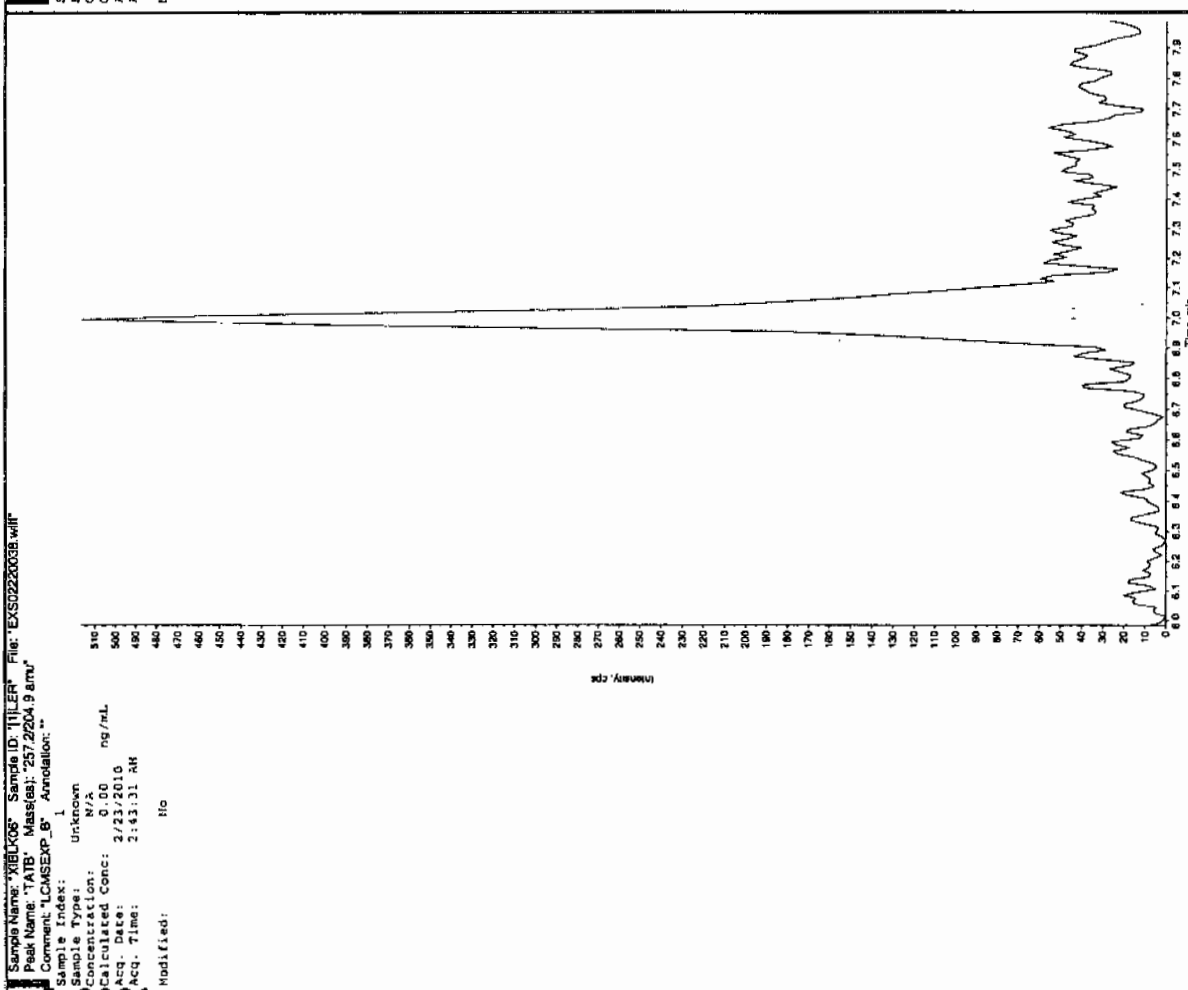
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	1.18
tris(o-cresyl) phosphate	0	4.04
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/23/10



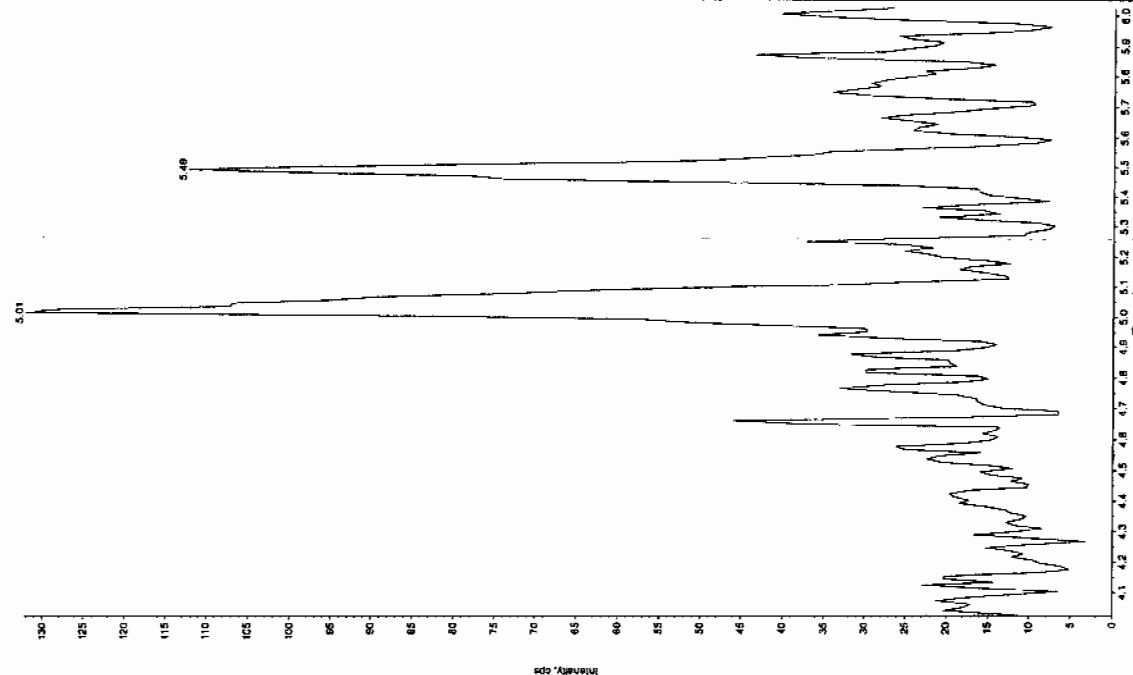
See 2/23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

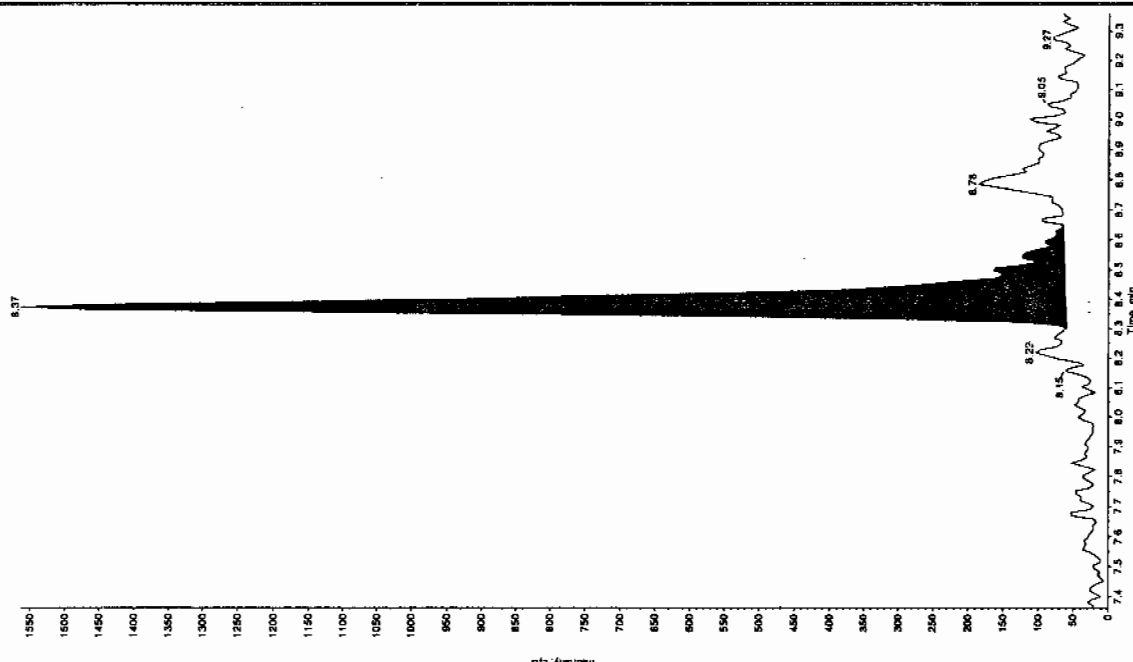
Sample Name: "XIBLX05" Sample ID: "JILFR" File: "EX502220038.wif"
 Peak Name: "26-Diantho-4-nitrofluene" Mass(es): "156.0460 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 2:43:31 AM
 Modified: No



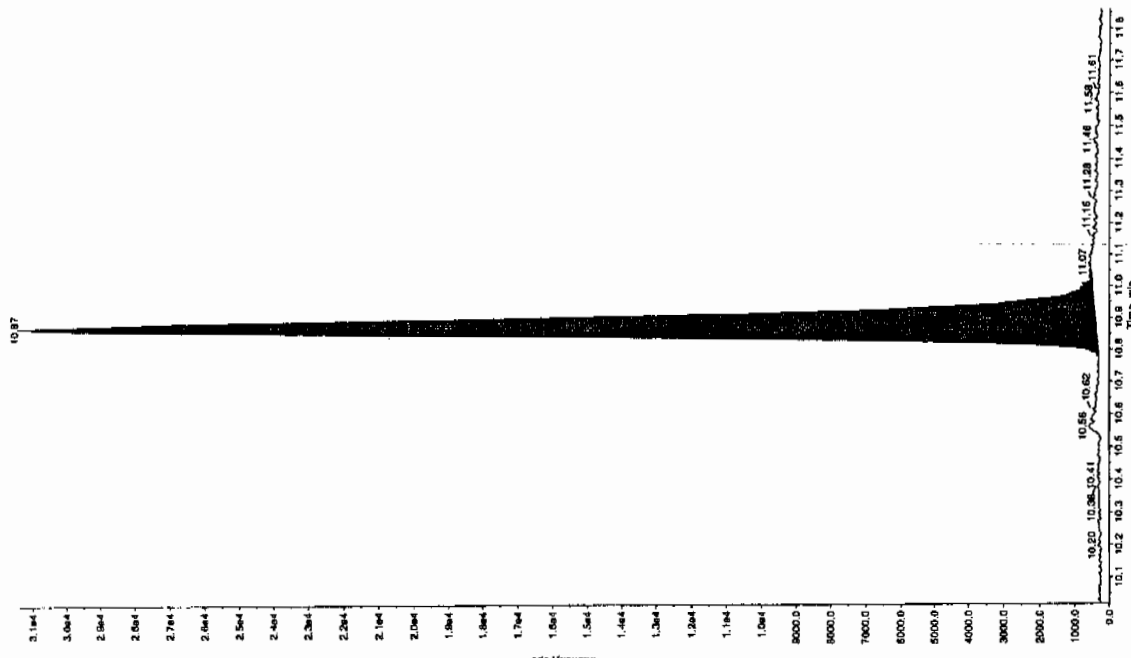
Sample Name: "XIBLX05" Sample ID: "JILFR" File: "EX502220038.wif"
 Peak Name: "34-Diantho-4-nitrofluene" Mass(es): "182.1711 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 1.18 ng/mL
 Calculated Conc: 0.00
 Acq. Date: 2/23/2010
 Acq. Time: 2:43:31 AM
 Modified: No
 Proc Algorithm: IntelliQuan - IOA
 Min. Peak Height: 160.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 6.82e+003 counts
 Height: 1502.971 cps
 Start Time: 8.30 min
 End Time: 8.45 min



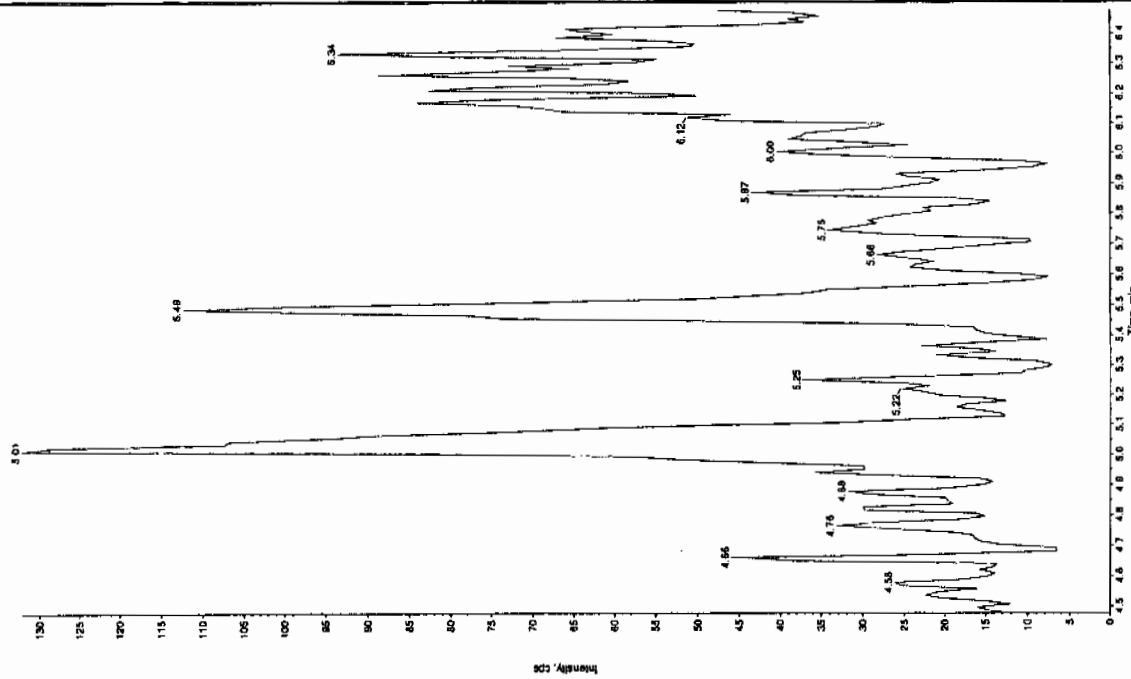
Sample Name: "XIBL006" Sample ID: "TILER" File: "EXS0220038.wif"
 Peak Name: "tris(2-oxo-5-phenyl-1,3,4-oxadiazol-5-yl) phosphite" Mass(es): "359.191.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/23/2010
 Acq. Date: 2/23/2010
 Acq. Time: 2:43:31 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 31013344 counts
 Height: 31013344 cps
 Start Time: 10.8 min
 End Time: 11.1 min



Sample Name: "XIBL006" Sample ID: "TILER" File: "EXS0220038.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/23/2010
 Acq. Date: 2/23/2010
 Acq. Time: 2:43:31 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 23-FEB-10 04:02

GEL Data File: EXS02220043.wiff

Instrument ID: LCMSMS

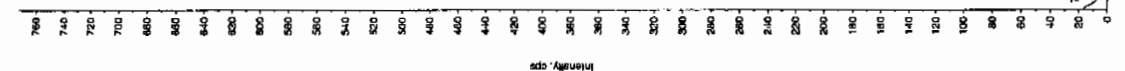
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	2.43
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jun 23/10

Sample Name: "XBL007" Sample ID: "11155" File: "EX502220043.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

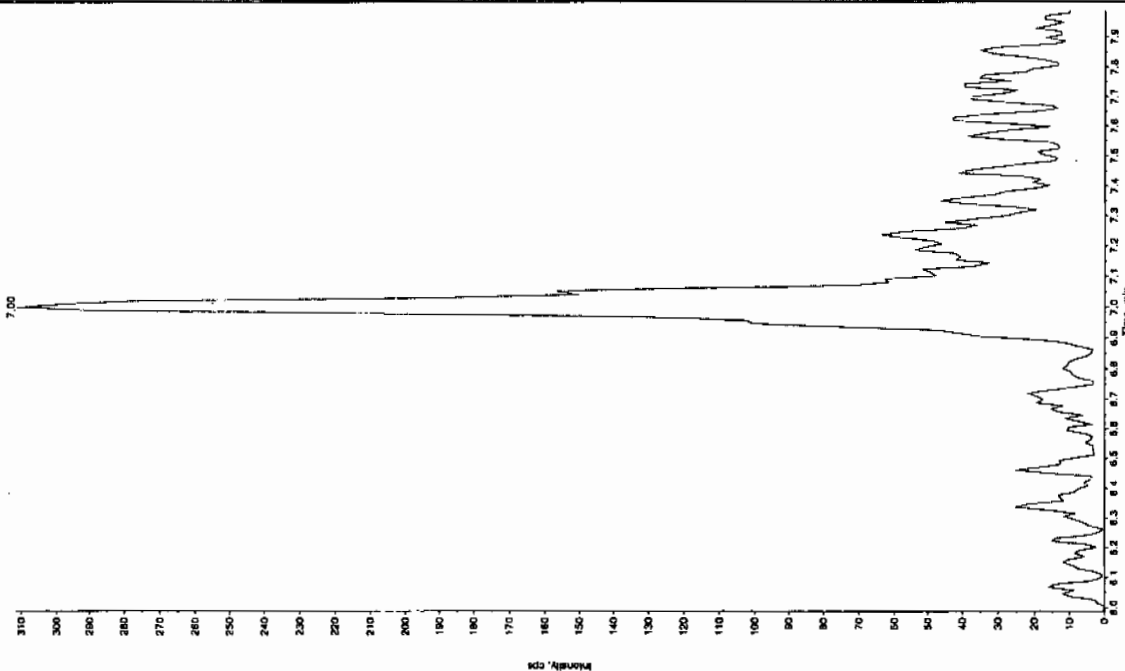
Sample Index: 1
 Sample Type: Unknown
 Concentrated: 0.00 ng/mL
 Calculated Conc: 2/23/2010
 Acq. Date: 4:02:12 AM
 Acq. Time: 4:02:12 AM
 Modified: No



Jun 23/10

Sample Name: "XBL007" Sample ID: "11155" File: "EX502220043.wif"
 Peak Name: "TAIB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

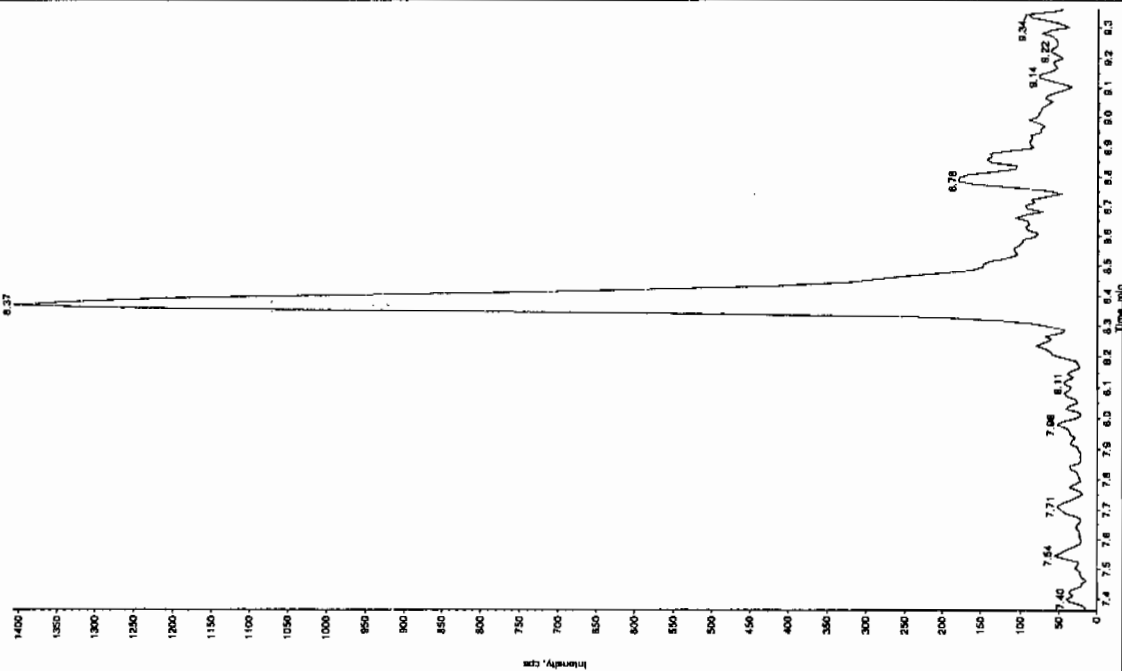
Sample Index: 1
 Sample Type: Unknown
 Concentrated: 0.00 ng/mL
 Calculated Conc: 2/23/2010
 Acq. Date: 4:02:12 AM
 Acq. Time: 4:02:12 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

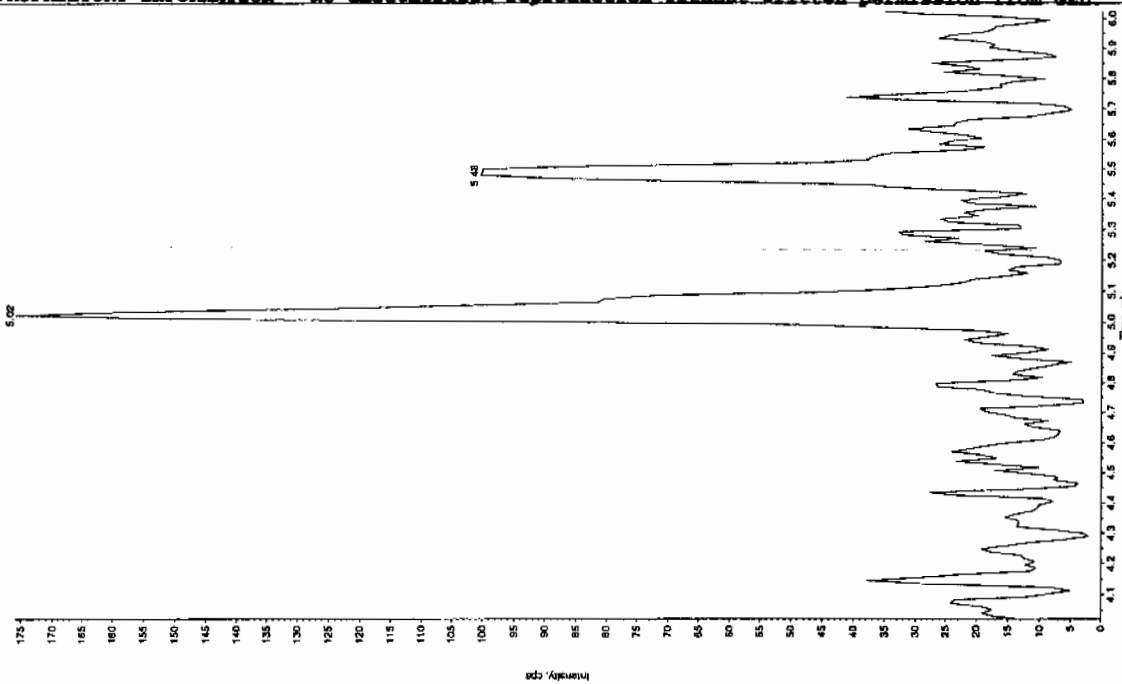
Sample Name: XBLK07 Sample ID: 111557 File: EX50222043.wif
 Peak Name: 26-Diamino-4-nitrobenzene Mass(es): 162.1151.9 amu
 Comment: LCMSEXP_B, Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/23/2010
 Acq. Date: 4:02:12 AM
 Acq. Time: 4:02:12 AM
 Modified: No



Sample Name: XBLK07 Sample ID: 111557 File: EX50222043.wif
 Peak Name: 26-Diamino-4-nitrobenzene Mass(es): 166.046.0 amu
 Comment: LCMSEXP_B, Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/23/2010
 Acq. Date: 4:02:12 AM
 Acq. Time: 4:02:12 AM
 Modified: No



Sample Name: "XBLK07" Sample ID: "JILLER" File: "EXS0220043.wif"

Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "166.045.0 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Calculated Conc: 2/23/2010

Acq. Date: 4:02:12 AM

Acq. Time: 4:02:12 AM

Modified: No

Int. Type: Valley

Retention Time: 10.9 min

Area: 9.52e-004 counts

Height: 22422.792 cps

Start Time: 10.8 min

End Time: 11.1 min

Use Relative RT: No

Modifed: No

Int. Algorithm: Interpolated - IOA

Min. Peak Width: 500.00 sec

Min. Peak Width: 3.00 points

Smoothing Width: 30.0 sec

Expected RT: 10.9 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 10.9 min

Area: 9.52e-004 counts

Height: 22422.792 cps

Start Time: 10.8 min

End Time: 11.1 min

Use Relative RT: No

Modifed: No

Int. Algorithm: Interpolated - IOA

Min. Peak Width: 500.00 sec

Min. Peak Width: 3.00 points

Smoothing Width: 30.0 sec

Expected RT: 10.9 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 10.9 min

Area: 9.52e-004 counts

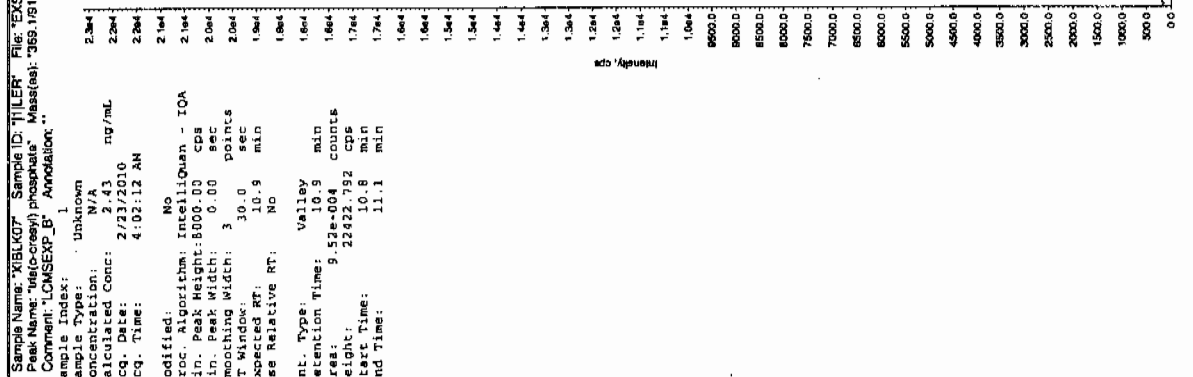
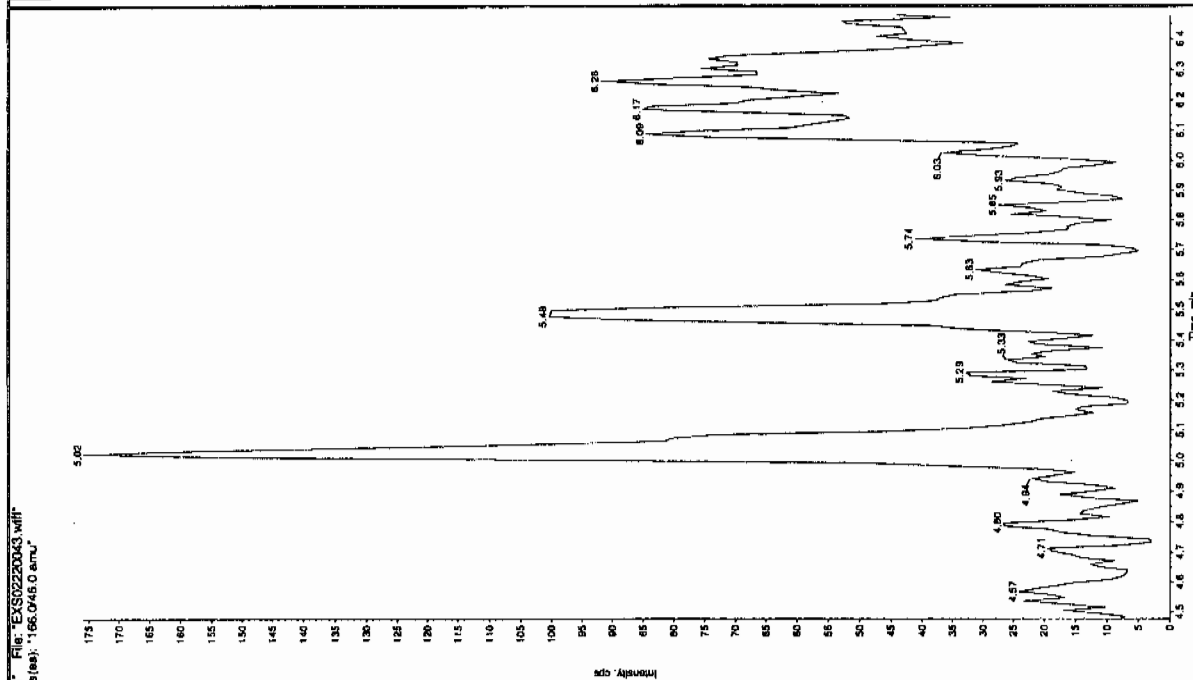
Height: 22422.792 cps

Start Time: 10.8 min

End Time: 11.1 min

Use Relative RT: No

Modifed: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 23-FEB-10 06:08

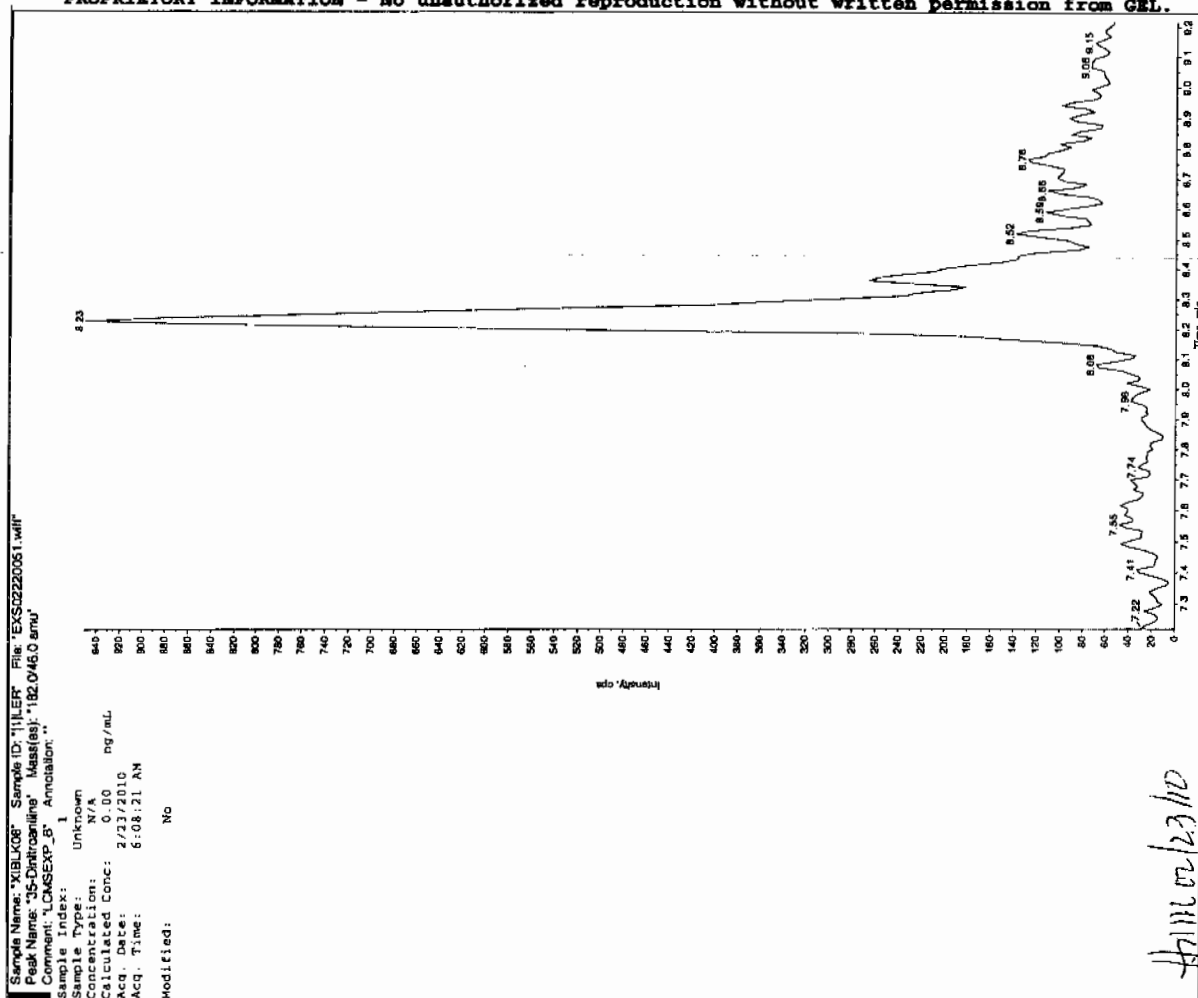
GEL Data File: EXS02220051.wiff

Instrument ID: LCMSMS

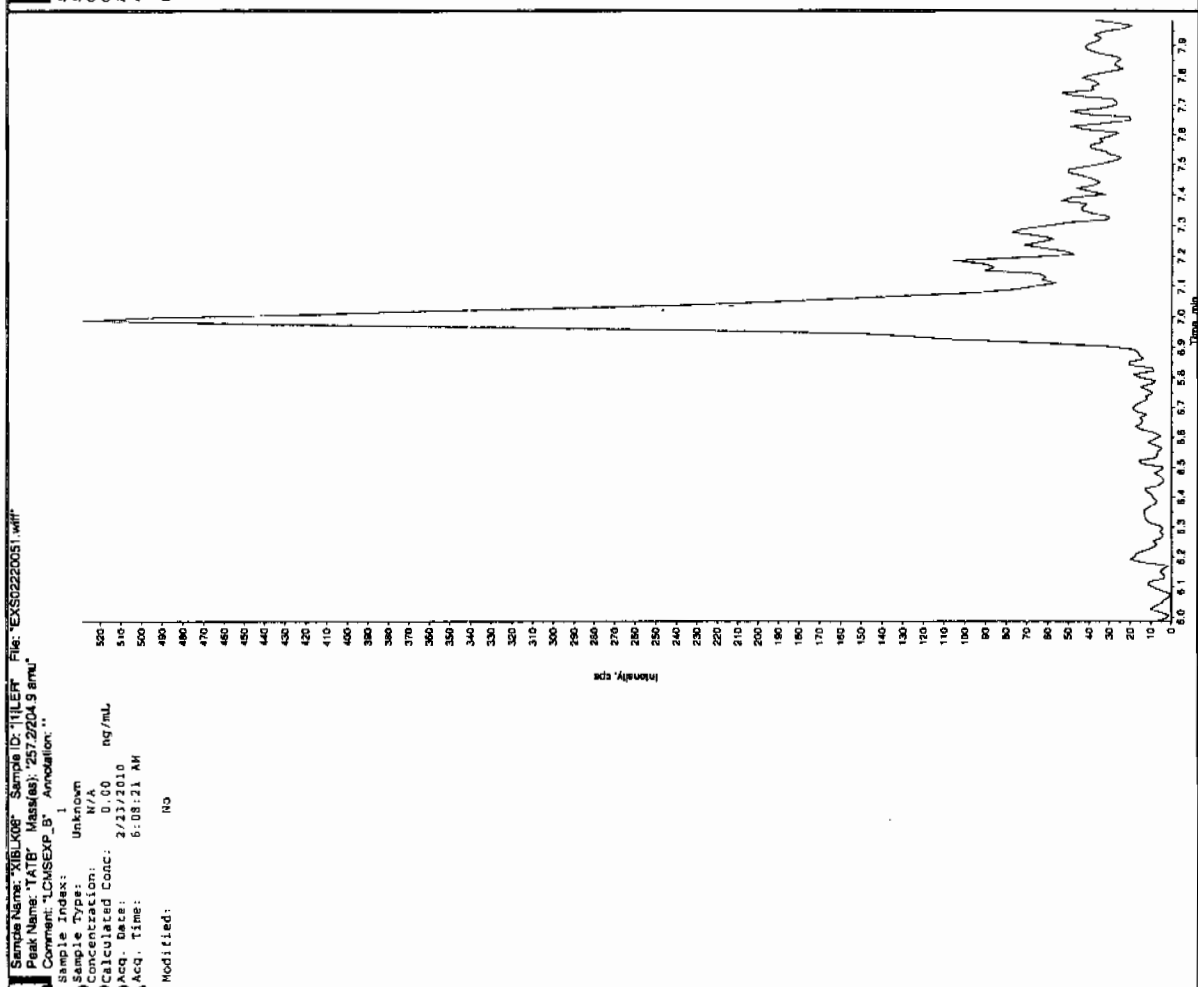
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	5.67
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/23/10



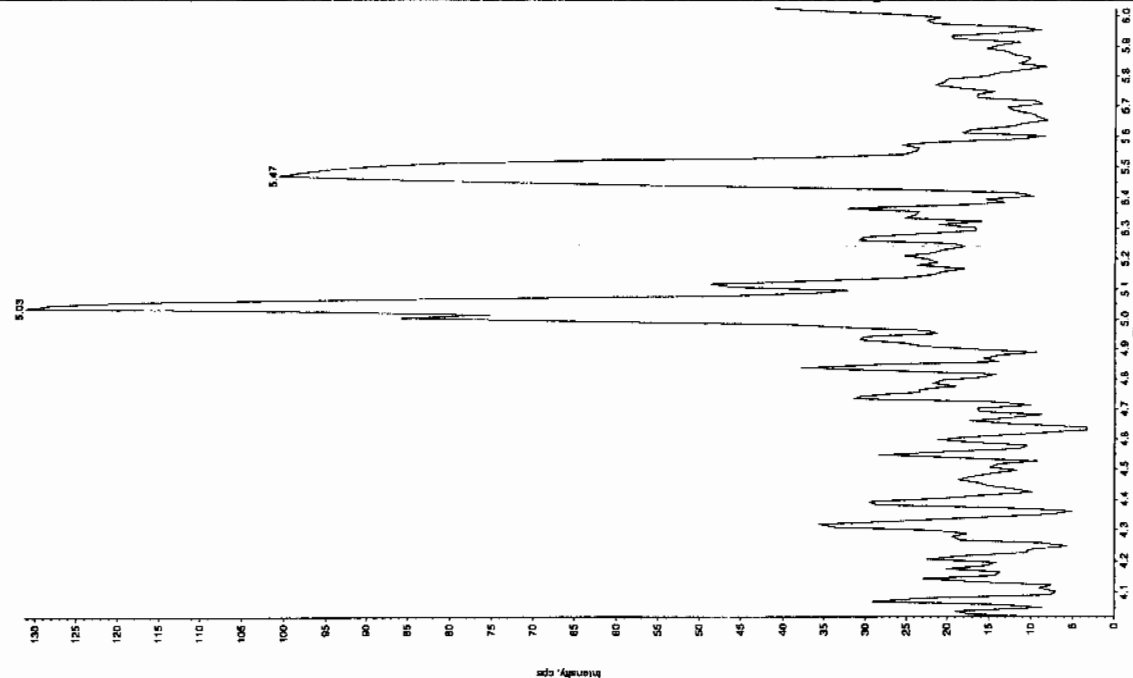
See 2/23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

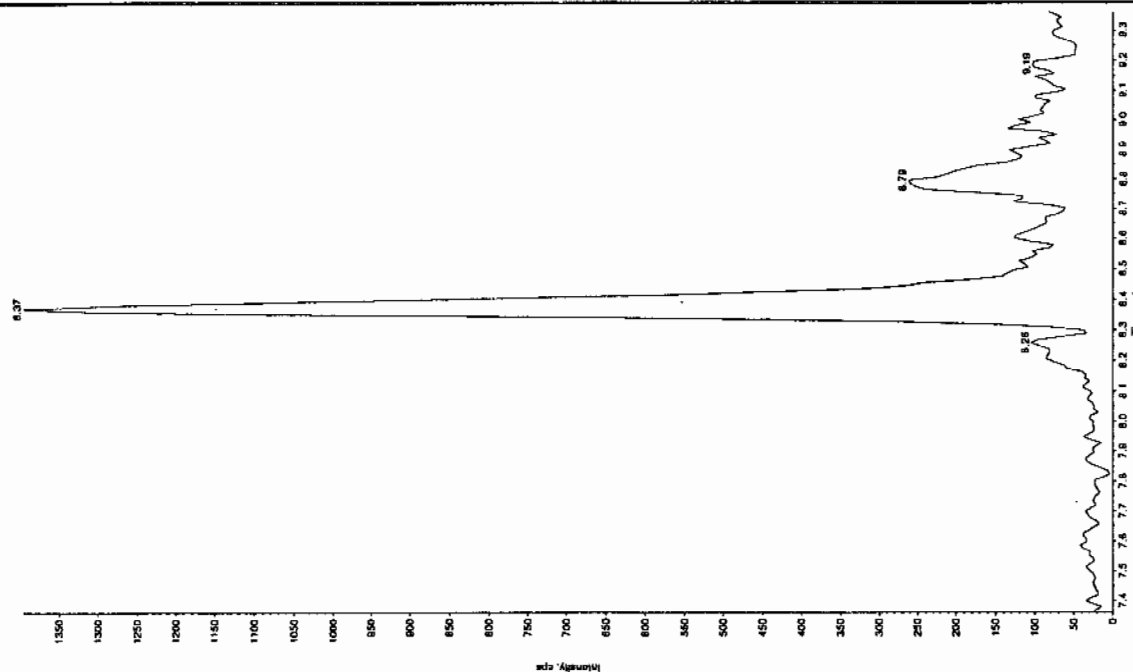
Sample Name: "XBLK05" Sample ID: "1111ER" File: "EXS0220051.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 6:08:21 AM
 Modified: No



Sample Name: "XBLK05" Sample ID: "1111ER" File: "EXS0220051.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

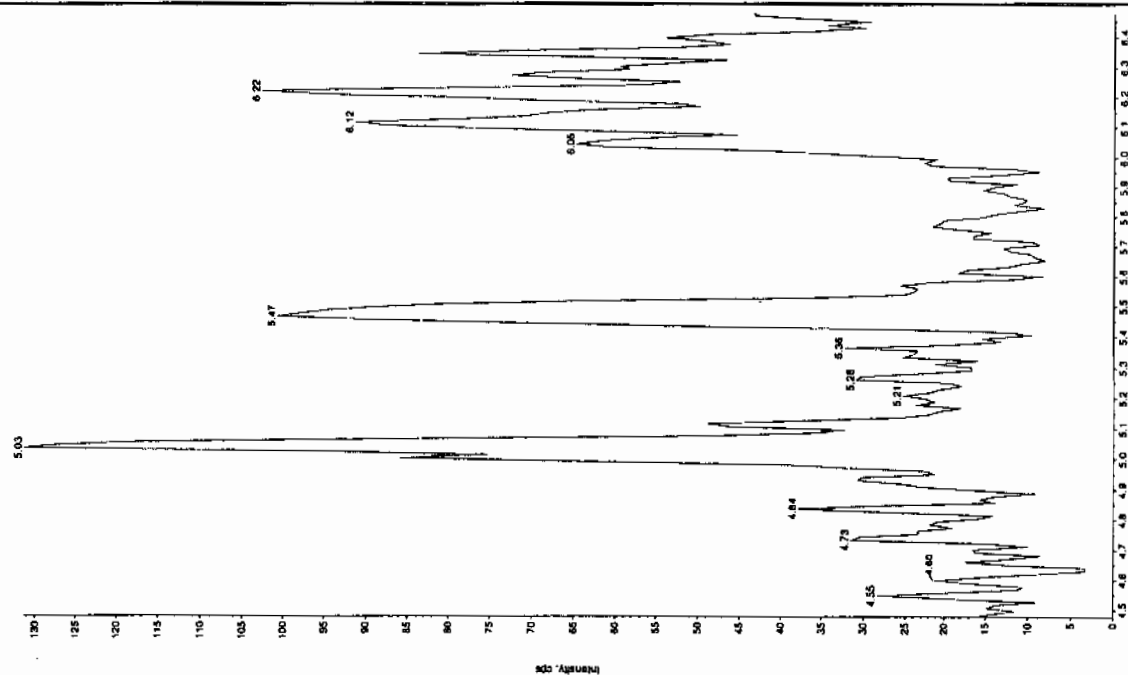
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 6:08:21 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: XIBLK08 Sample ID: 11111111 File: EX50220051.wif
 Peak Name: 24-Diamino-6-nitrofluorene Mass(es): 366.191.0 amu
 Comment: LCMSEXP_B_1 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 5.67 ng/mL
 Calculated Conc: 2/23/2010
 Acq. Date: 6:08:21 AM
 Acq. Time: 6:08:21 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.65e+005 counts
 Height: 37790.951 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: XIBLK08 Sample ID: 11111111 File: EX50220051.wif
 Peak Name: 24-Diamino-6-nitrofluorene Mass(es): 366.191.0 amu
 Comment: LCMSEXP_B_1 Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/23/2010
 Acq. Date: 6:08:21 AM
 Acq. Time: 6:08:21 AM
 Modified: No

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 24-FEB-10 12:19

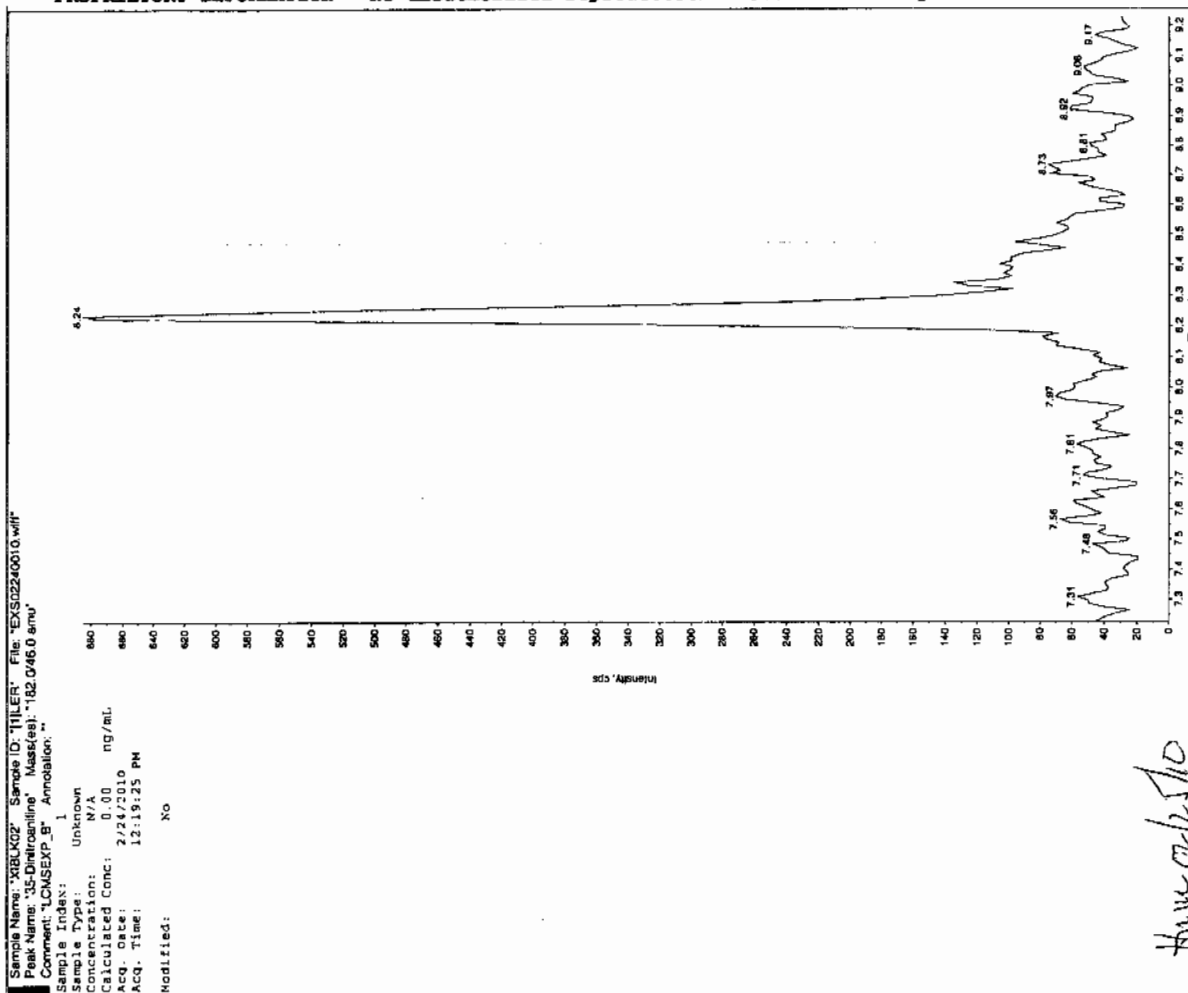
GEL Data File: EXS02240010.wiff

Instrument ID: LCMSMS

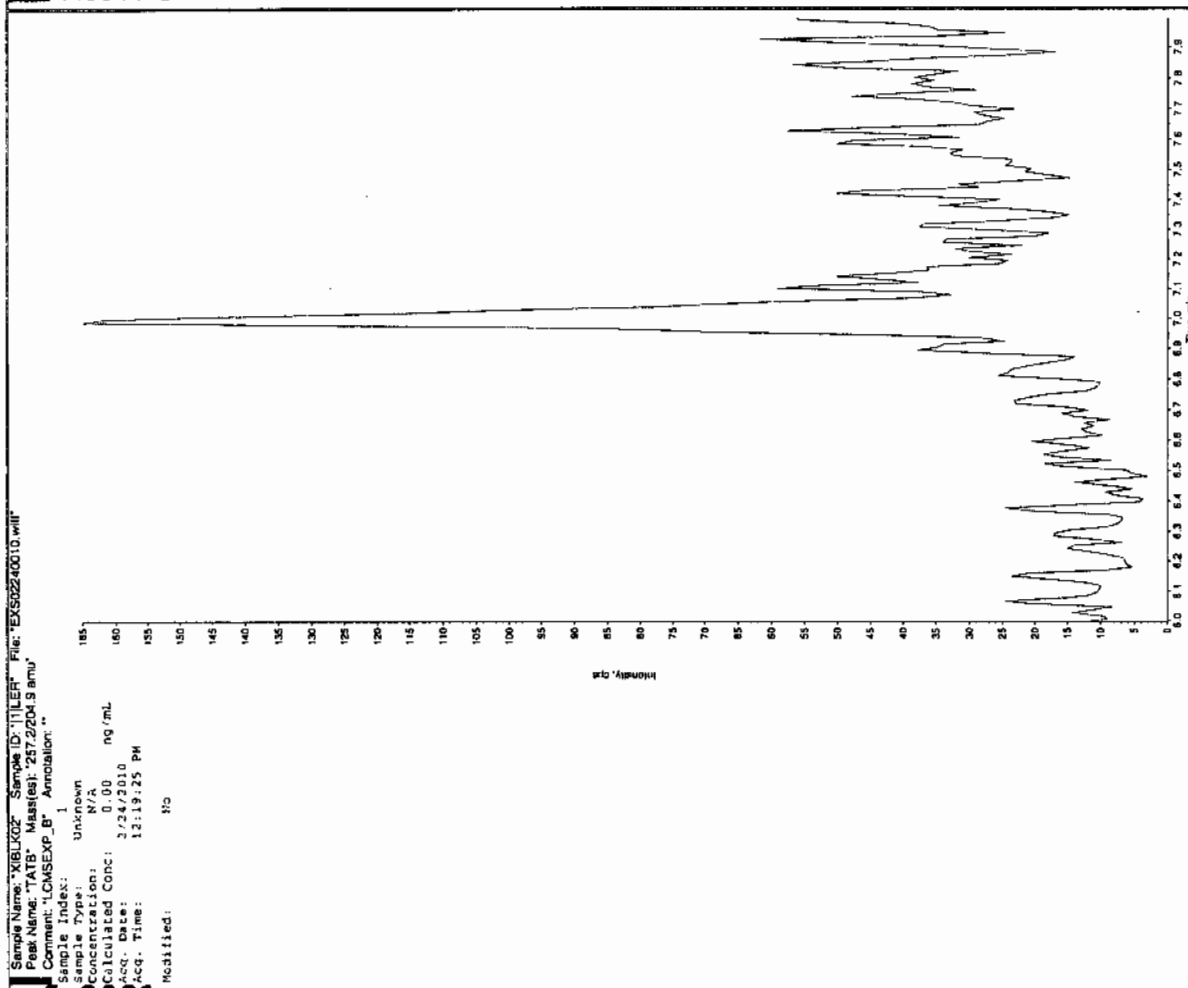
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	5.15
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/25/10

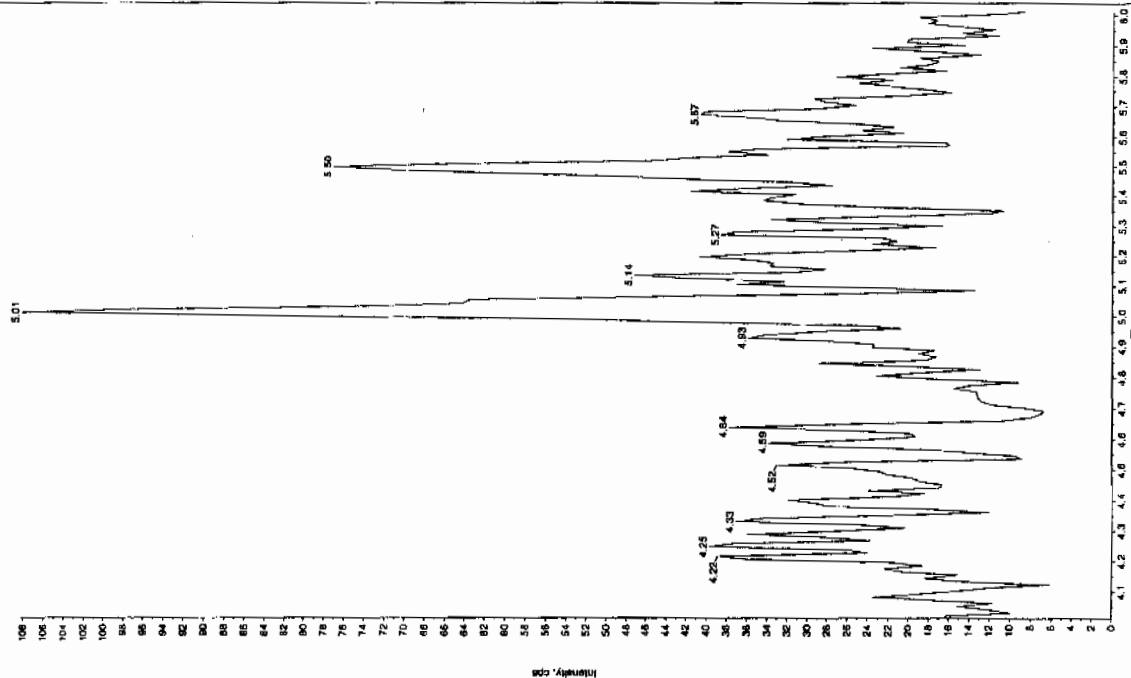


See 2/25/10

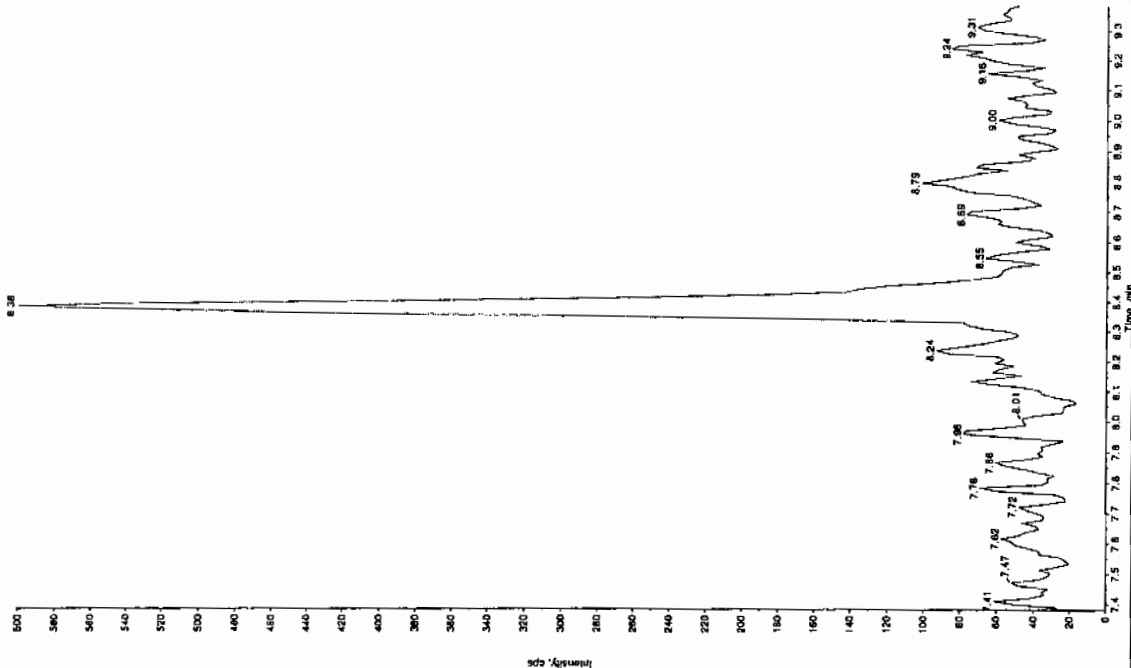


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: 'XBLK02' Sample ID: '111ER' File: 'EXS0220010.will'
 Peak Name: '25-Diamino-4-nitrofluorene' Mass(es): '166.0465.0 amu'
 Comment: 'LCMSEXP_B' Annotation: '-'
 Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 12:19:25 PM
 Acq. Time: 12:19:25 PM
 Modified: No

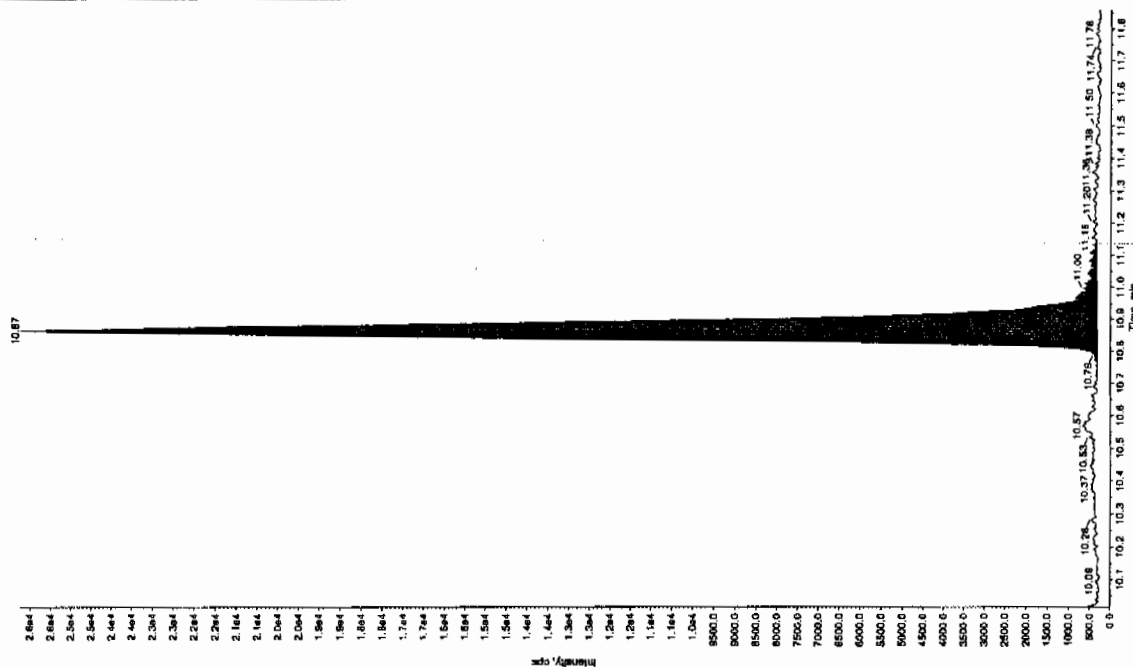


Sample Name: 'XBLK02' Sample ID: '111ER' File: 'EXS0220010.will'
 Peak Name: '34-Dinitrofluorene' Mass(es): '182.1151.9 amu'
 Comment: 'LCMSEXP_B' Annotation: '-'
 Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 12:19:25 PM
 Acq. Time: 12:19:25 PM
 Modified: No



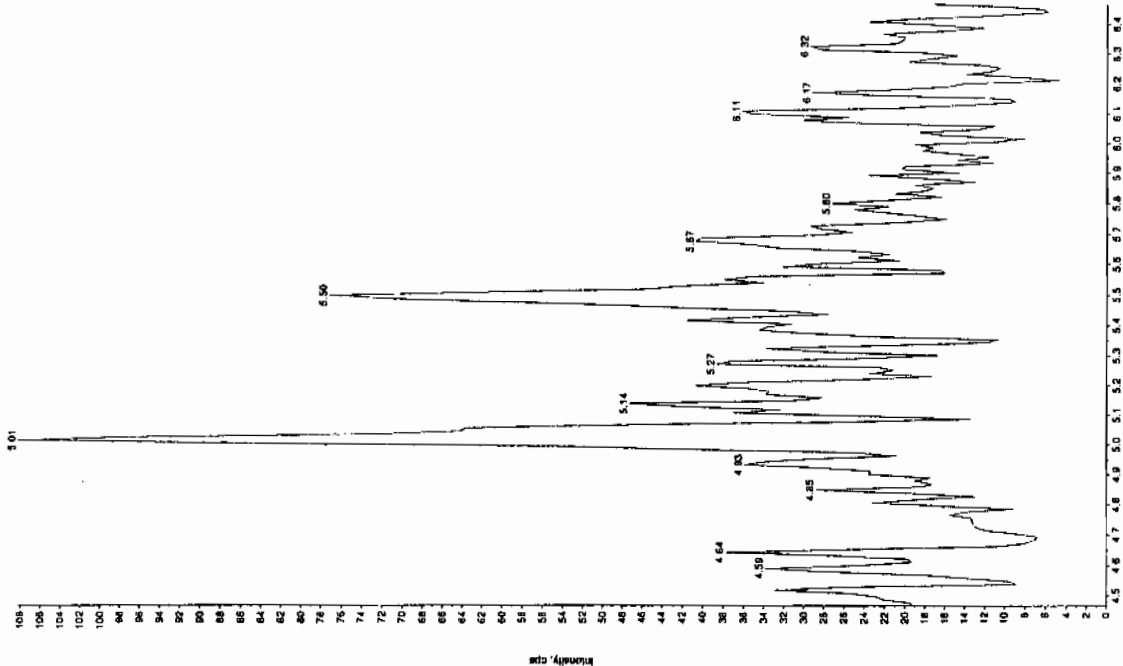
Sample Name: XBLK02 Sample ID: J11LFF File: EXS02240010.wif
 Peak Name: bis(oxocresyl) phosphide Mass(es): 359.181.0 amu
 Comment: LCMSEXP_B: Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 5.15 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 12:19:25 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Retention Width: 30.0 points
 RT Window: 10.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 9.34e+004 counts
 Height: 25905.701 cps
 Start Time: 10.8 min
 End Time: 11.1 min



Sample Name: XBLK02 Sample ID: J11LFF File: EXS02240010.wif
 Peak Name: 24-Dumiro-6-nitrotoluene Mass(es): 166.045.0 amu
 Comment: LCMSEXP_B: Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 12:19:25 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 24-FEB-10 12:50

GEL Data File: EXS02240012.wiff

Instrument ID: LCMSMS

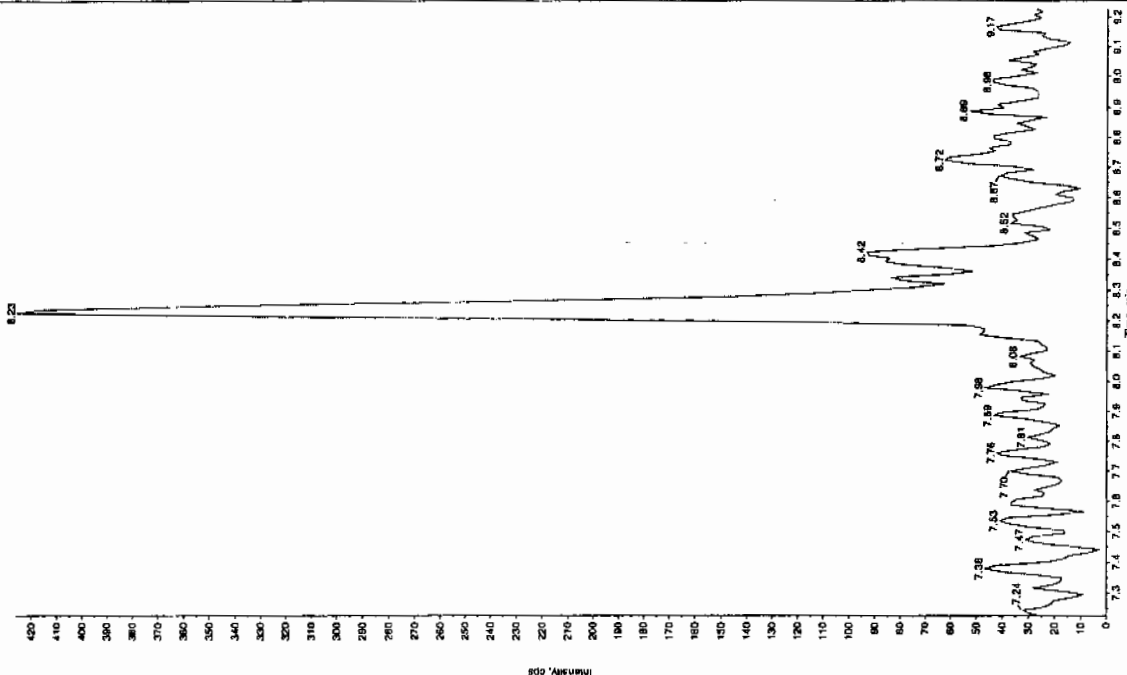
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.8
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 12/5/10

Sample Name: YIBL003 Sample ID: YIBL003 File: EXS02240012.will
 Peak Name: 25-Dehydrothiophene Mass(es): 182.0460 amu
 Comment: LCMSEXP_B1 Annotation: 1

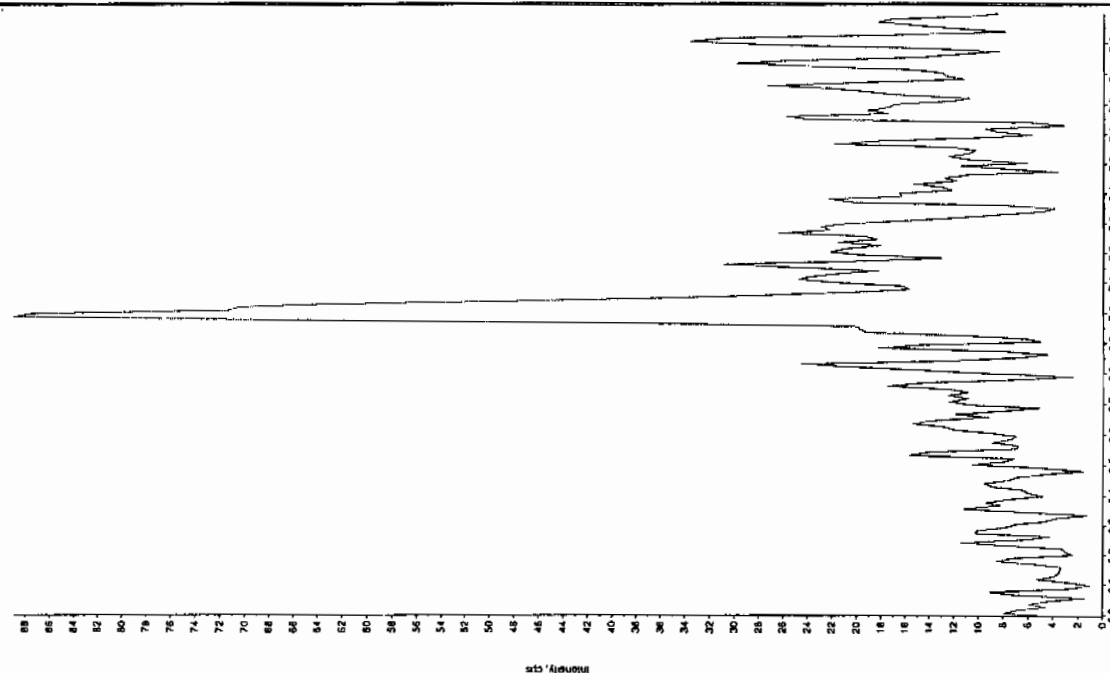
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 12:50:49 PM
 Acq. Time: 12:50:49 PM
 Modified: No



Time works to

Sample Name: YIBL003 Sample ID: YIBL003 File: EXS02240012.will
 Peak Name: YATB Mass(es): 257.22049 amu
 Comment: LCMSEXP_B1 Annotation: 1

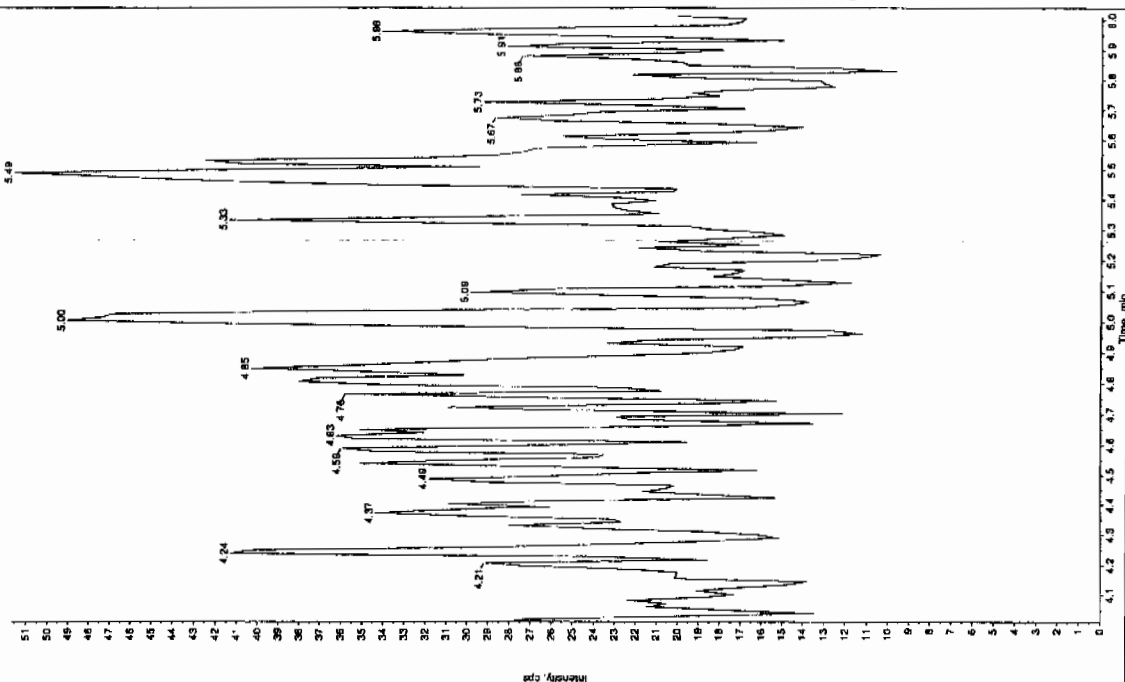
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 12:50:49 PM
 Acq. Time: 12:50:49 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

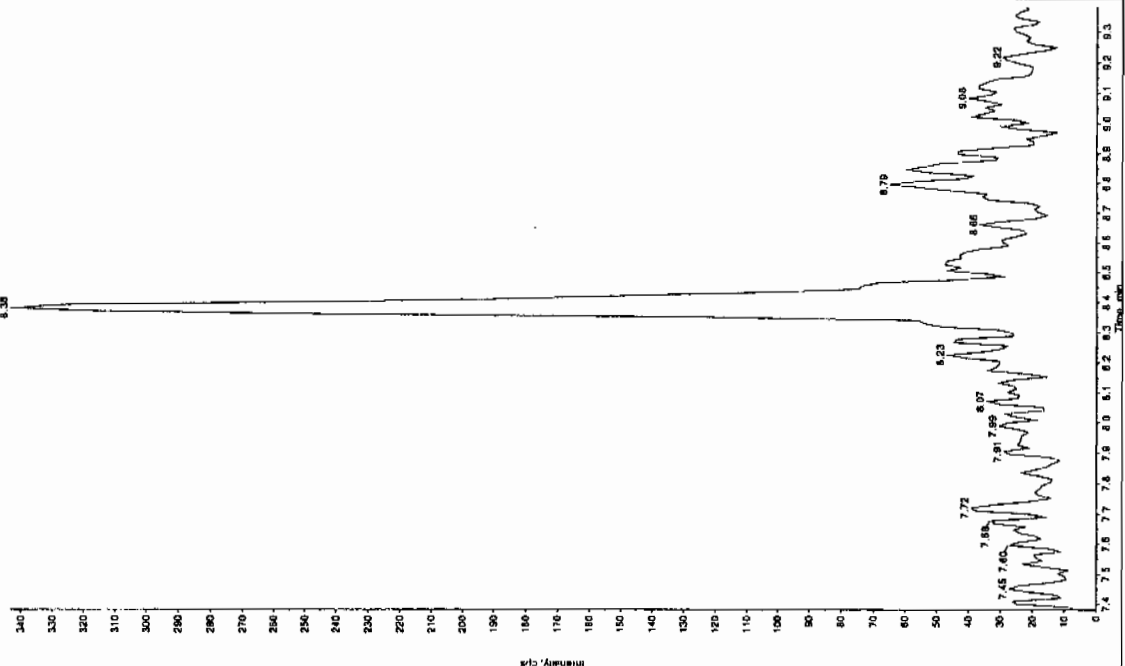
Sample Name: "YBLK03" Sample ID: "JILLER" File: "EXS0220012.wif"
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 12:50:49 PM
 Modified: NO



Sample Name: "YBLK03" Sample ID: "JILLER" File: "EXS0220012.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1715.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 12:50:49 PM
 Modified: NO



Sample Name: "XIBLK03" Sample ID: "1111ER" File: "EX50240012.wif"
 Peak Name: "166.045.0 amu" Mass(es): "166.045.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 2.24 ng/mL

Acq. Date: 2/24/2010

Acq. Time: 12:50:49 PM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 1.004 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 10.9 min

Use Relative RT: No

Int. Type: Valley

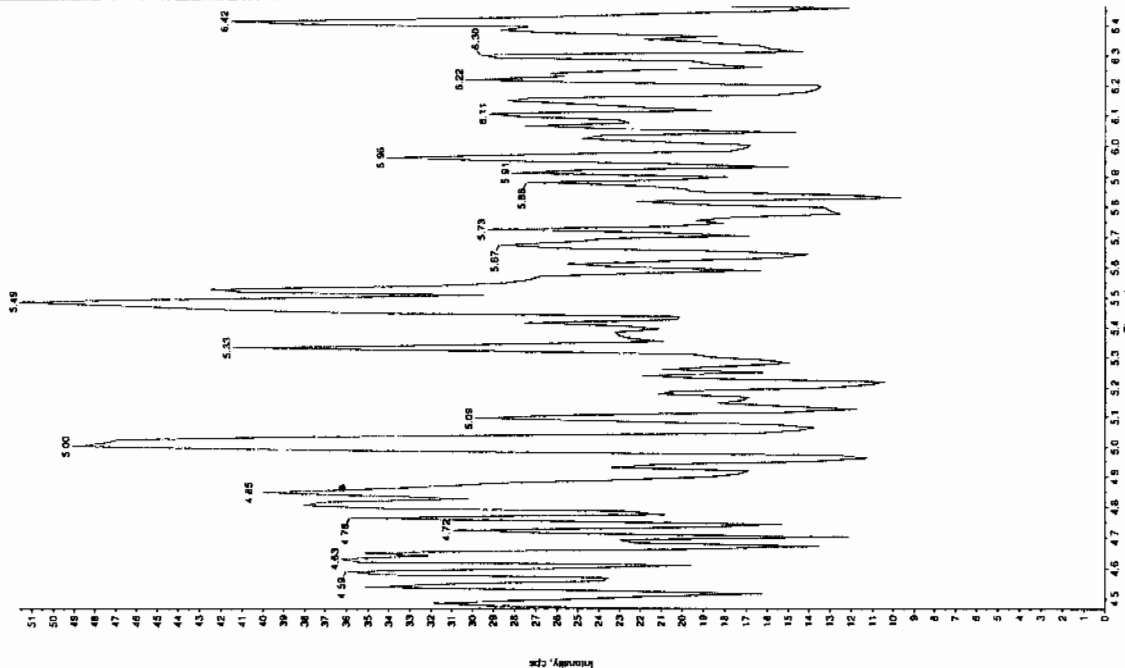
Retention Time: 10.9 min

Area: 5.08e+004 counts

Height: 14003.9 cps

Start Time: 10.8 min

End Time: 11.0 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 24-FEB-10 16:15

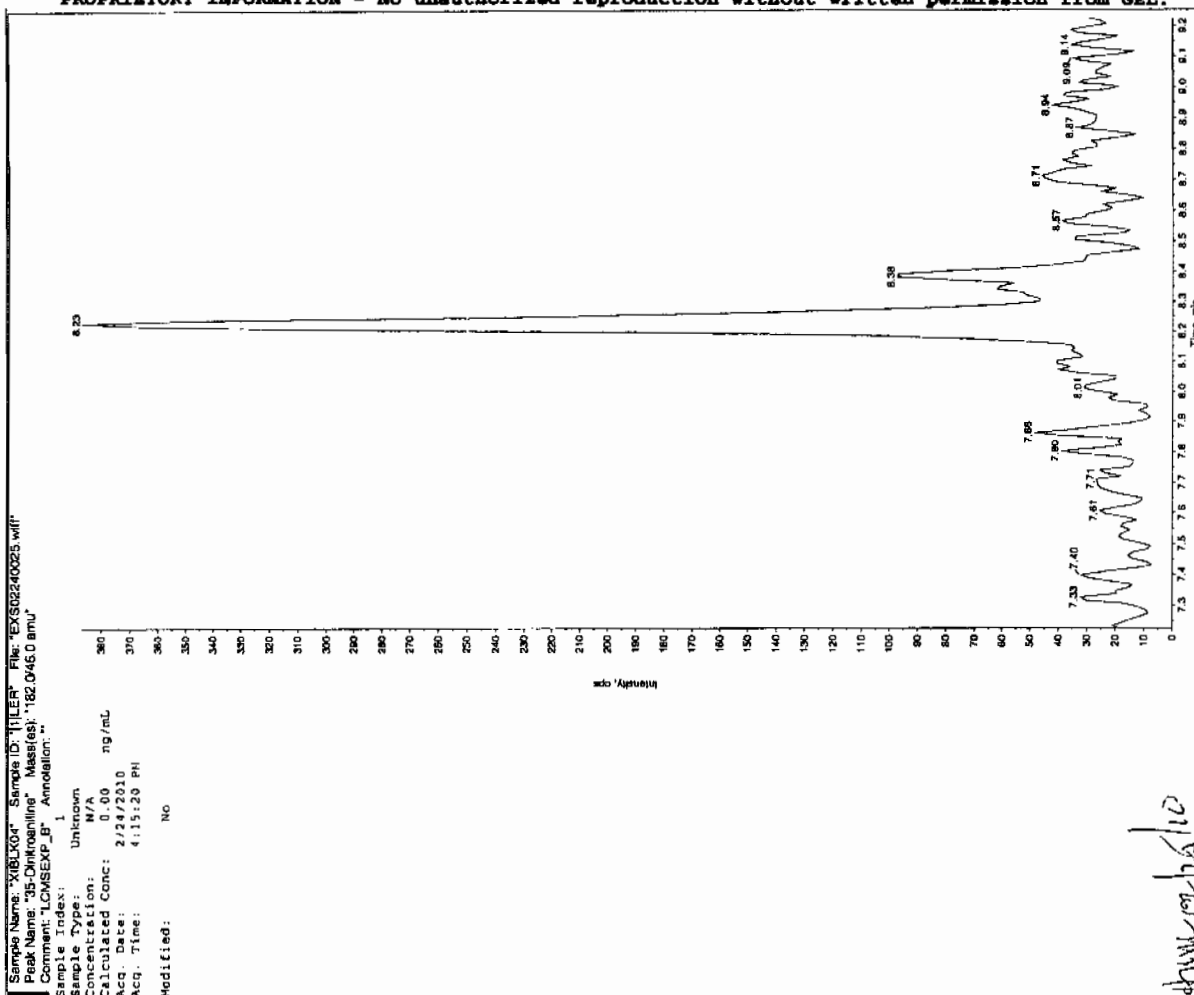
GEL Data File: EXS02240025.wiff

Instrument ID: LCMSMS

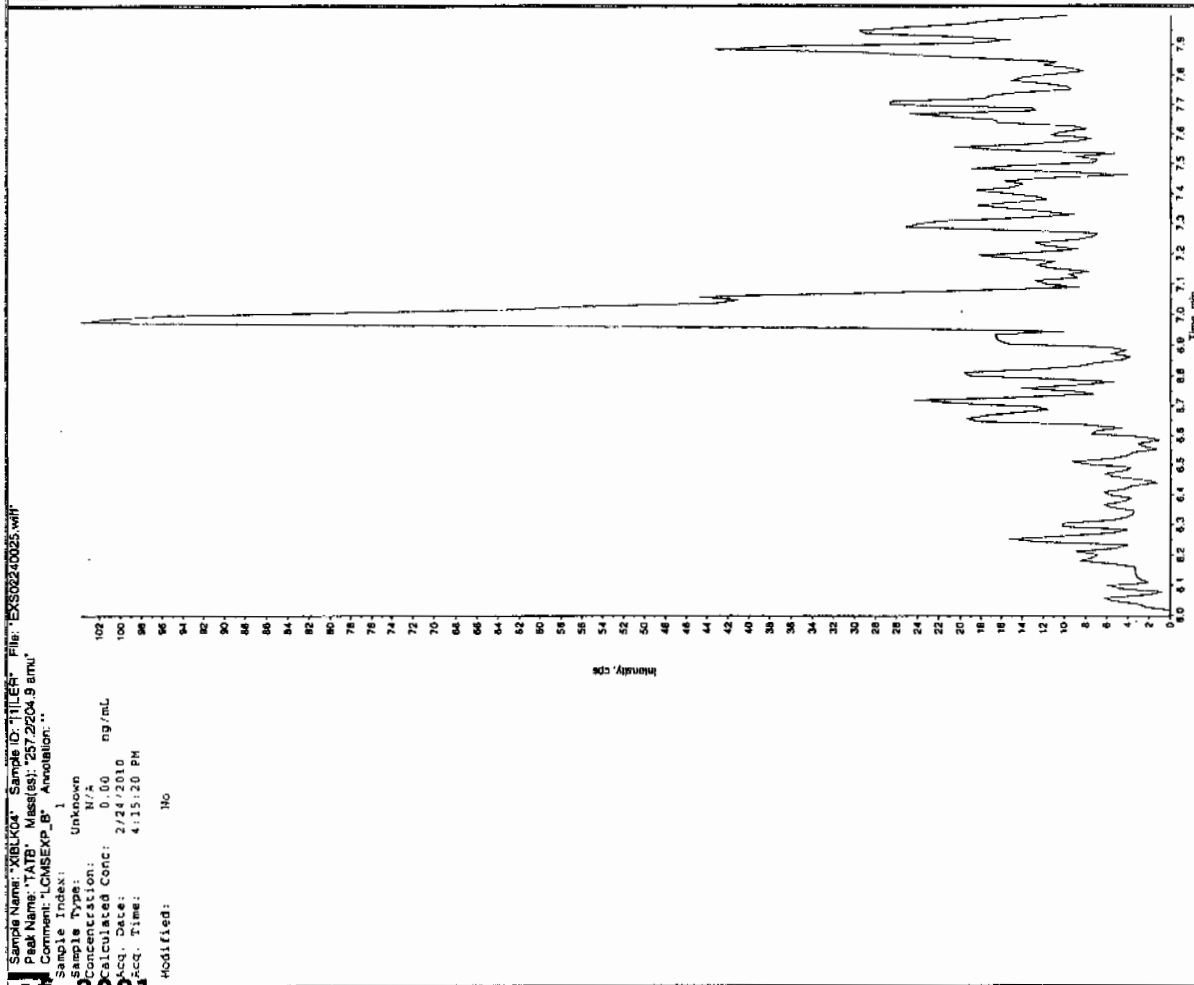
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.923
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/25/10

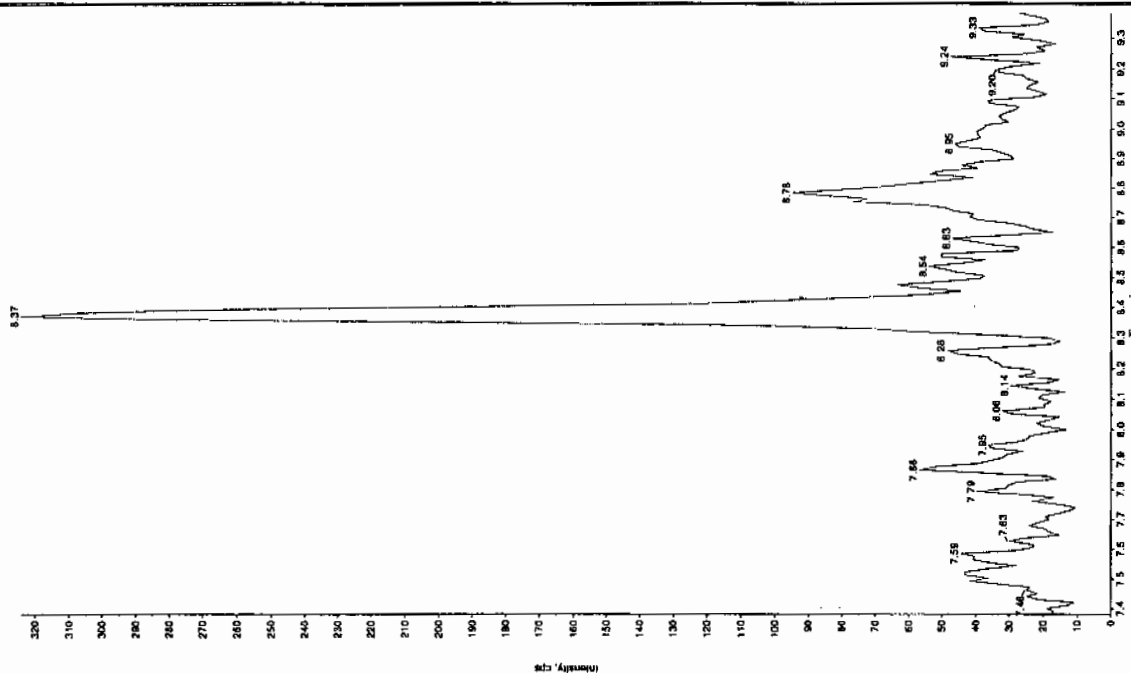


See 2/25/10

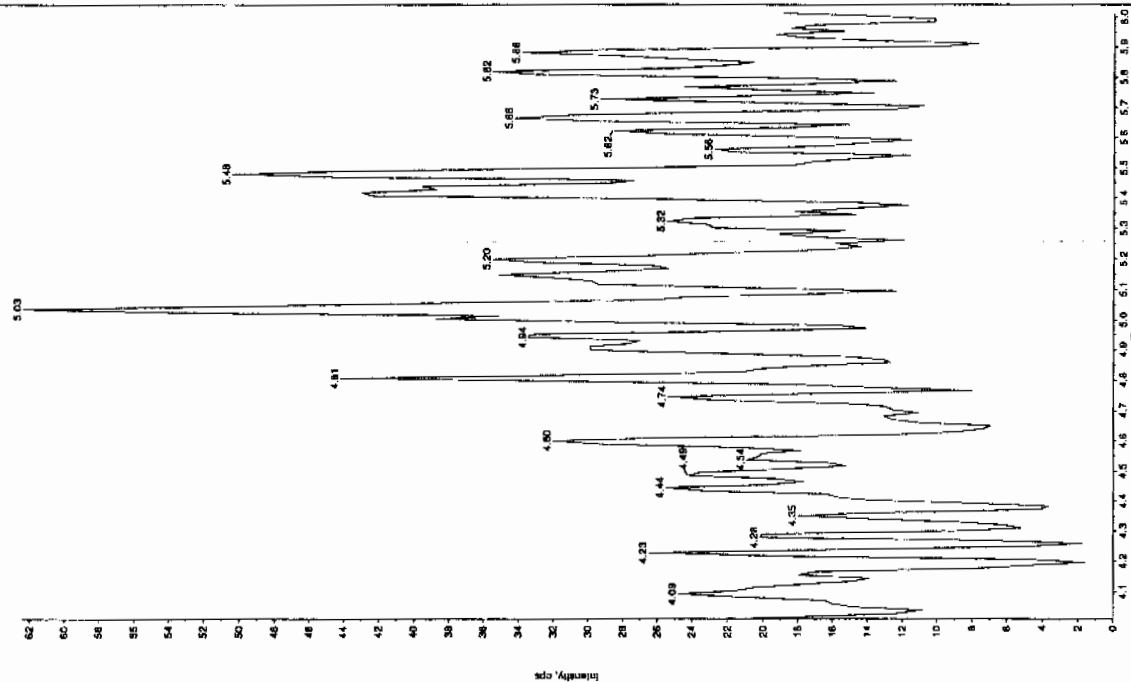


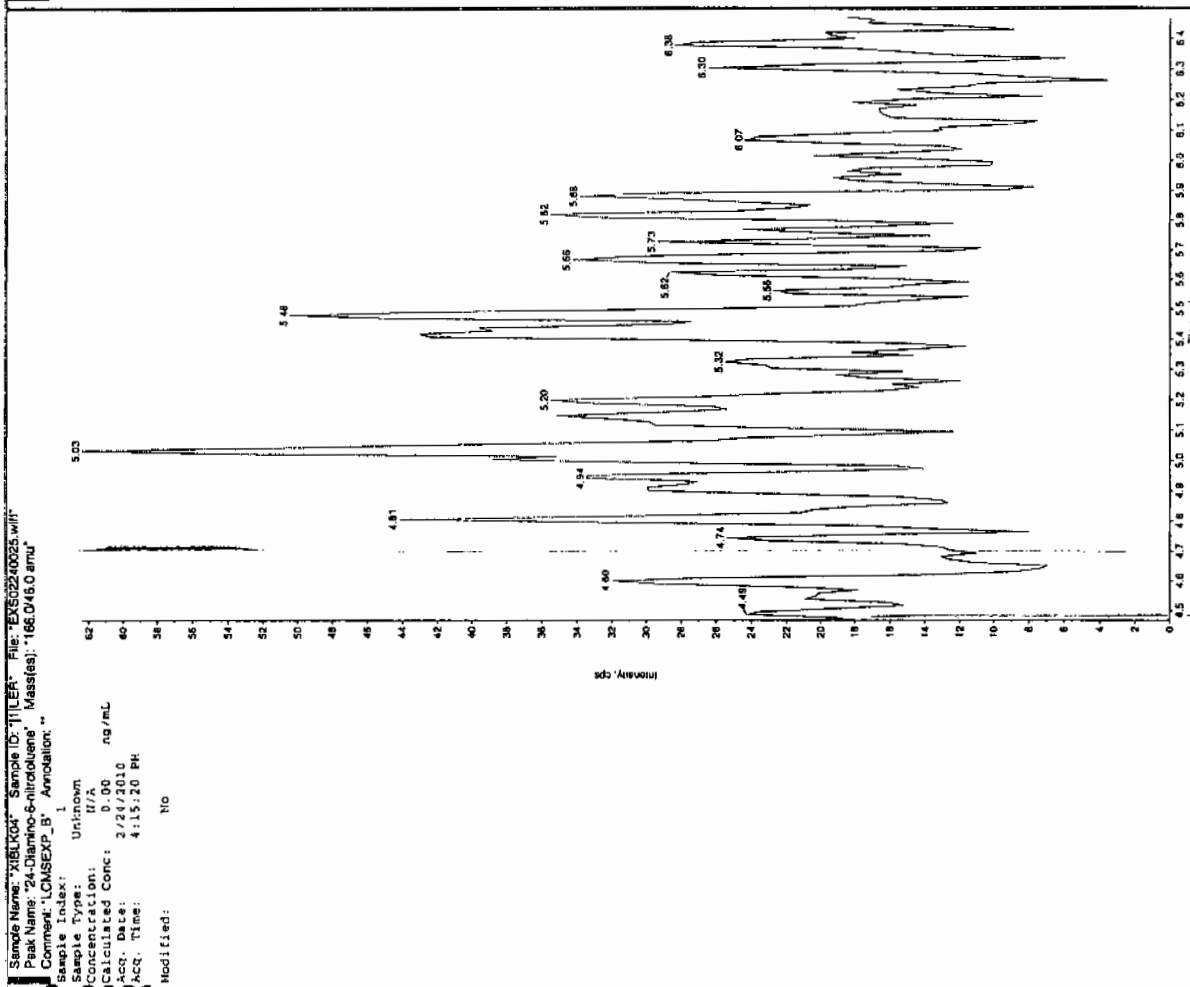
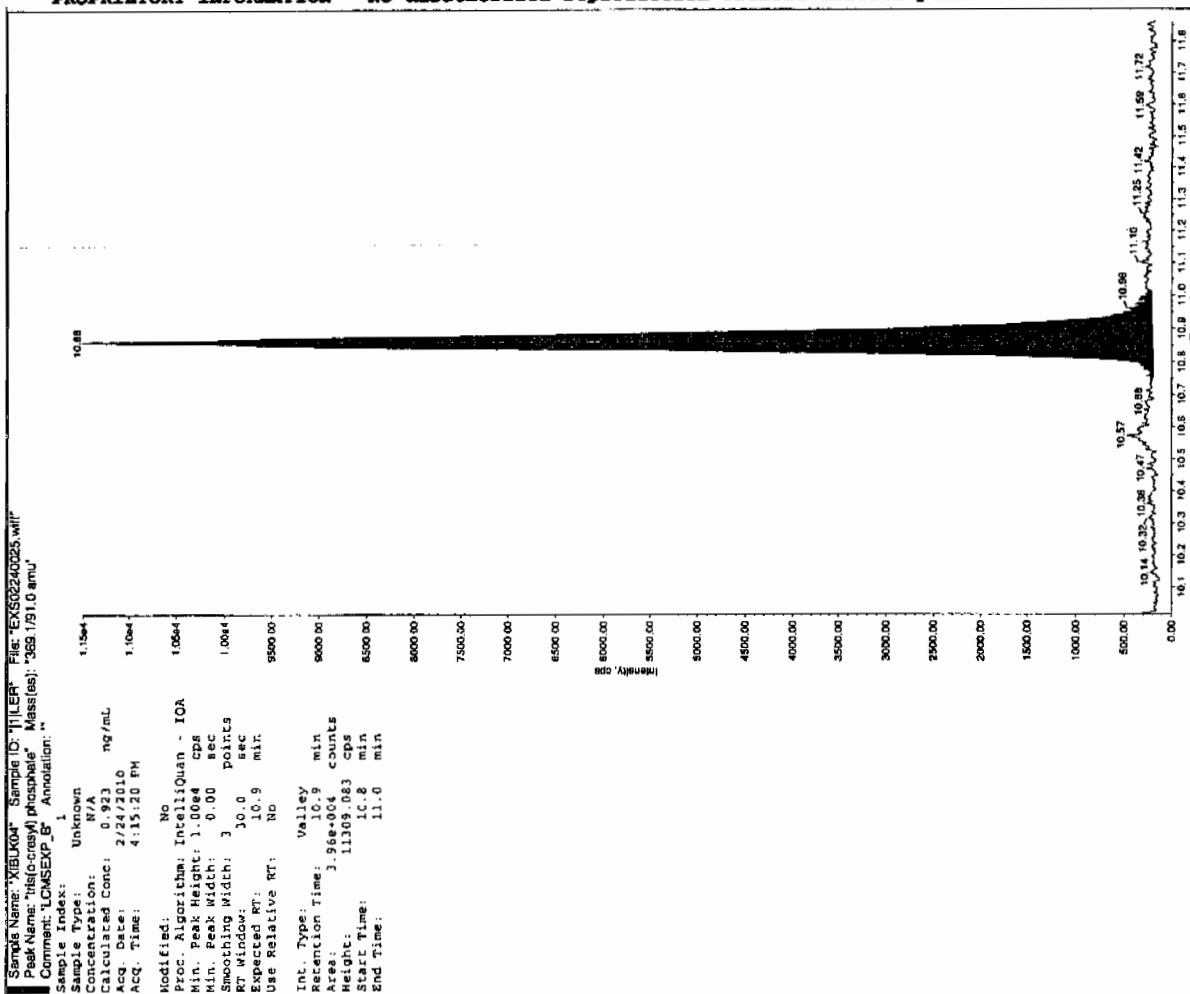
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBUK04" Sample ID: "111ER" File: "EXS02240025.wiff"
Peak Name: "34-Dinitrofluorene" Mass(es): "182 1/151.9 amu"
Comment: "LCMSEXP 8" Annotation: ""



Sample Name: "XIBLK04" Sample ID: "XIBLK04" File: "EX0502240025.wif"
Peak Name: "26-Diamino-4-nitrofluene" Mass(as): "166 0/46.0 amu"
Comment: "LCM/SEXP B" Annotation: ""





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1514

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 24-FEB-10 18:05

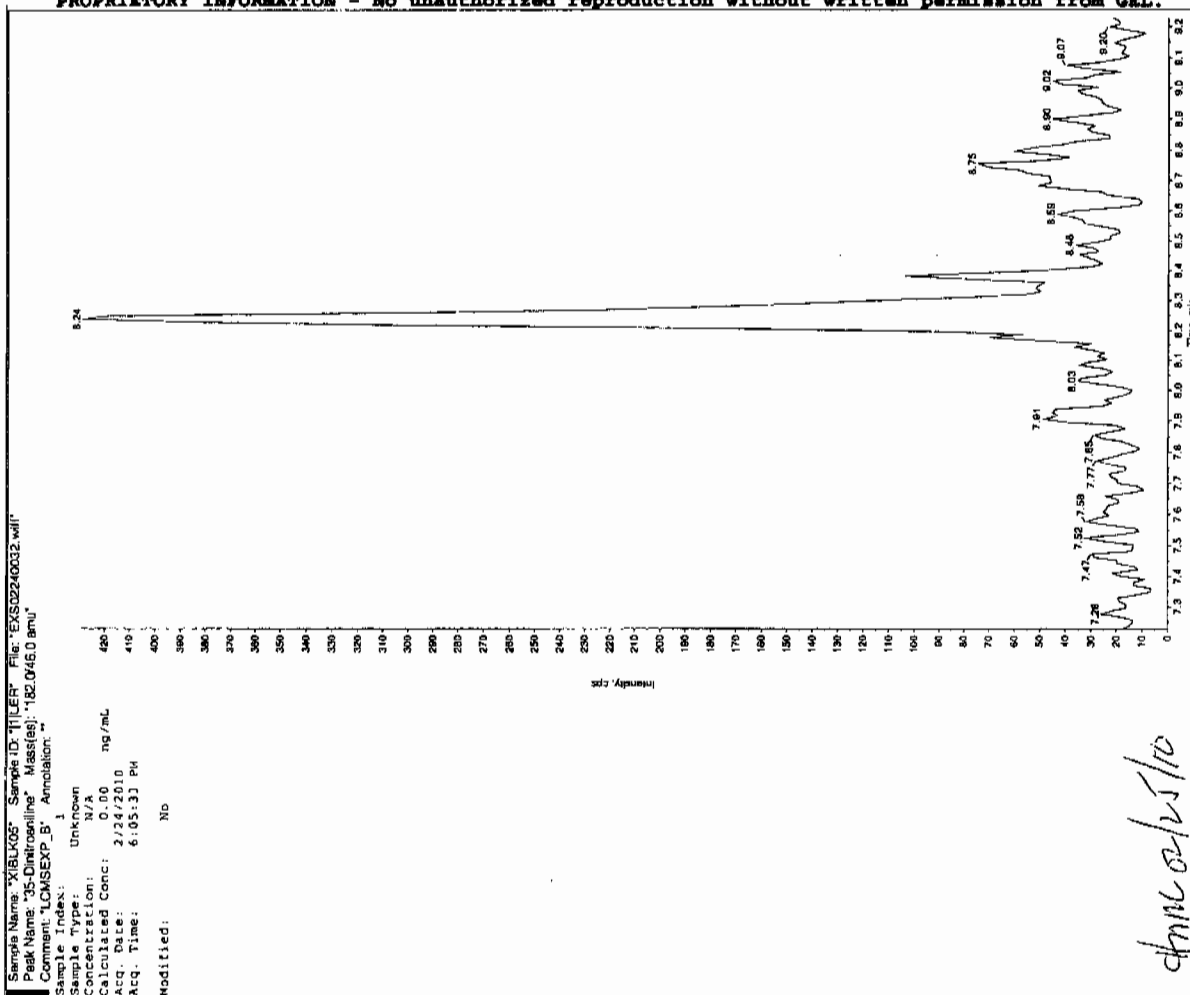
GEL Data File: EXS02240032.wiff

Instrument ID: LCMSMS

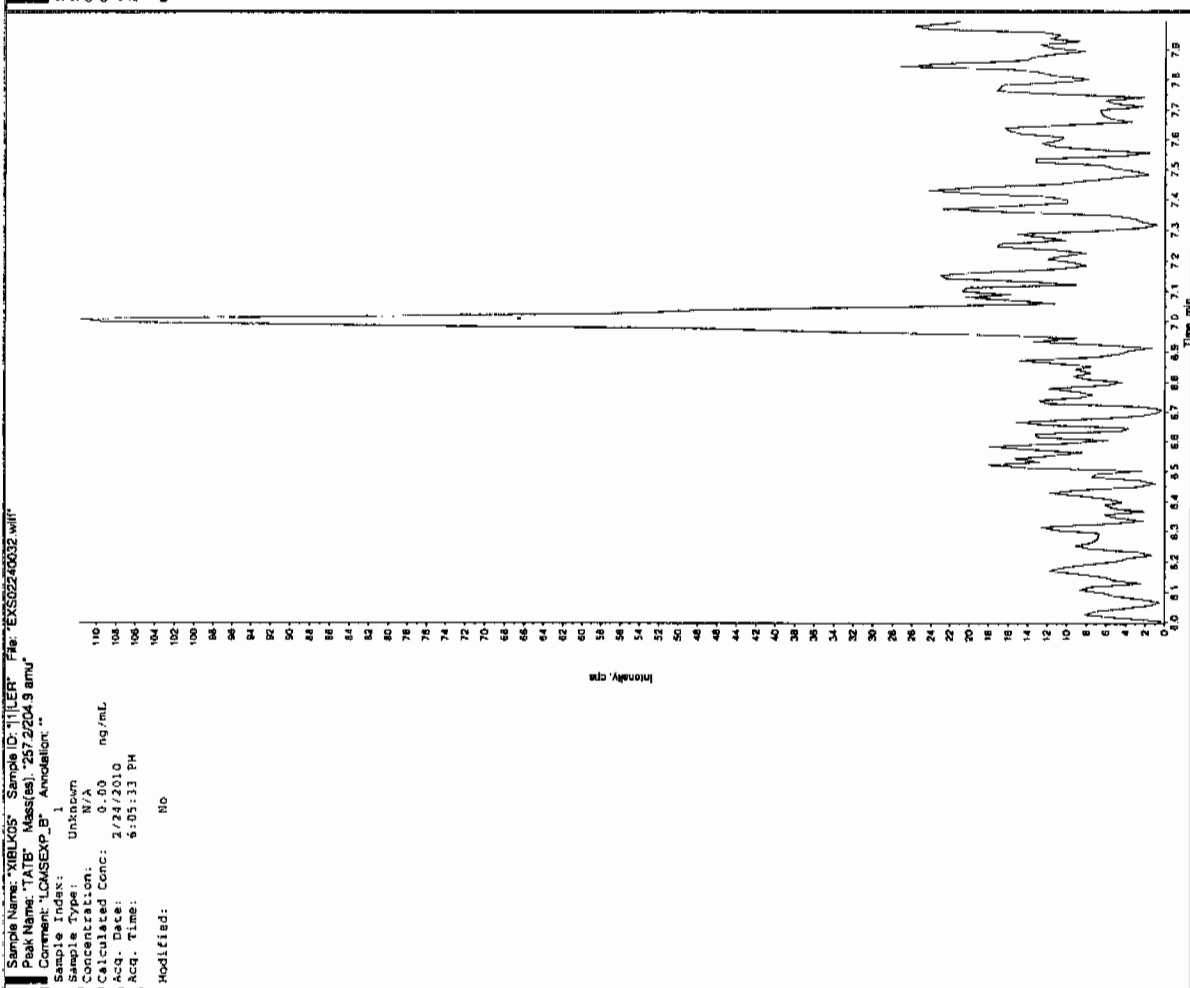
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.09
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

2/25/10



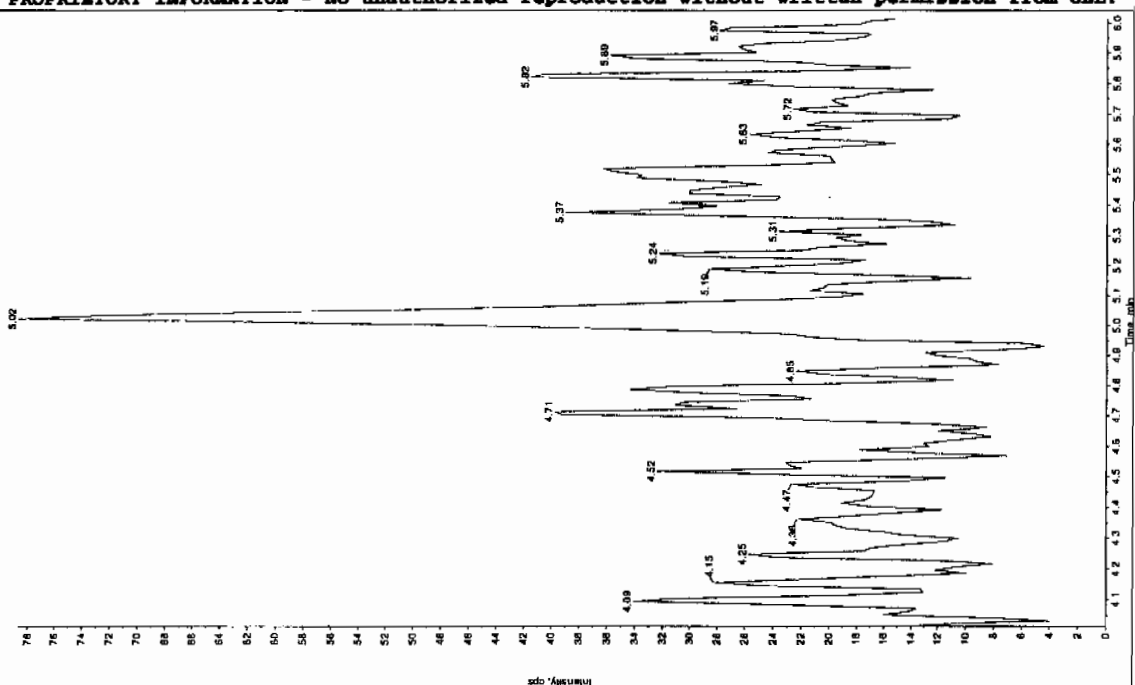
2/25/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

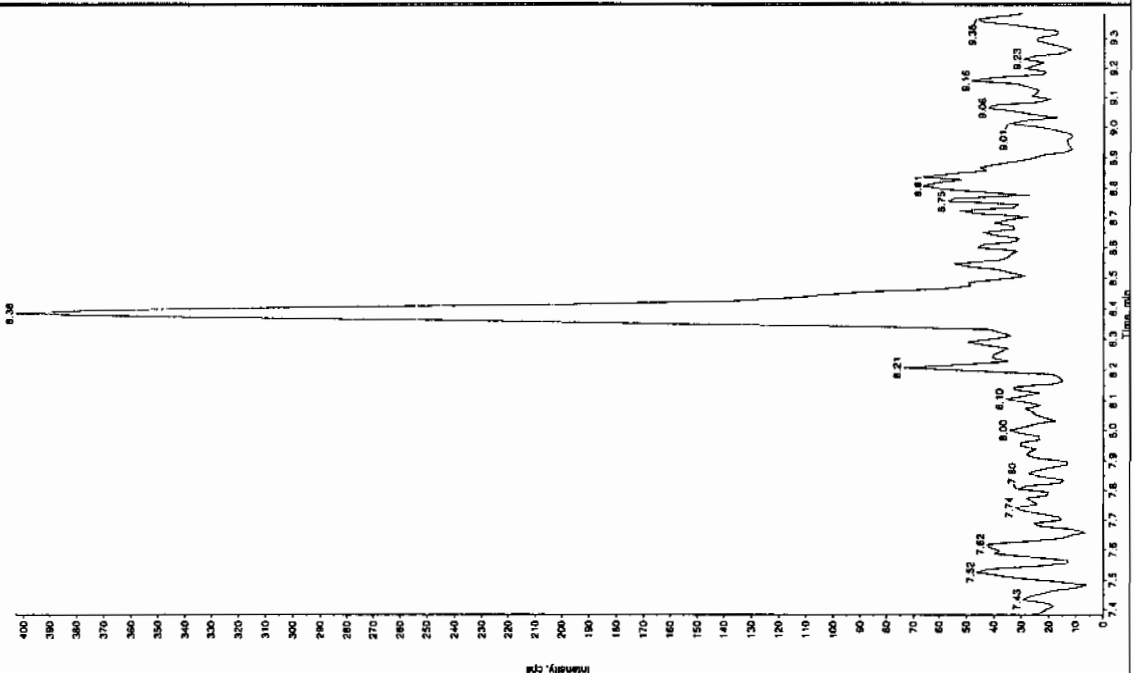
Sample Name: "XBLK05" Sample ID: "11LER" File: "EX502240032.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 6:05:33 PM
 Modified: No



Sample Name: "XBLK05" Sample ID: "11LER" File: "EX502240032.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

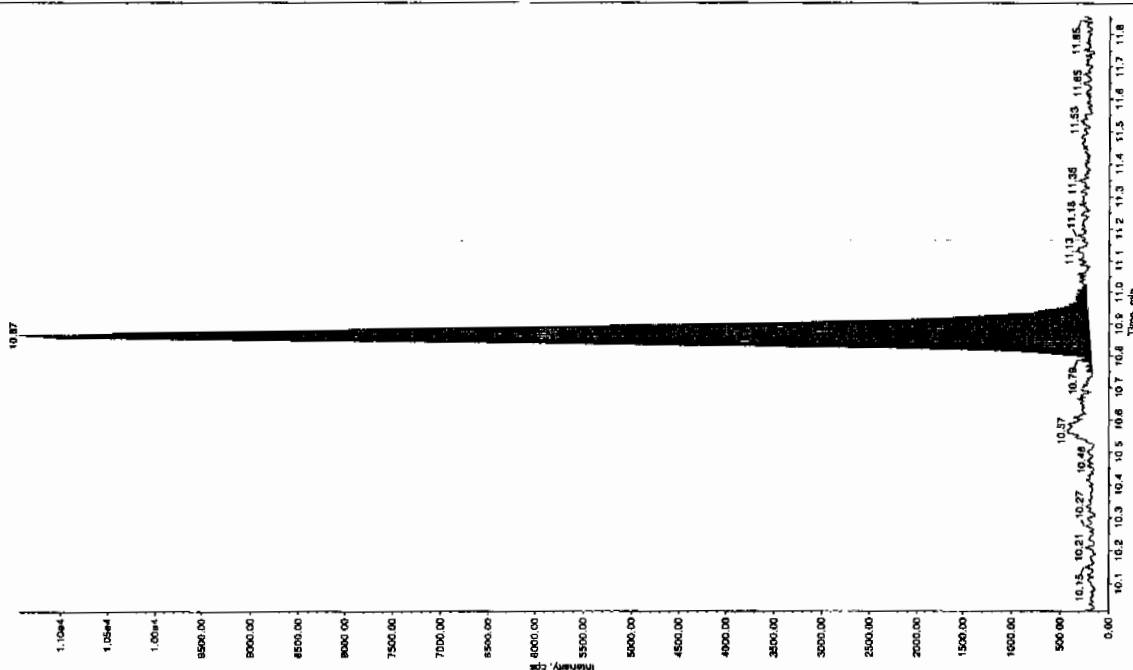
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 6:05:33 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

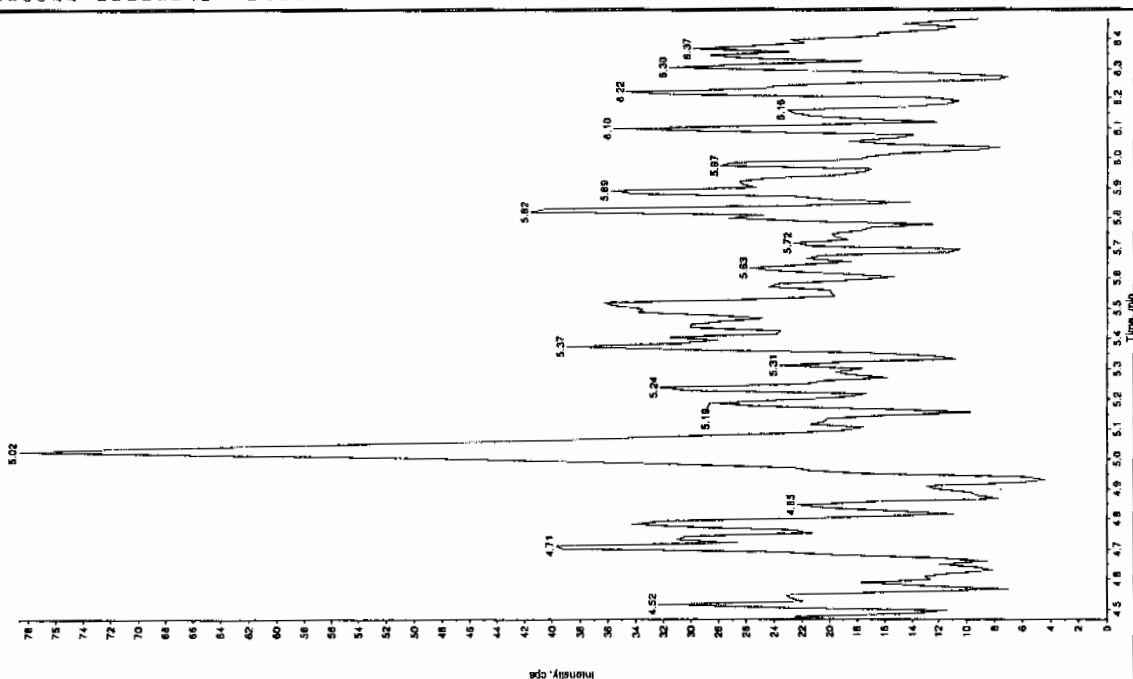
Sample Name: "VBLK05" Sample ID: "VBLK05" File: "EX50221032.wif"
 Peak Name: "VBLK05" Mass(es): "359.151.0 and
 Comment: "LCMSXP_5" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1.09 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 6:05:33 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 4.16e+004 counts
 Height: 11242.744 cps
 Start Time: 10.7 min
 End Time: 11.0 min



Sample Name: "VBLK05" Sample ID: "VBLK05" File: "EX50221032.wif"
 Peak Name: "VBLK05" Mass(es): "166.0461.0 and
 Comment: "LCMSXP_5" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 6:05:33 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Nairb.ref

;Positive ion monoisotopic and average masses from solution
 ;of NaI/RbI (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
 ;Most useful general purpose calibrant for all low
 ;MW applications, including MS/MS work.
 ;At high resolution, readily covers from m/z 50-2000.
 ;At reduced resolution, can be used to over m/z 3000.
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
 Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

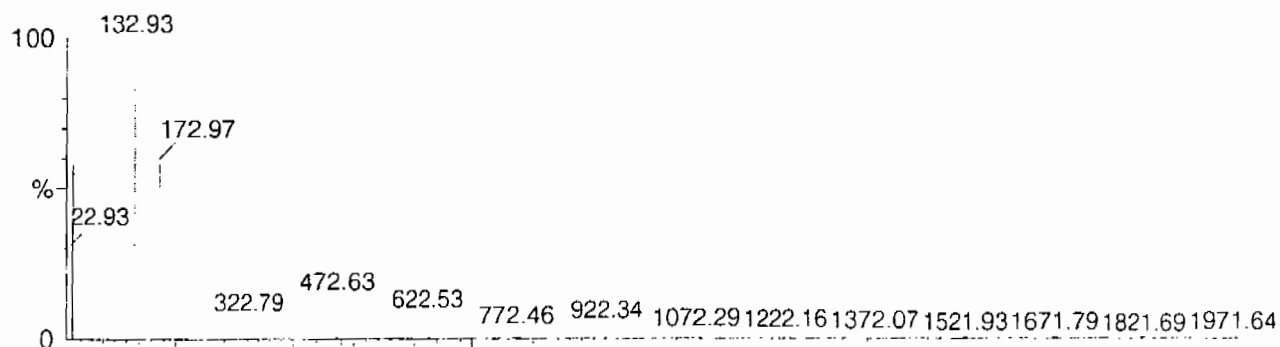
Calibration Report - MS1 Static

Page 1 of 1

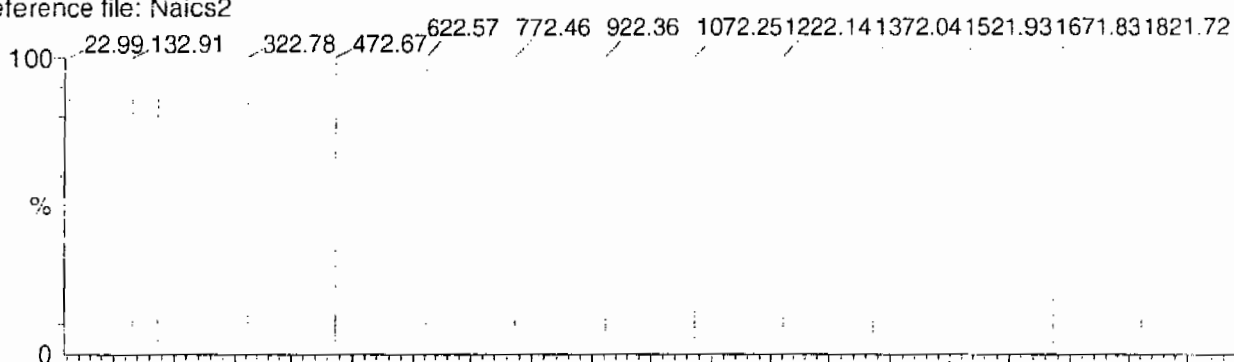
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

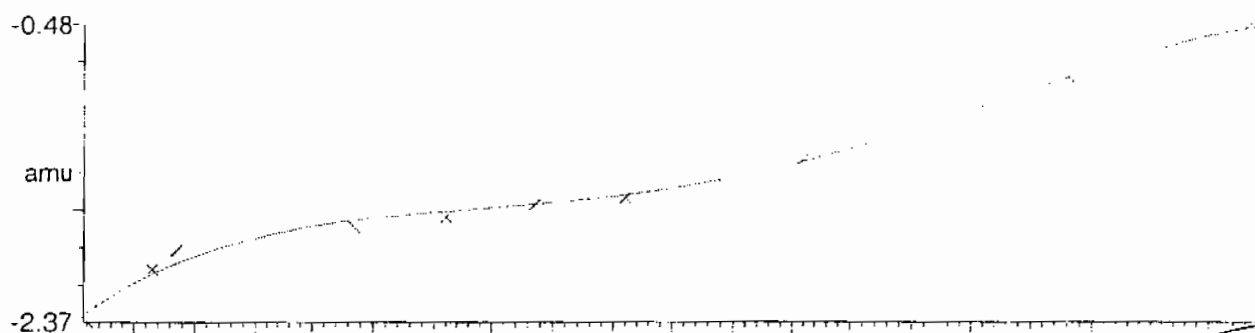
15 matches of 15 tested references



Reference file: Naics2

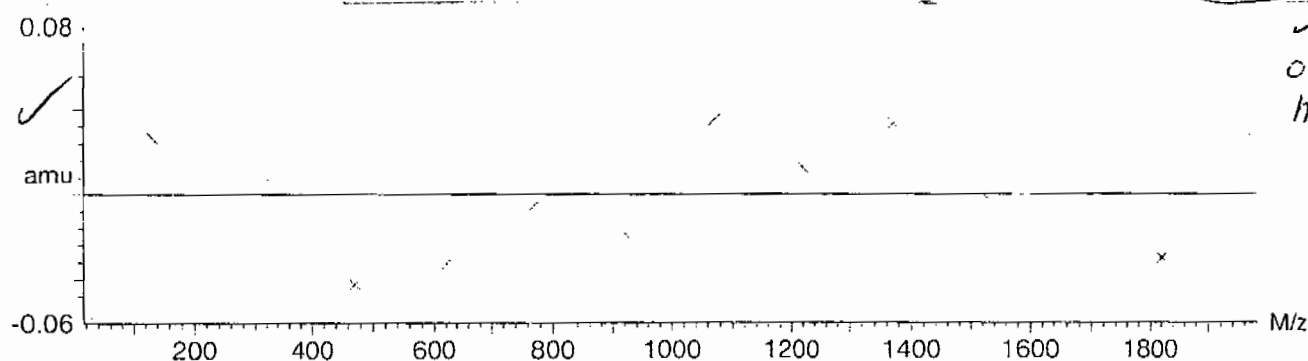


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$



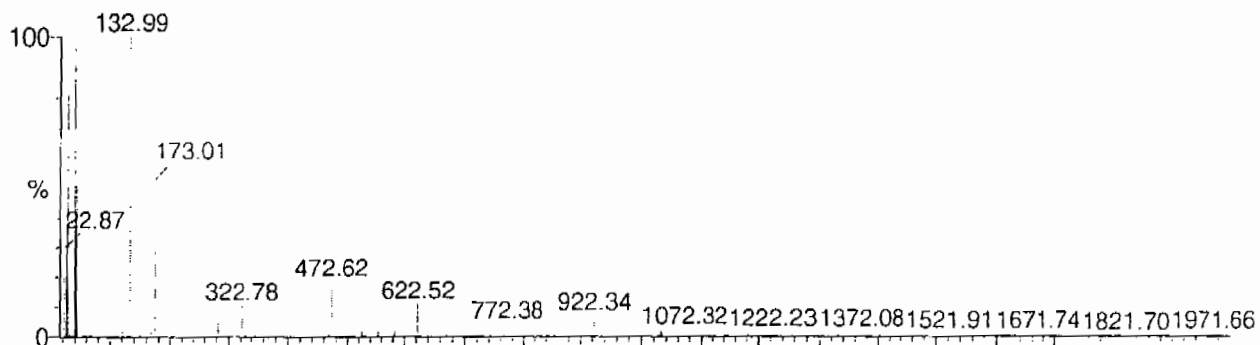
Calibration Report - MS1 Scanning

Page 1 of 1

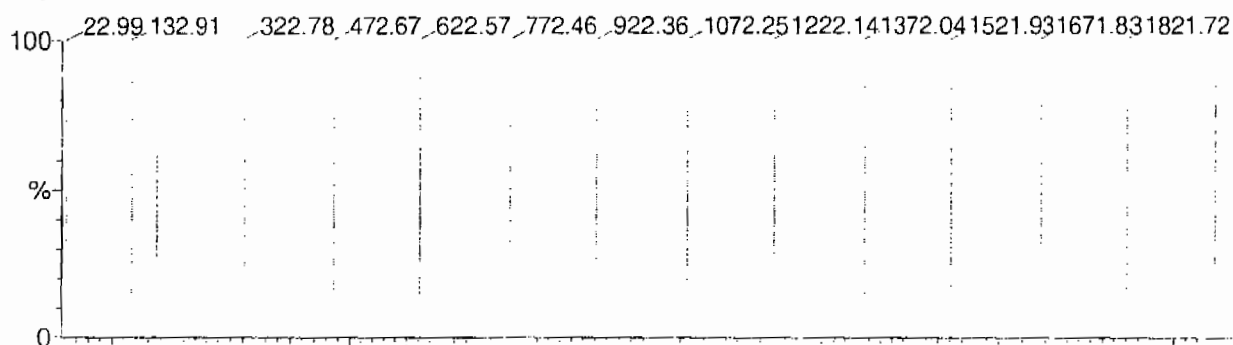
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

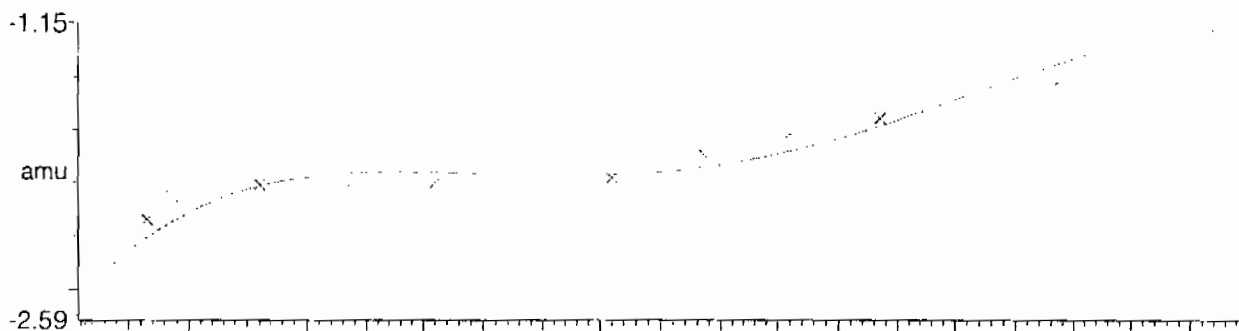
15 matches of 15 tested references



Reference file: Naics2

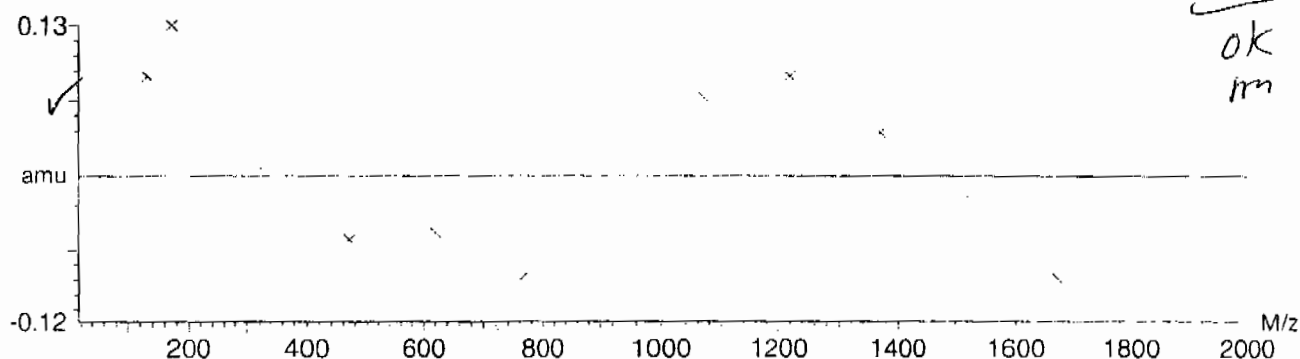


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-5.432715 \times 10^{-9} \pm 0.069858$



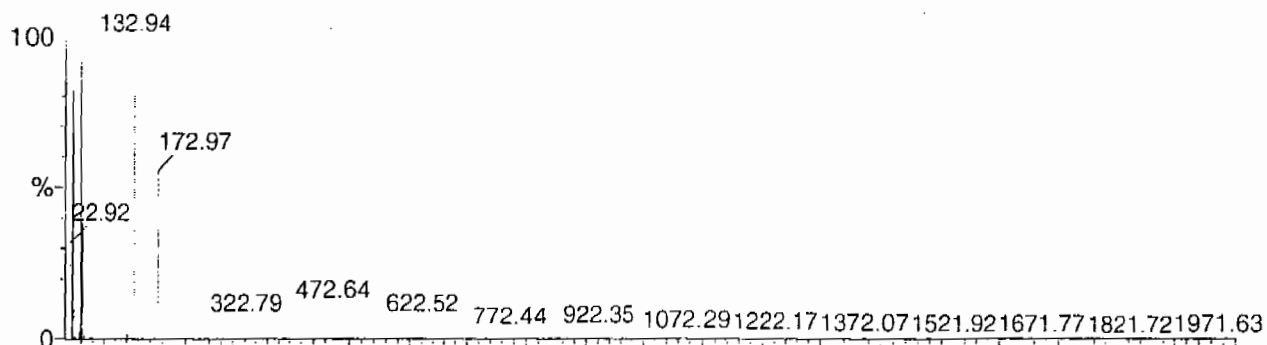
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

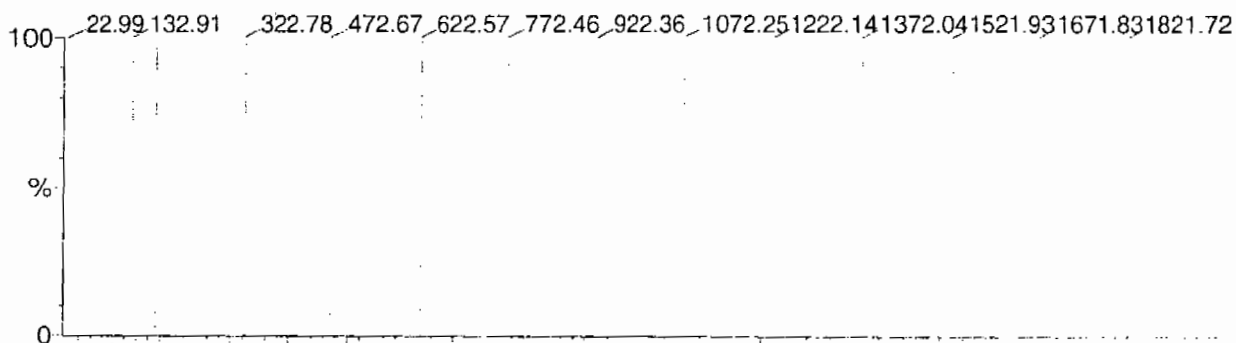
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

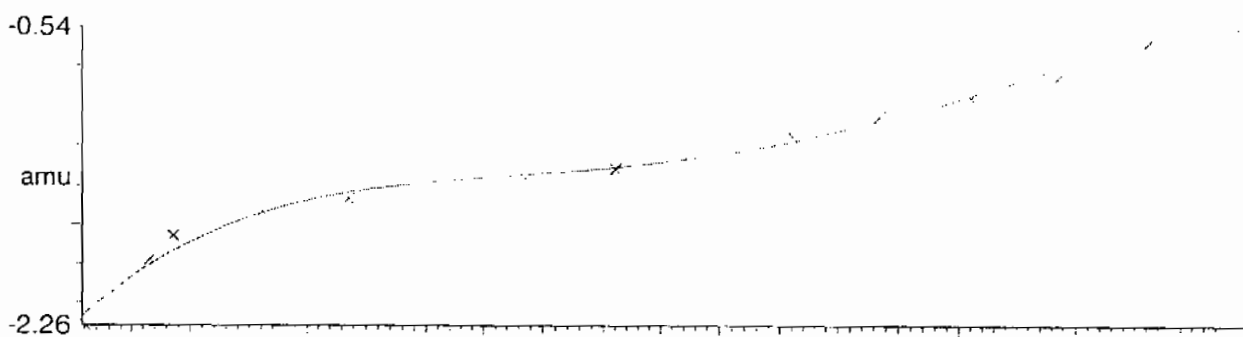
15 matches of 15 tested references



Reference file: Naics2

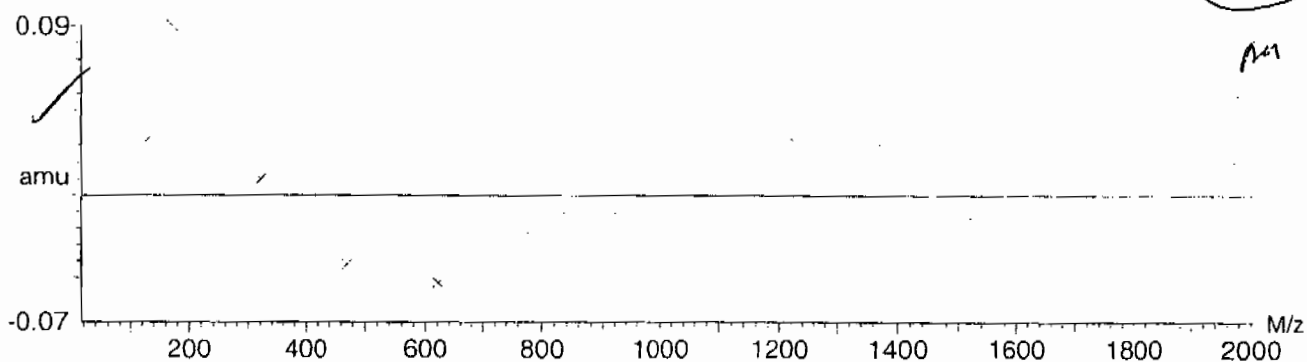


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639e-9 \pm 0.040487$



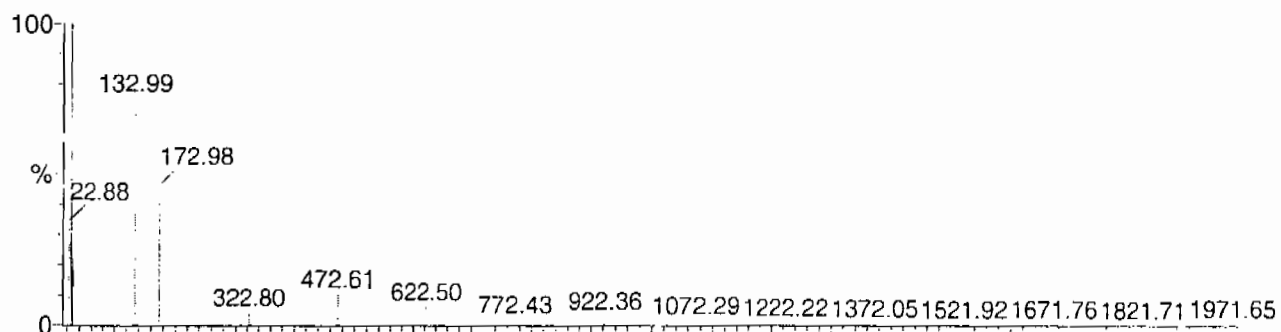
Calibration Report - MS2 Static

Page 1 of 1

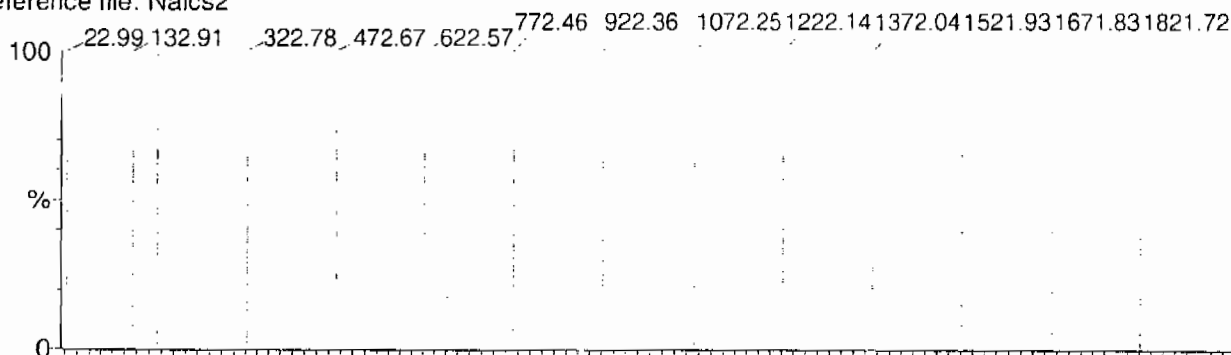
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

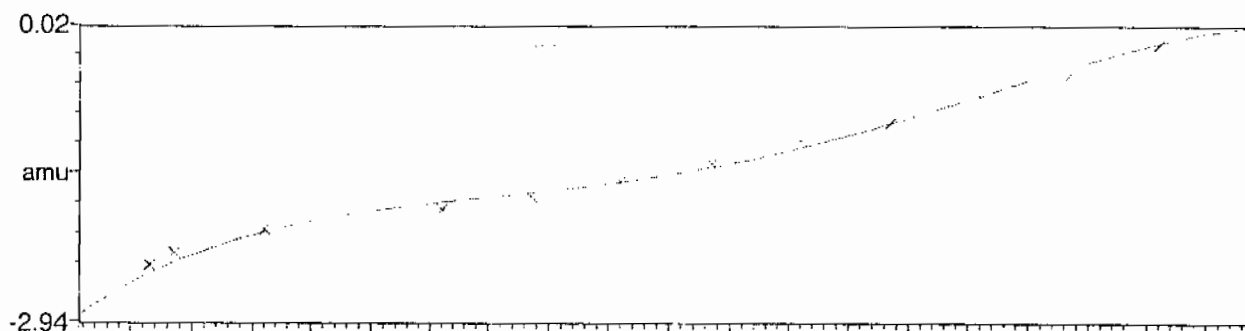
15 matches of 15 tested references



Reference file: Naics2

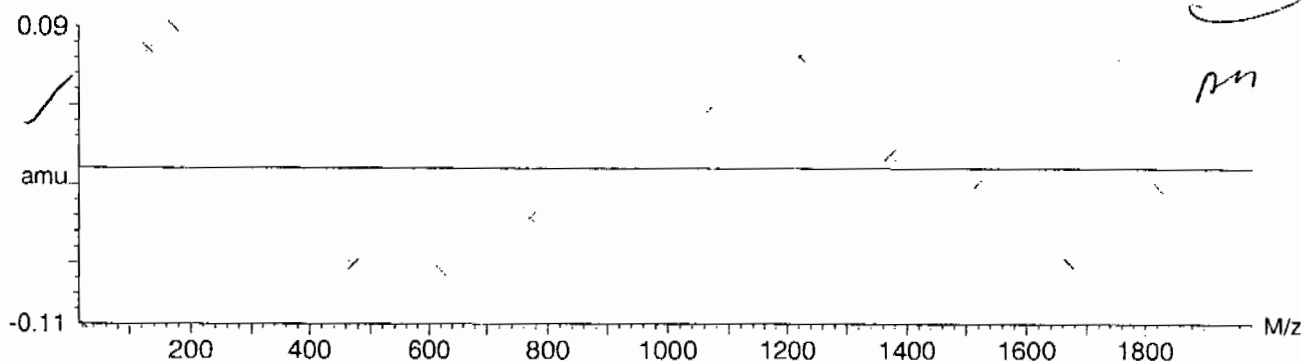


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.048910 \times 10^{-9} \pm 0.057803$



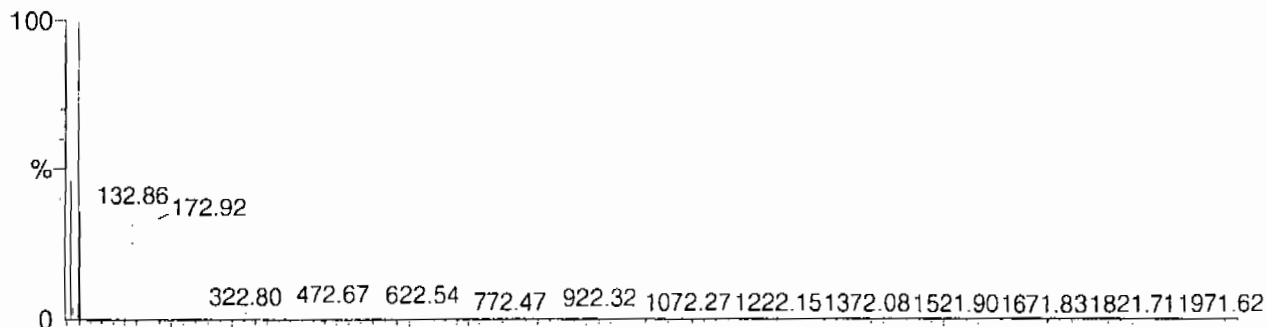
Calibration Report - MS2 Scanning

Page 1 of 1

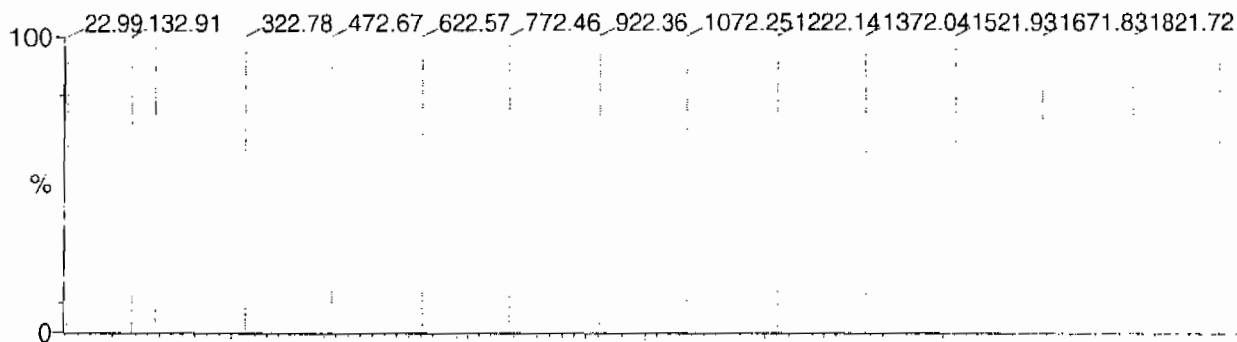
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

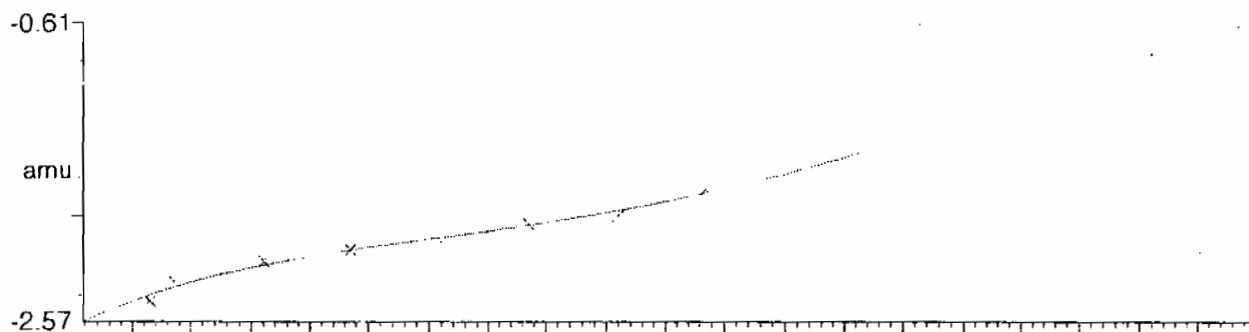
14 matches of 15 tested references



Reference file: Naics2

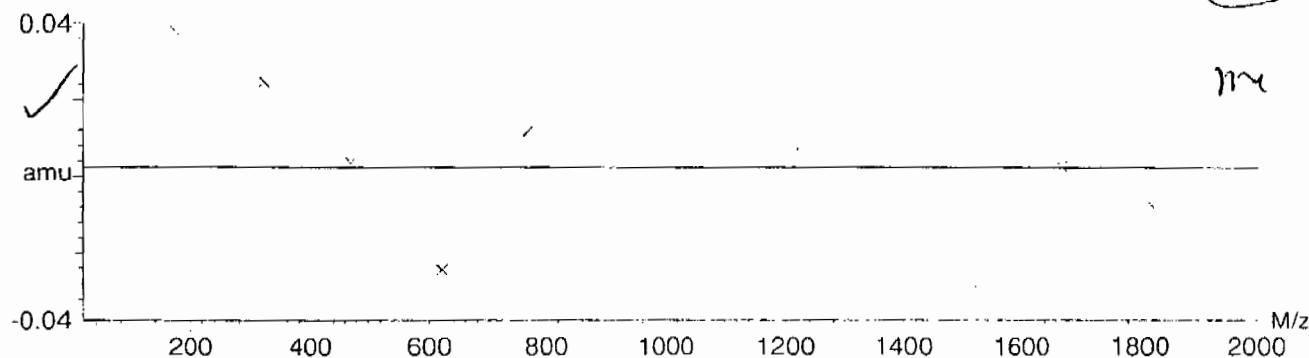


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502 \times 10^{-9} \pm 0.025622$



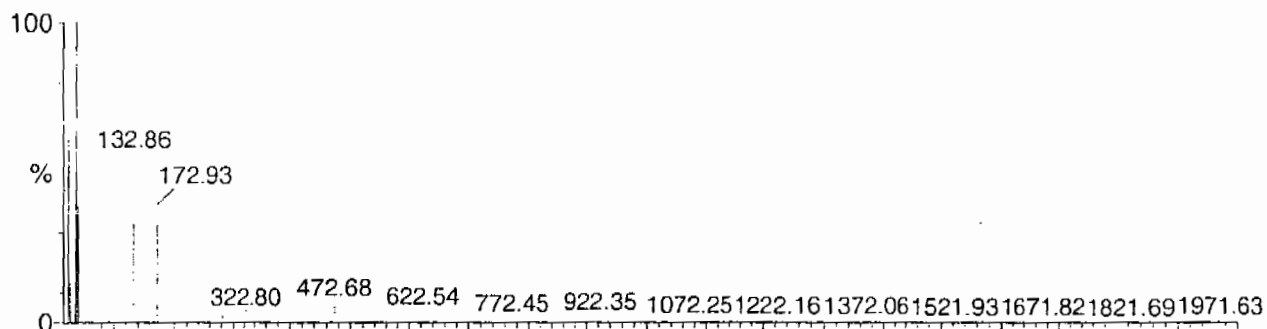
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

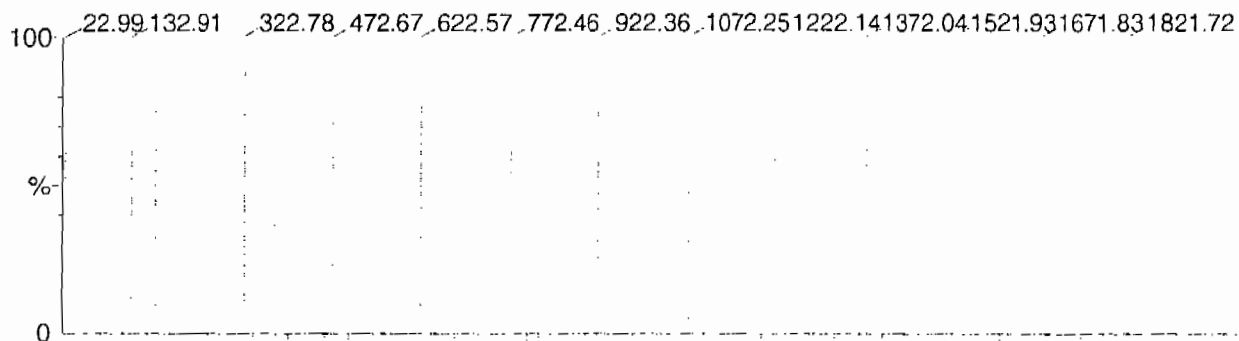
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

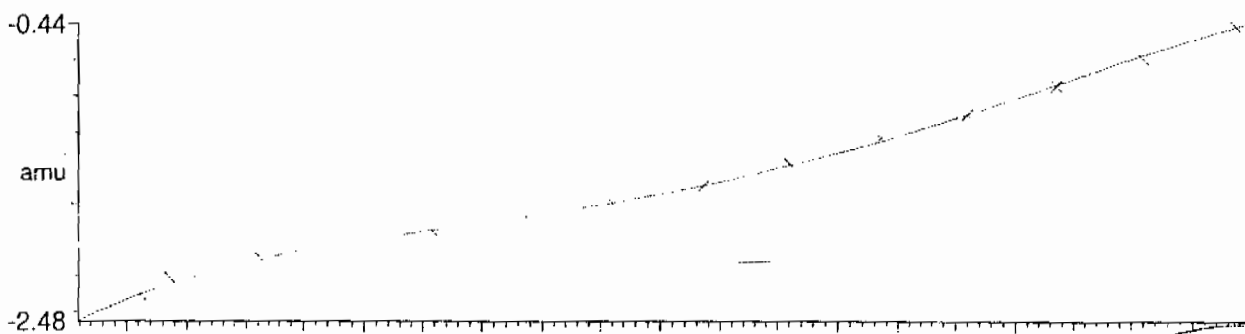
14 matches of 15 tested references



Reference file: Naics2

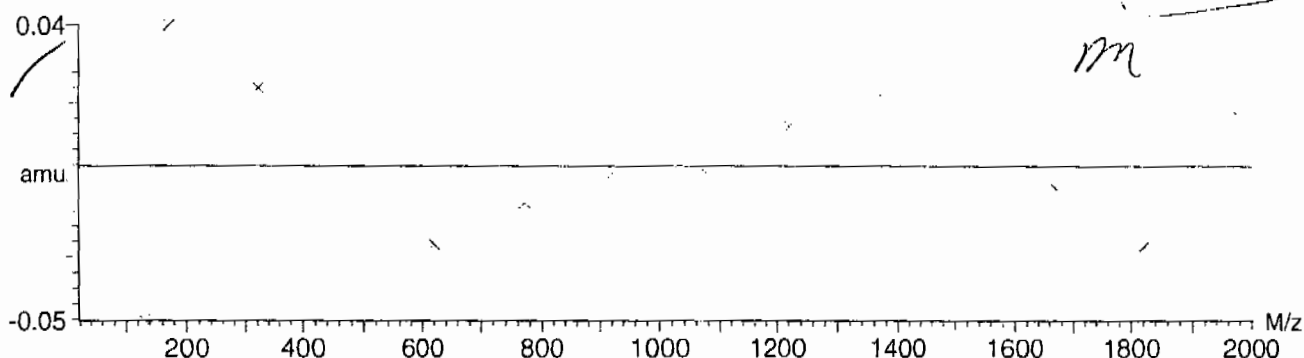


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350 \times 10^{-9} \pm 0.023134$

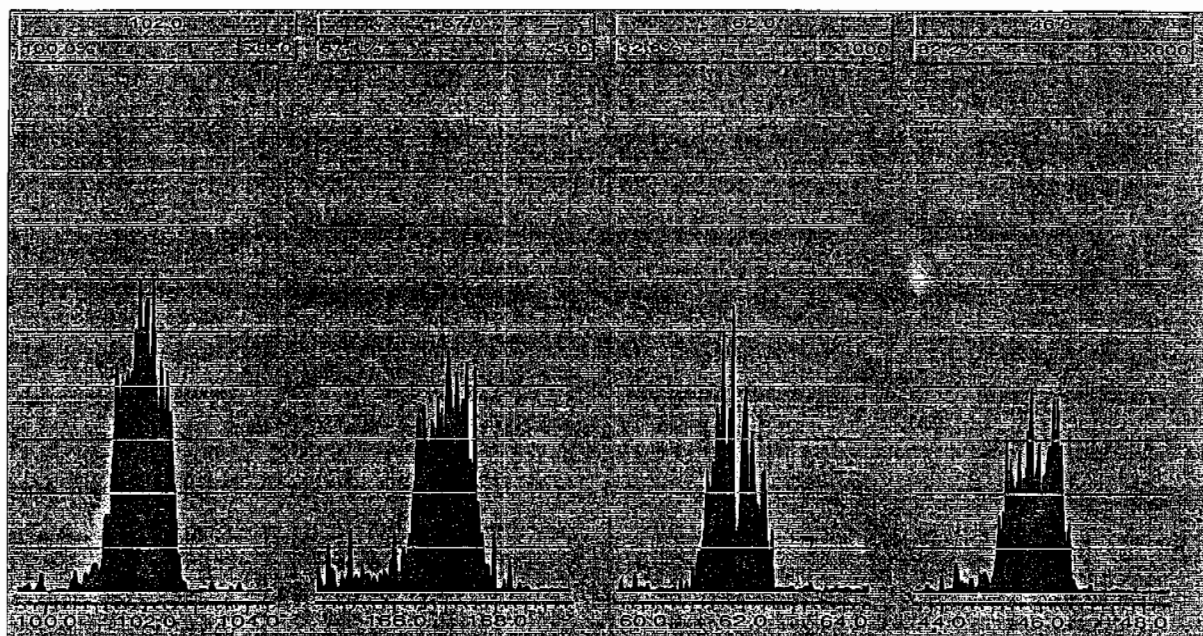


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNXNEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Mon Mar 01 15:29:45 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Instrument ID: LCMSMS

	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	RT (min) #	IS2 (DNT) (Area) #	RT2 (min) #
			2898.075	12.172	16084.817	17.641
Upper Limit			3767.4975	12.672	20910.2621	18.141
Lower Limit			2028.6525	11.672	11259.3719	17.141
MB for batch 948576	02-mar-10 13:47	EXP0301046a	3512.81	12.17	18261.5	17.641
LCS for batch 948576	02-mar-10 14:17	EXP0301047a	3334.8	12.177	19940.8	17.641
RE15-10-7980	02-mar-10 14:46	EXP0301048a	3528.33	12.168	19743.8	17.631
RE15-10-7980(245979001MS)	02-mar-10 15:16	EXP0301049a	3403.86	12.172	18800.9	17.617
RE15-10-7980(245979001MSD)	02-mar-10 15:45	EXP0301050a	3476.88	12.174	19982	17.619
RE15-10-7958	02-mar-10 16:15	EXP0301051a	3085.55	12.177	18395.4	17.619
RE15-10-7960	02-mar-10 16:44	EXP0301052a	3186.19	12.172	18322.8	17.638
RE15-10-7979	02-mar-10 17:14	EXP0301053a	3255.96	12.17	18008.2	17.62
RE15-10-7972	02-mar-10 17:43	EXP0301054a	3581.04	12.17	19986.5	17.62
RE15-10-7957	02-mar-10 18:13	EXP0301055a	3035.07	12.17	17152.8	17.619
RE15-10-7974	02-mar-10 20:11	EXP0301059a	3116.5	12.171	17523.4	17.619
RE15-10-7961	02-mar-10 20:40	EXP0301060a	3228.51	12.174	16971.1	17.619
RE15-10-7971	02-mar-10 21:10	EXP0301061a	3368.68	12.172	19838	17.639
RE15-10-7966	02-mar-10 21:39	EXP0301062a	3430.59	12.168	19655.5	17.631
RE15-10-7959	02-mar-10 22:09	EXP0301063a	3309.82	12.171	17384.2	17.642
RE15-10-7969	02-mar-10 22:38	EXP0301064a	3447.55	12.17	20135.2	17.642
RE15-10-8061	02-mar-10 23:08	EXP0301065a	3020.92	12.17	18700.8	17.64
RE15-10-8063	02-mar-10 23:37	EXP0301066a	3366.52	12.17	19432.2	17.64
RE15-10-8062	03-mar-10 15:52	EXP0301099a	3277.36	12.17	19332.2	17.597
RE15-10-7969	03-mar-10 16:21	EXP0301100a	2060.31	12.17	12755.8	17.618

IS1 (DNB) = 1,3-Dinitrobenzene-d4

IS2 (DNT) = 2,6-Dinitrotoluene-d2

Area Upper Limit = + 30% of average IS area from multipoint calibration

Area Lower Limit = - 30% of average IS area from multipoint calibration

RT Upper Limit = +0.5 of average multipoint RT

RT Lower Limit = -0.5 of average multipoint RT

Column used to flag values outside QC limits with an asterisk

* Values outside of QC limits

SAMPLE DATA

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979001

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301048a

Date Analyzed: 02-MAR-10 14:46

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0301048a

Date: 02-Mar-2010

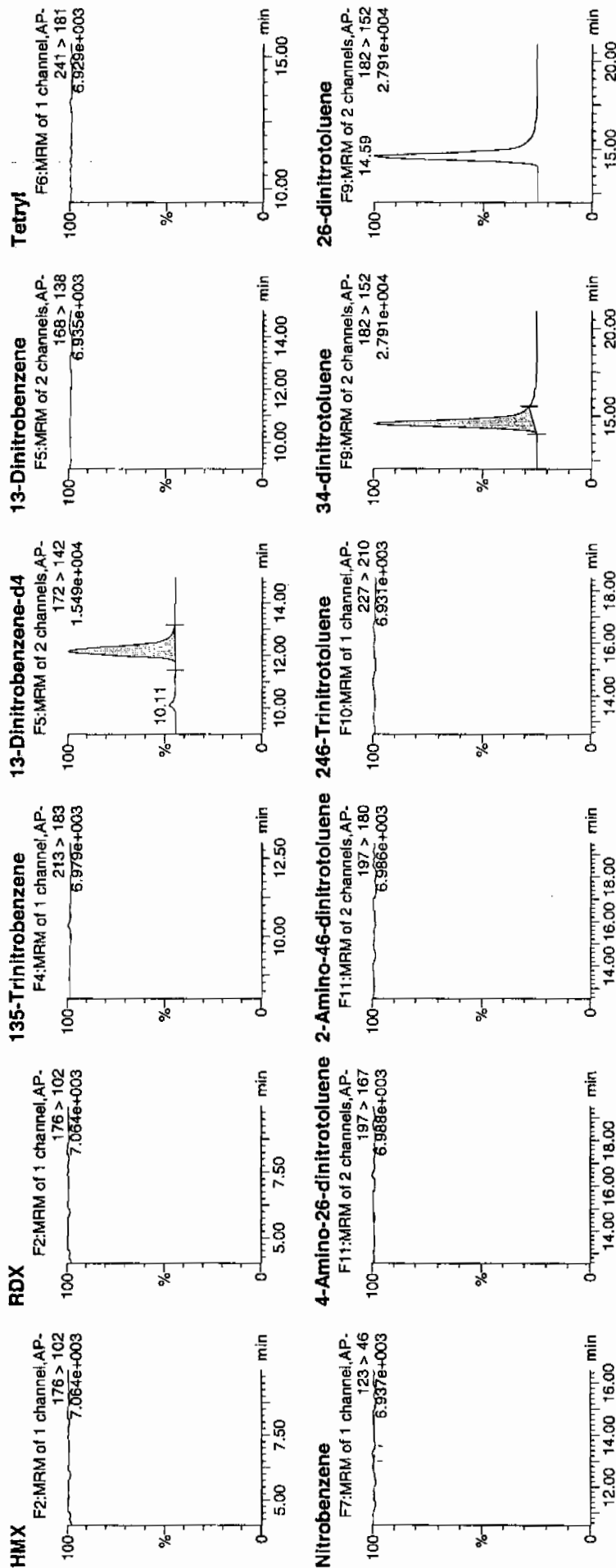
Time: 14:46:43

ID: 245979001

Vial: 2:5,C

LC# 3/3/10

Vanu 948577 / 8022 / 2

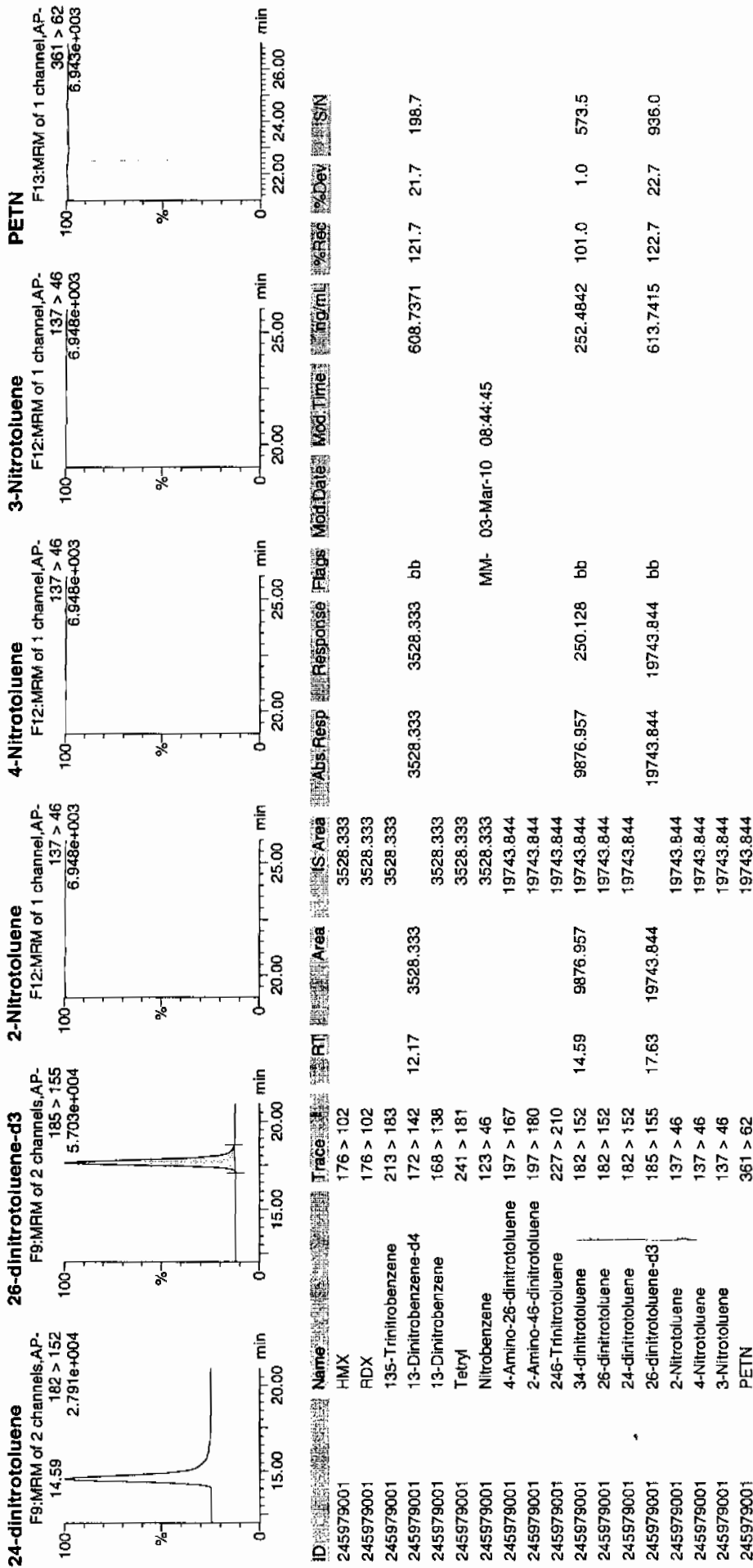


Amu 104/10

Printed: Wed Mar 03 09:10:52 2010, Page 32 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979001

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220046.wiff

Date Analyzed: 23-FEB-10 04:49

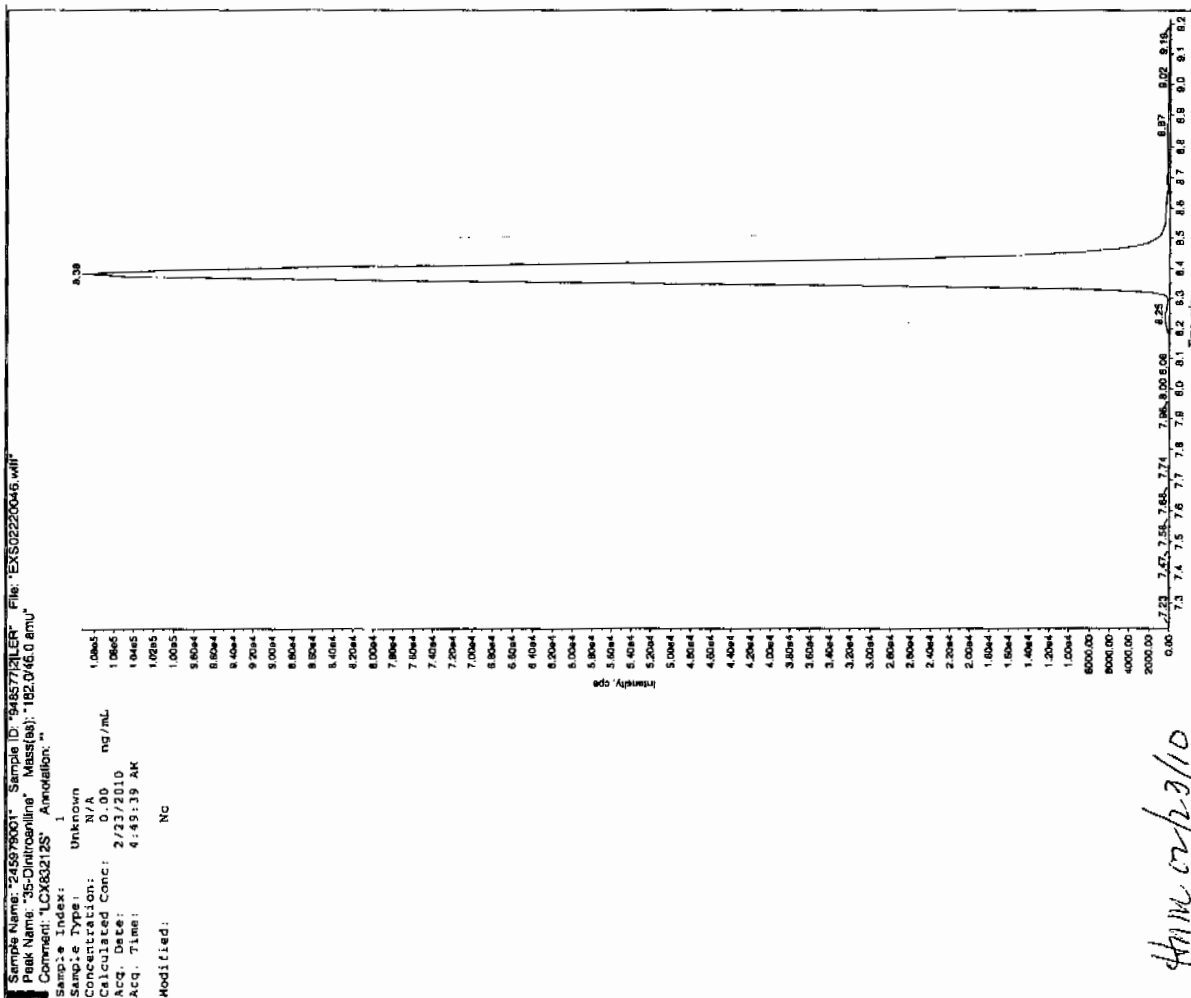
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

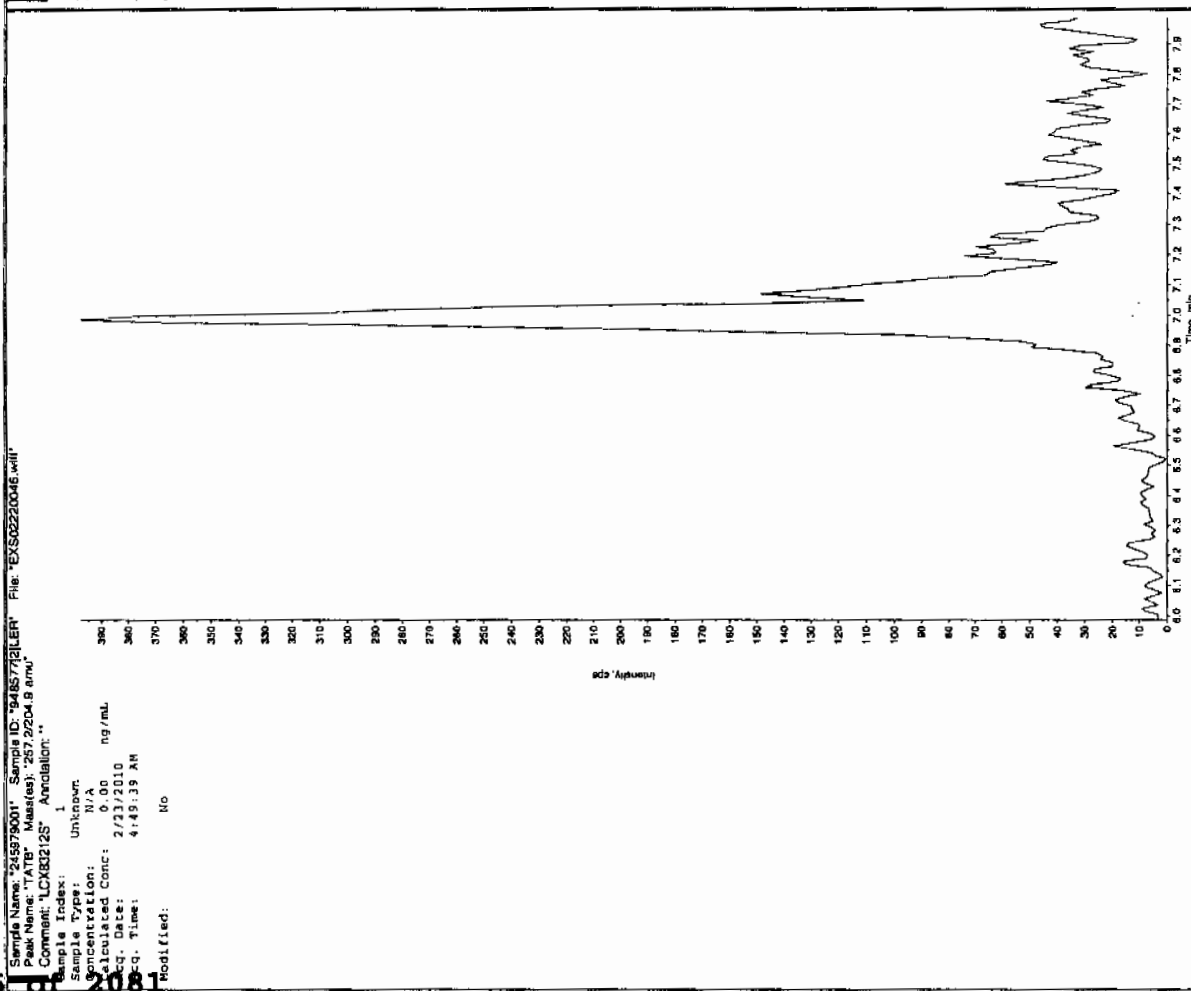
*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

See 2/23/10



4/11/10 02/23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

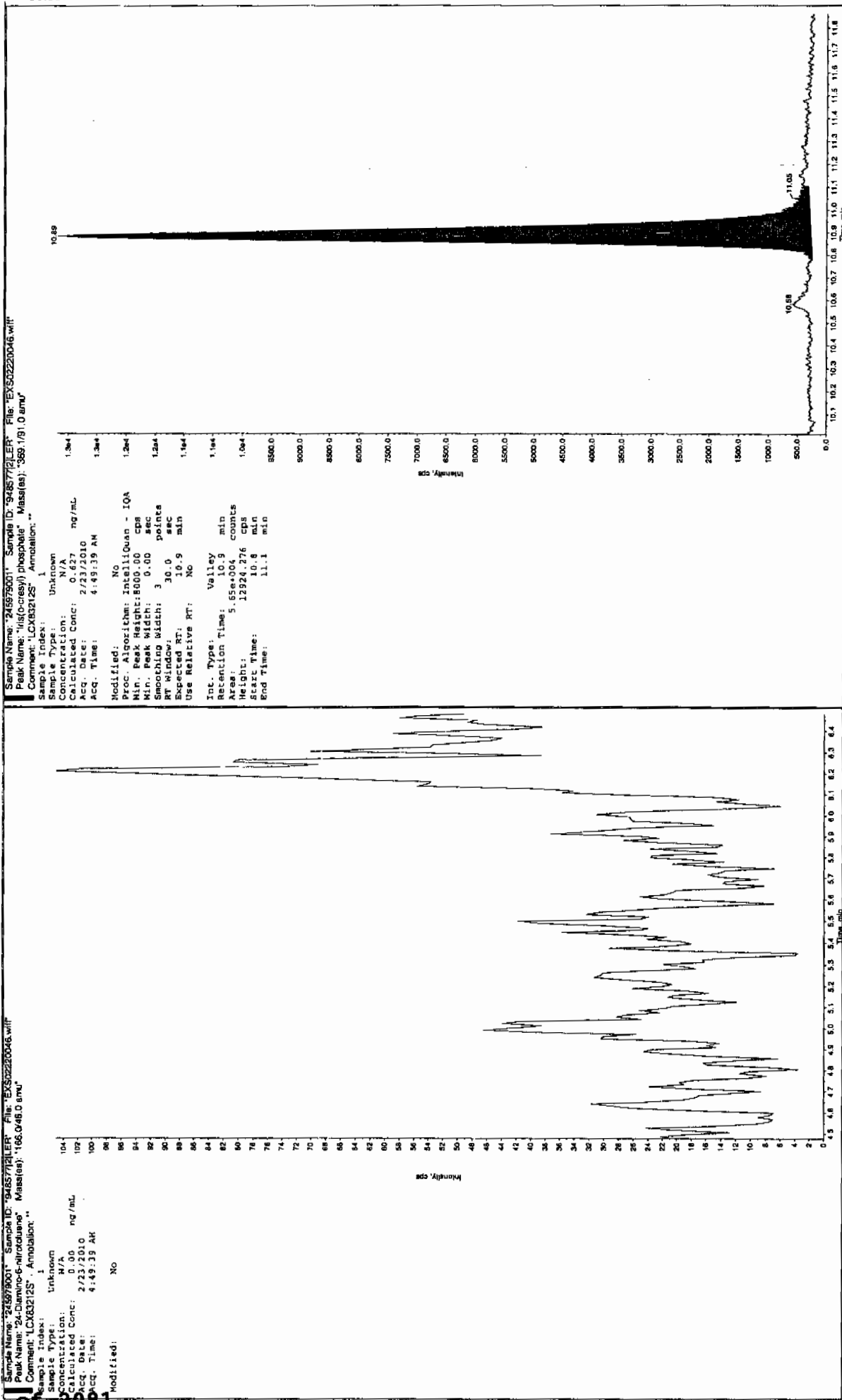
Sample Name: '245979001' Sample ID: '948577121ER' File: 'EX502220046.wit'
 Peak Name: '26-Diamino-4-Nitrocoucine' Mass(es): '166.0460 amu'
 Comment: 'LCX0212S' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 4:49:39 AM
 Modified: No



Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 4:49:39 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 4.51e+006 counts
 Height: 1110311.006 cps
 Start Time: 8.27 min
 End Time: 8.72 min

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7958

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979002

Sample Amount 2

Moisture: 19.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301051a

Date Analyzed: 02-MAR-10 16:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Printed: Wed Mar 03 09:10:52 2010, Page 37 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0301051a

Date: 02-Mar-2010

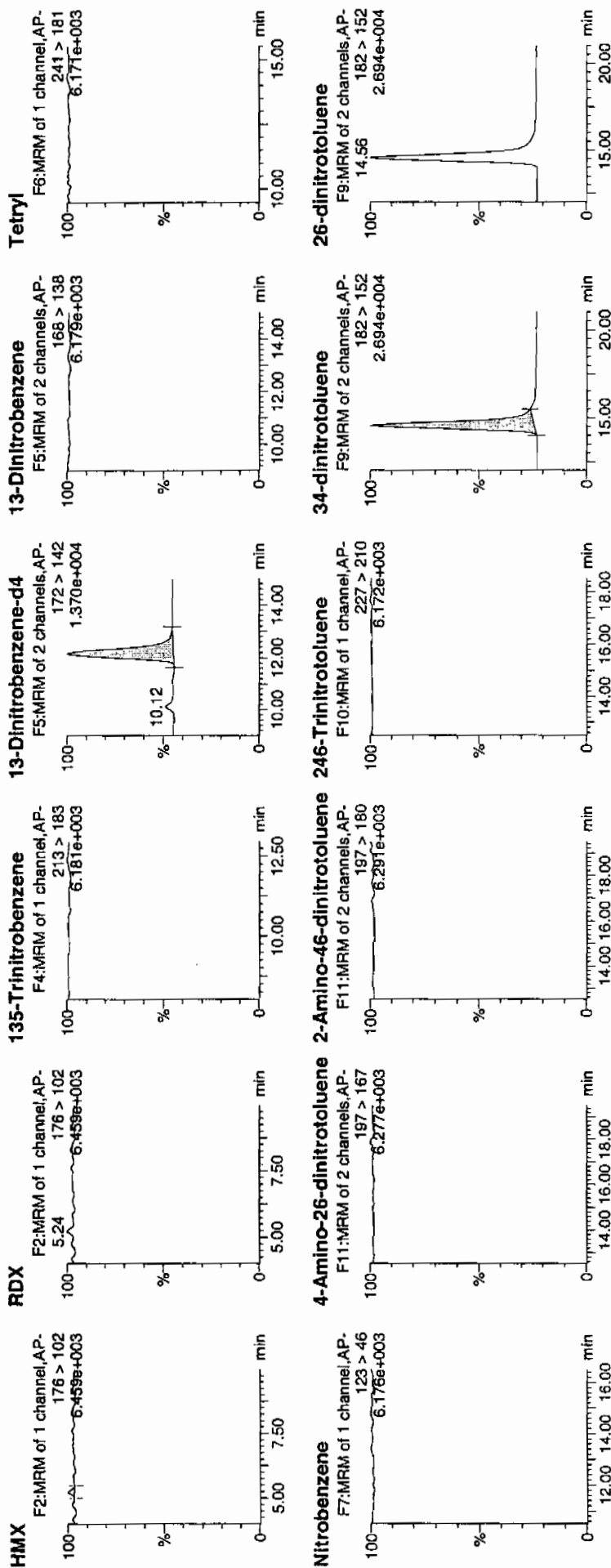
Time: 16:15:11

ID: 245979002

Vial: 2:5,F

10.12
3/3/10

Handwritten: 948577 / 8022 / 21

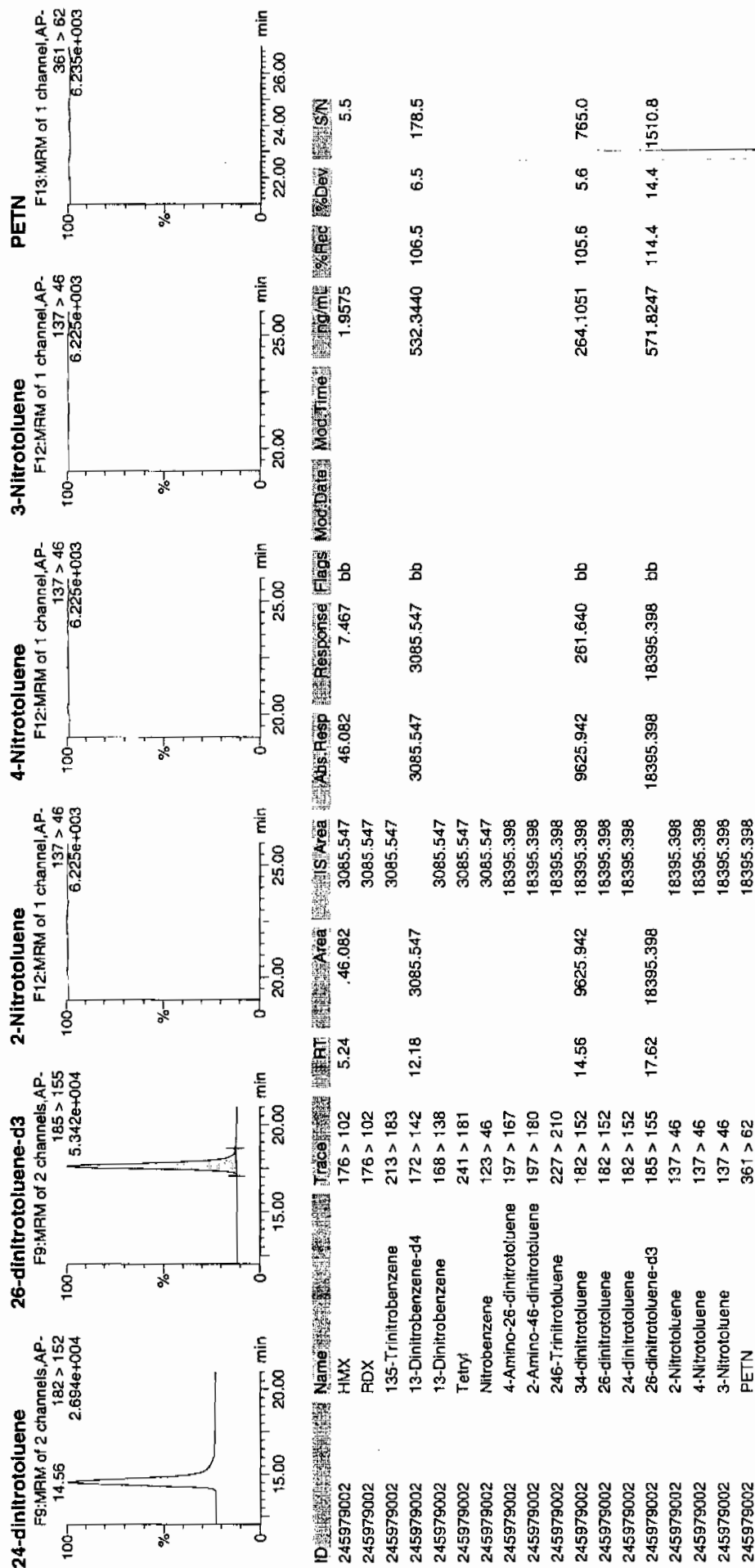


Handwritten: 03/04/10

Printed: Wed Mar 03 09:10:52 2010, Page 38 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7958

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979002

Sample Amount 2

Moisture: 19.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220049.wiff

Date Analyzed: 23-FEB-10 05:36

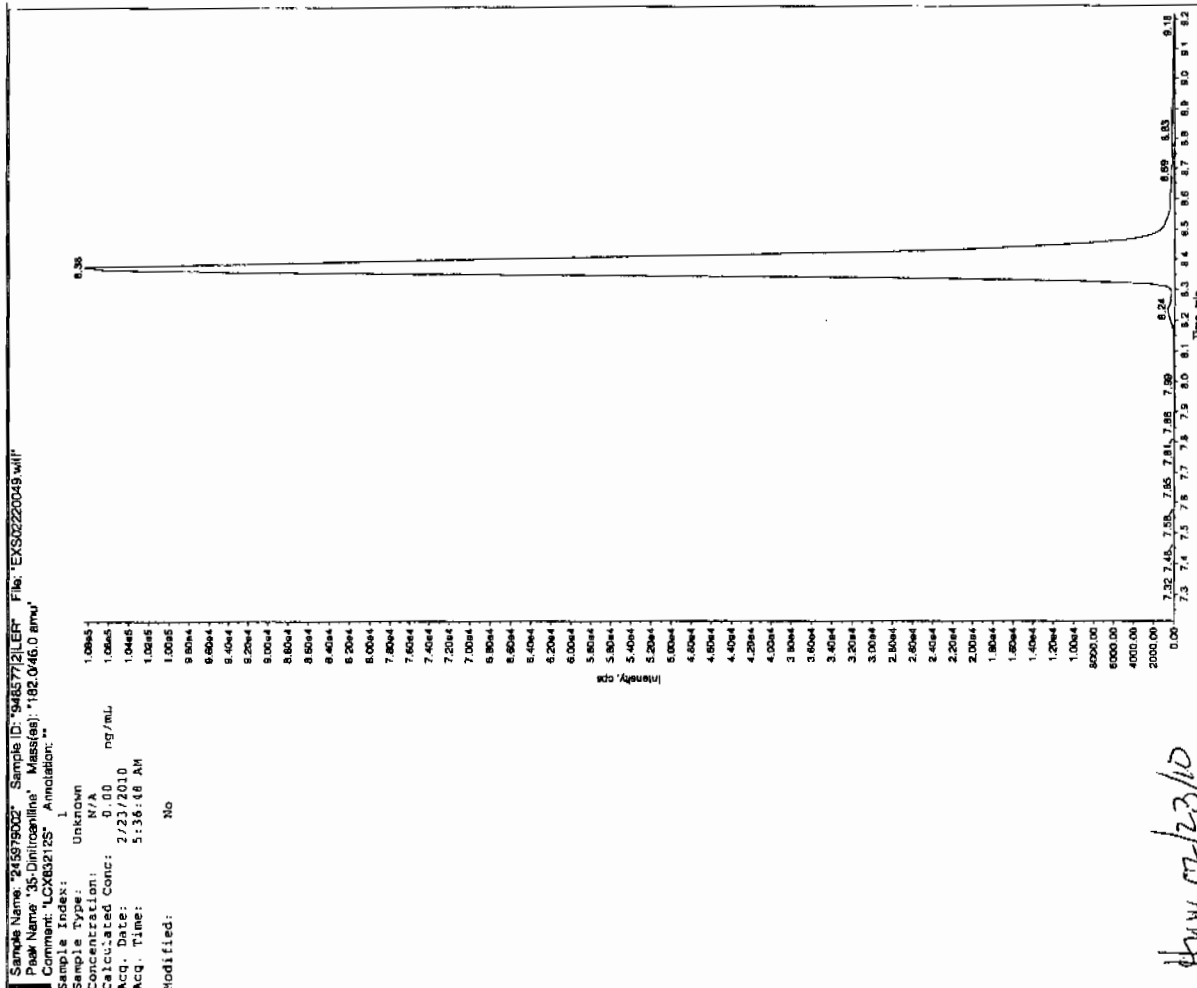
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

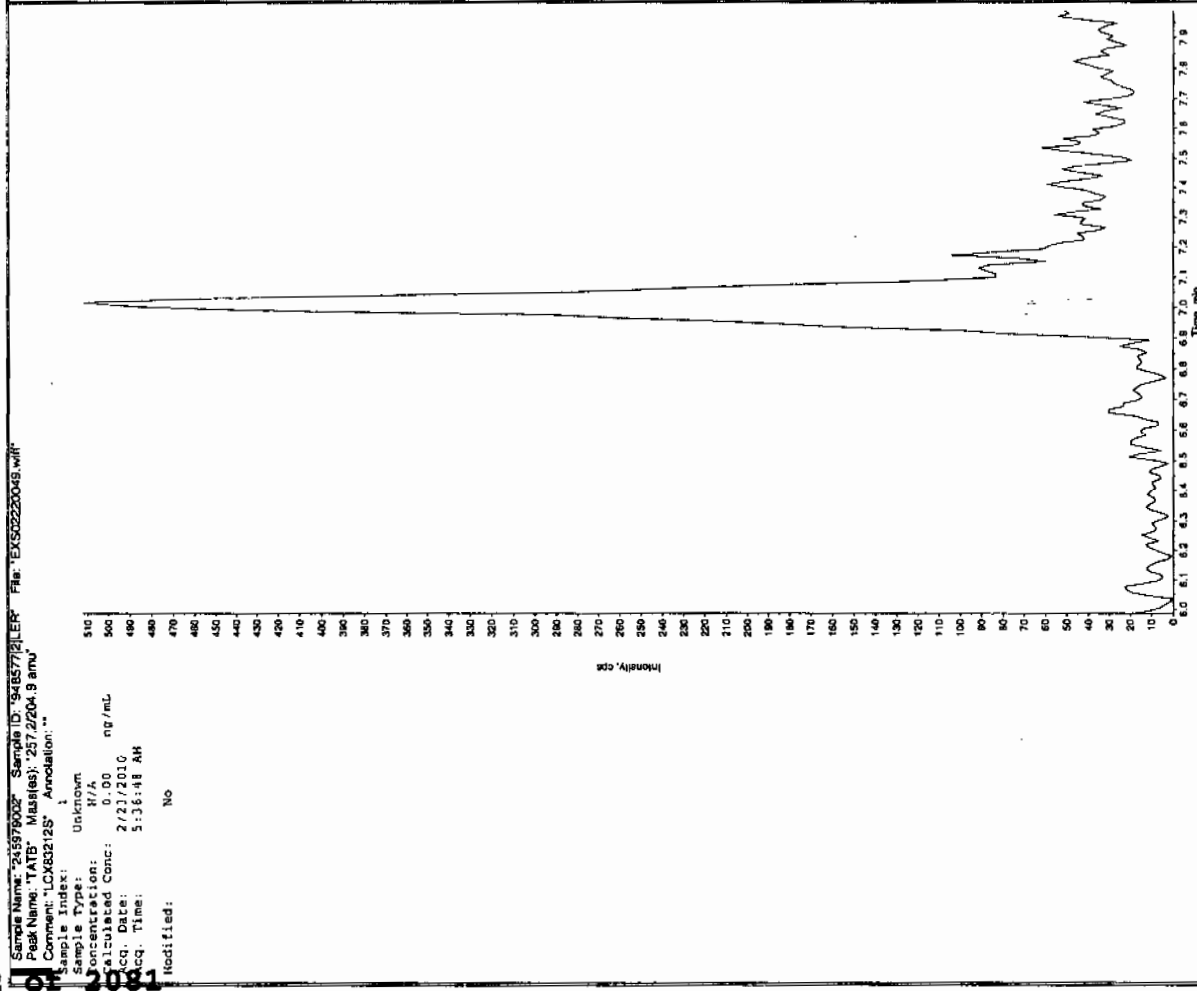
*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

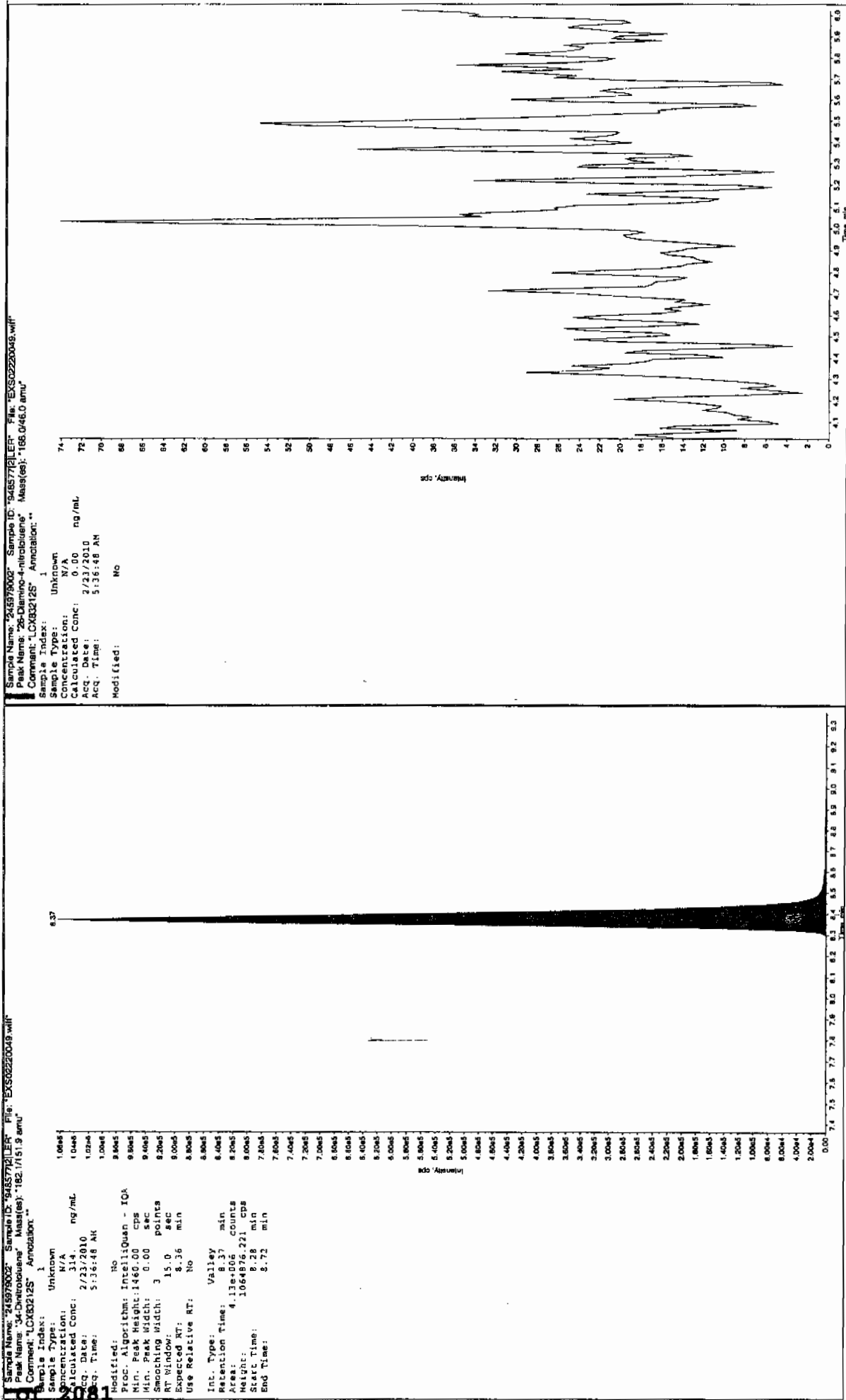
Jan 2/20/10



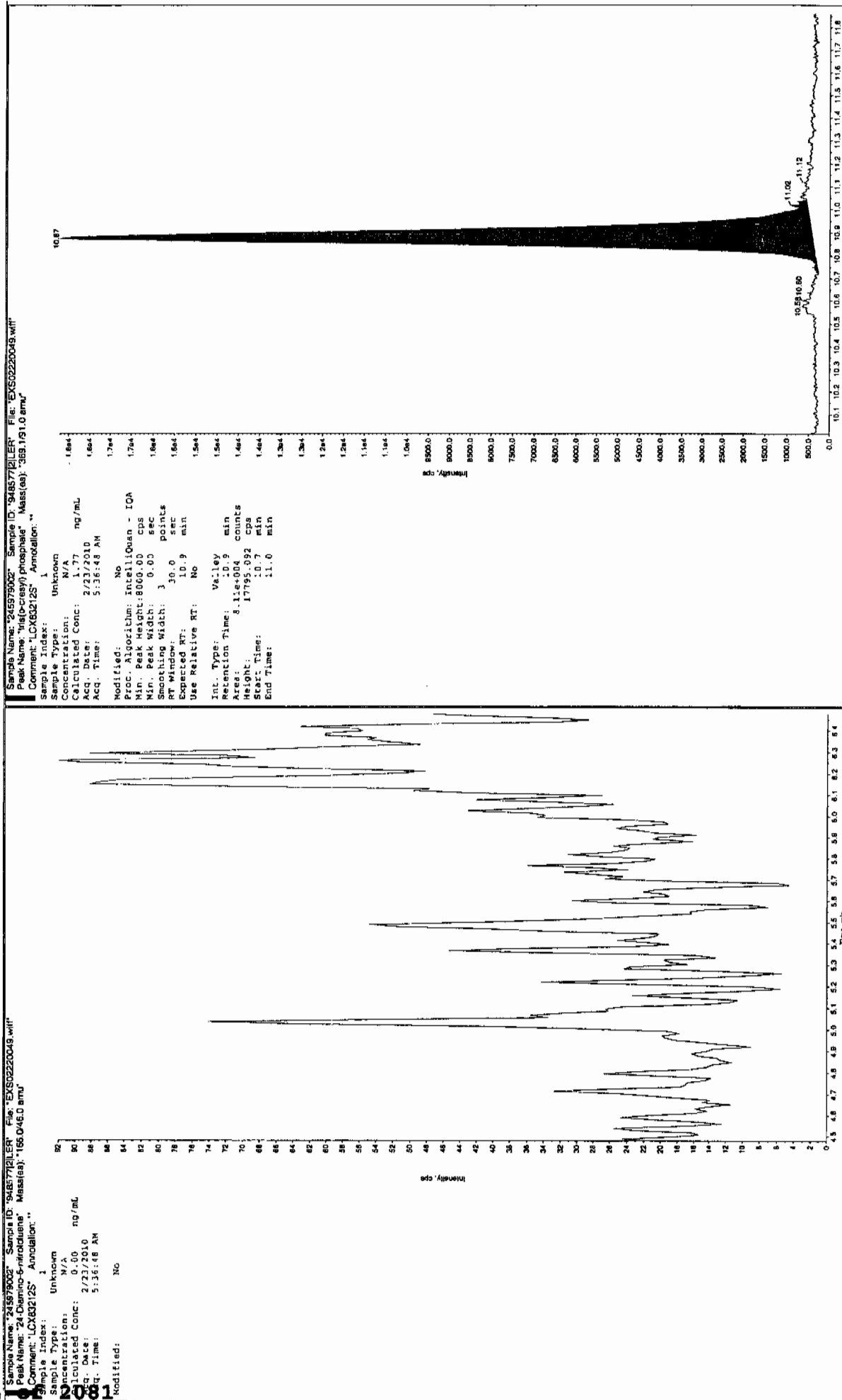
Jan 23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7960

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979003

Sample Amount 2

Moisture: 6.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301052a

Date Analyzed: 02-MAR-10 16:44

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qid, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301052a

Date: 02-Mar-2010

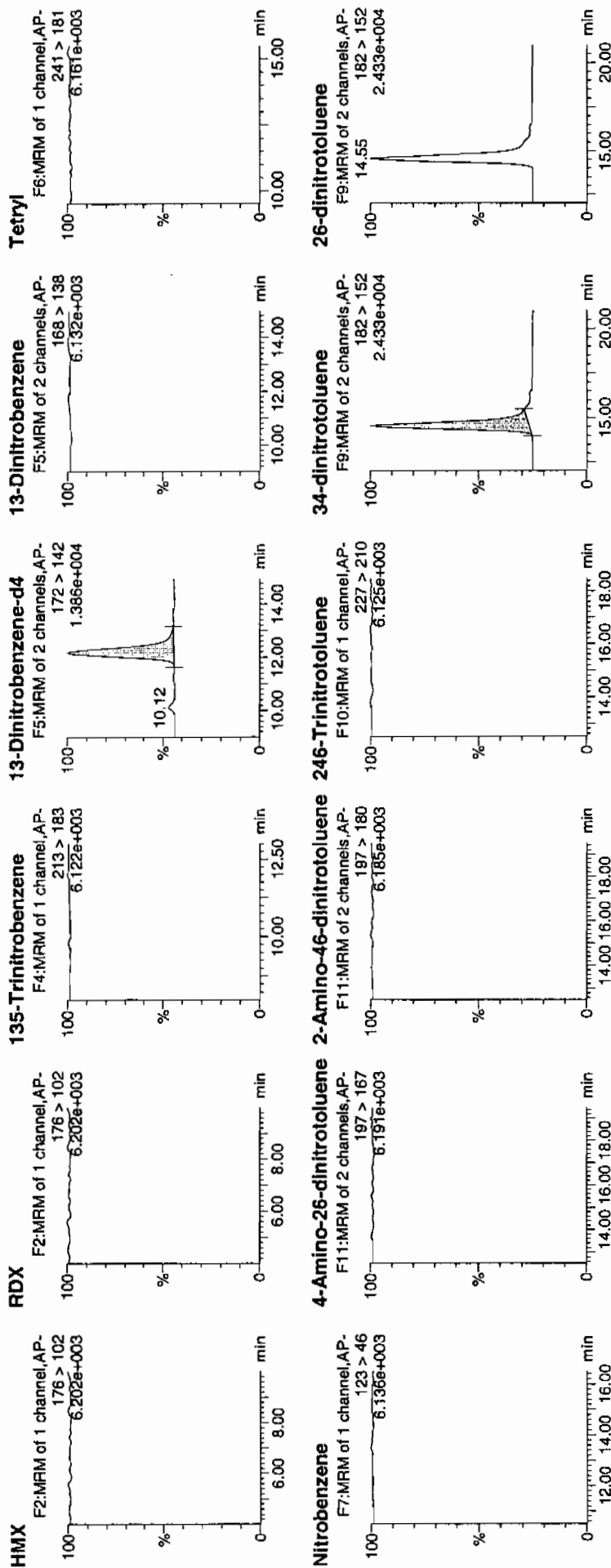
Time: 16:44:39

ID: 245979003

Vial: 2:6,A

1677
3/3/10

1948577 / 8025 / 21

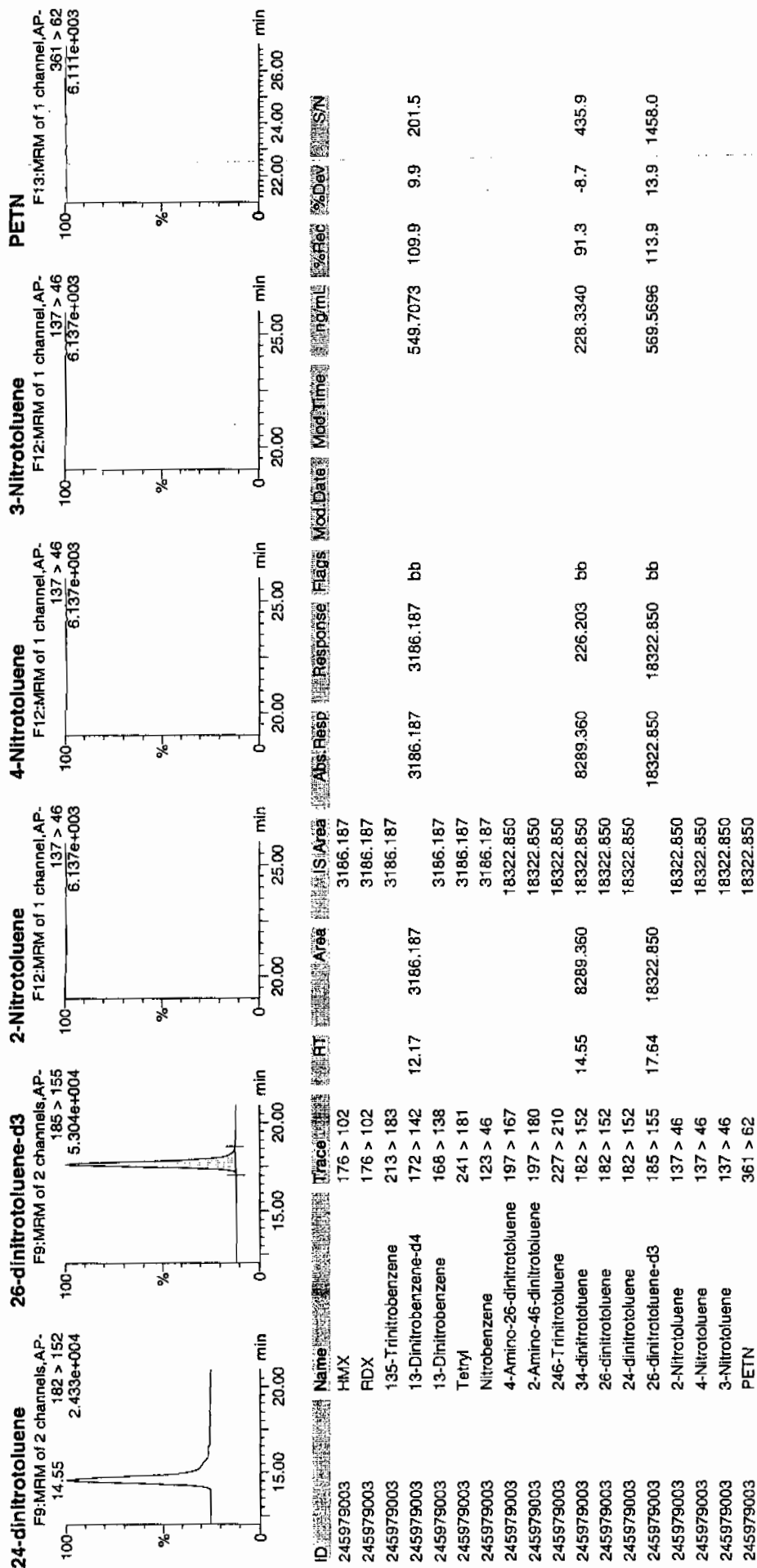


47111
03/04/10

Printed: Wed Mar 03 09:10:52 2010, Page 40 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7960

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979003

Sample Amount 2

Moisture: 6.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240014.wiff

Date Analyzed: 24-FEB-10 13:22

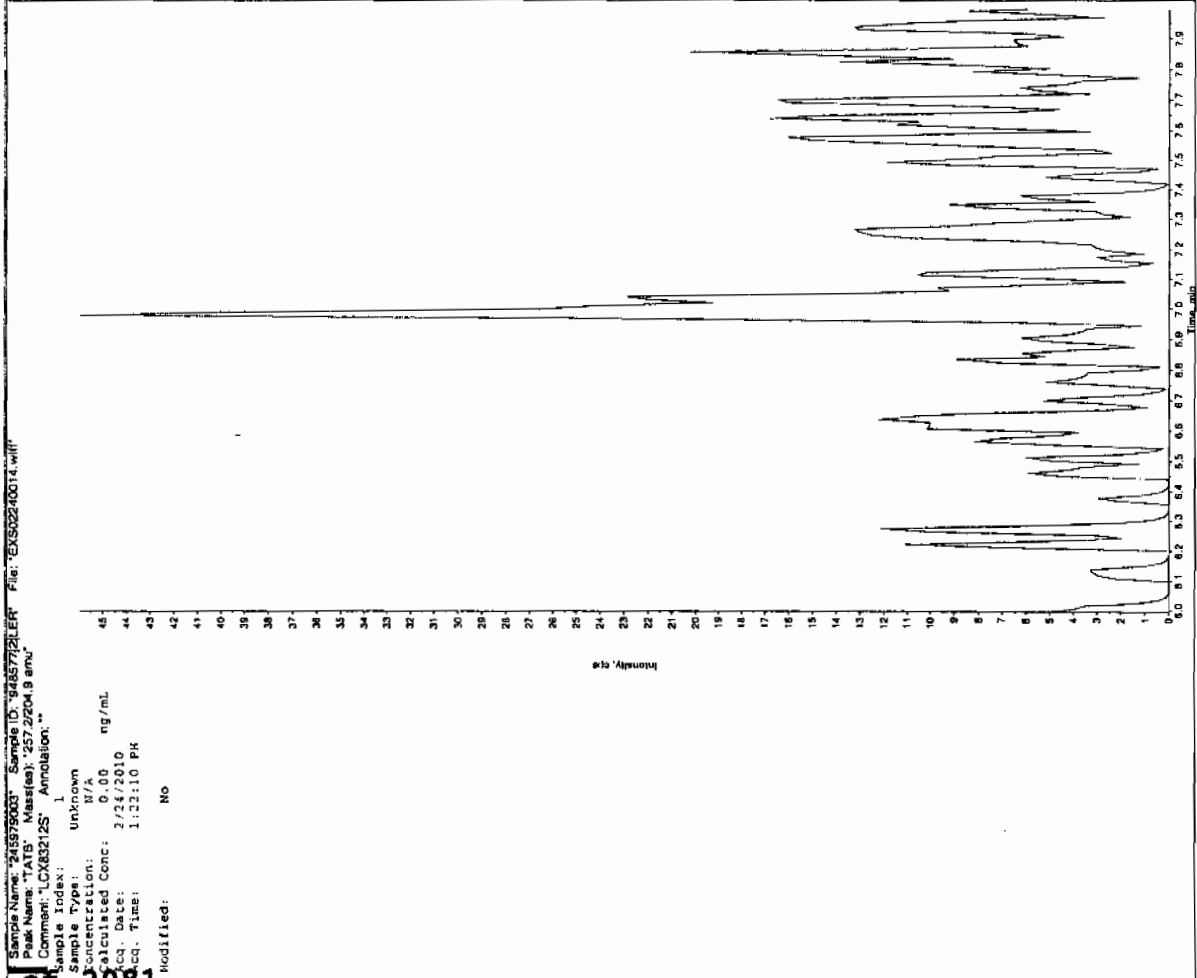
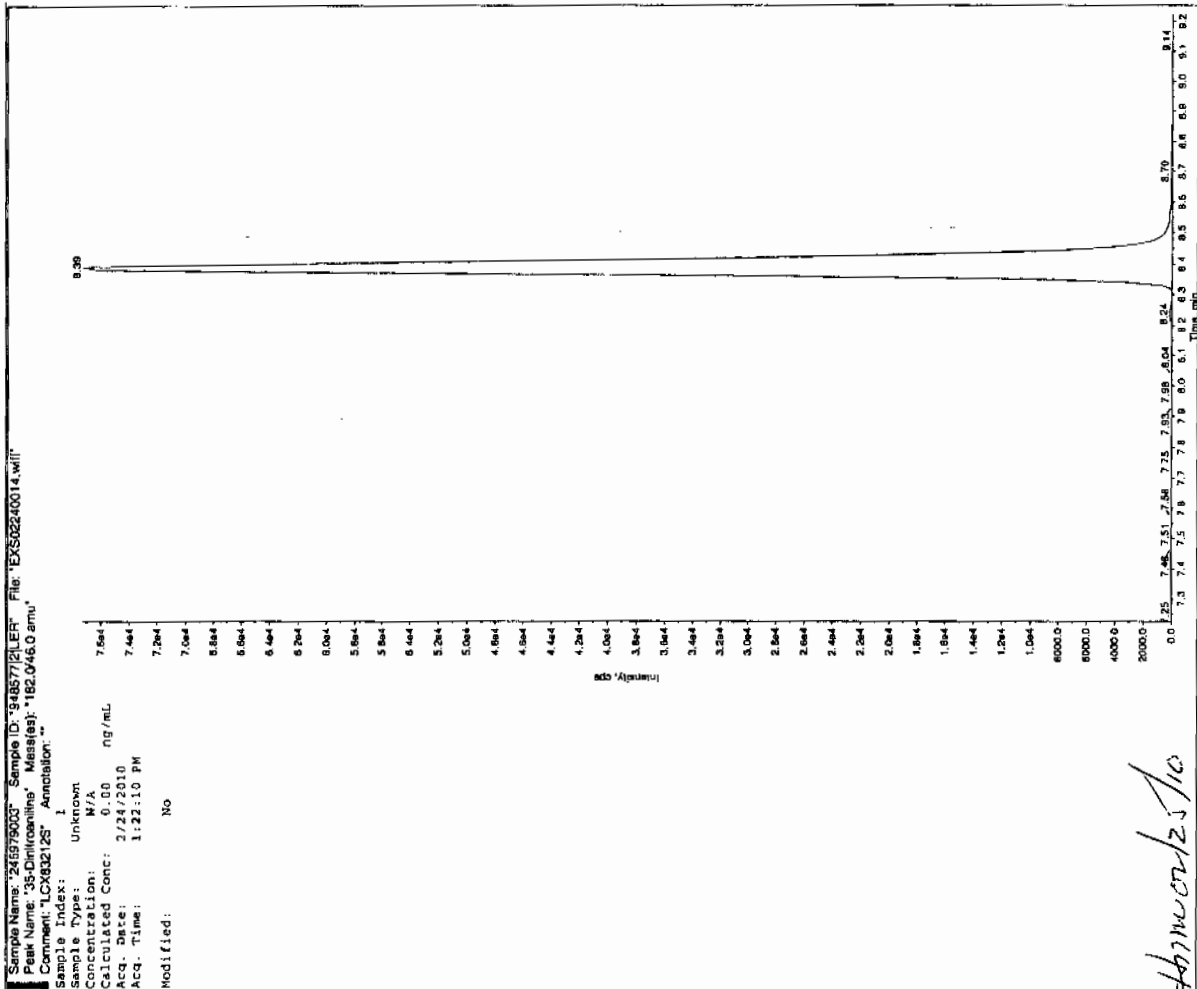
Units: ug/kg

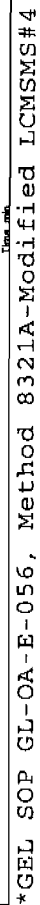
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

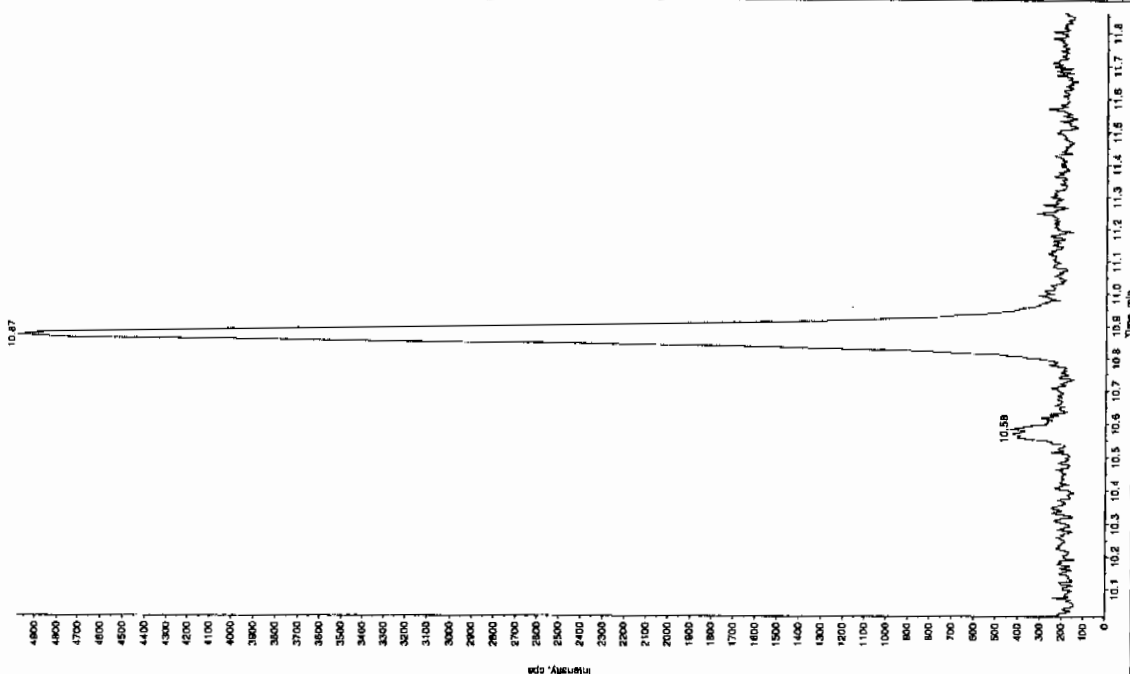
Jan 2/25/10





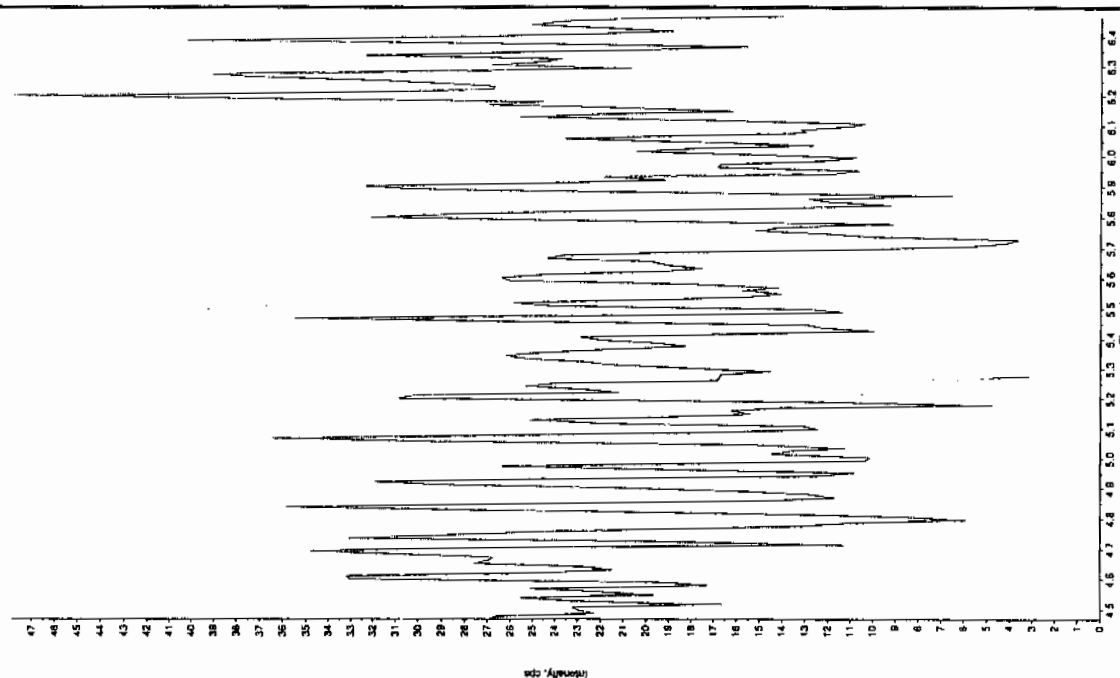
Sample Name: "245979003" Sample ID: "94057721ER" File: "EXS02240014.wif"
 Peak Name: "1,6-Di-tert-butyl phosphate" Mass(es): "359.191.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:22:10 PM
 Modified: No



Sample Name: "245979003" Sample ID: "94057721ER" File: "EXS02240014.wif"
 Peak Name: "24-Di-tert-butyl phosphate" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:22:10 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7979

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979004

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301053a

Date Analyzed: 02-MAR-10 17:14

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Printed: Wed Mar 03 09:10:52 2010, Page 41 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0301053a

Date: 02-Mar-2010

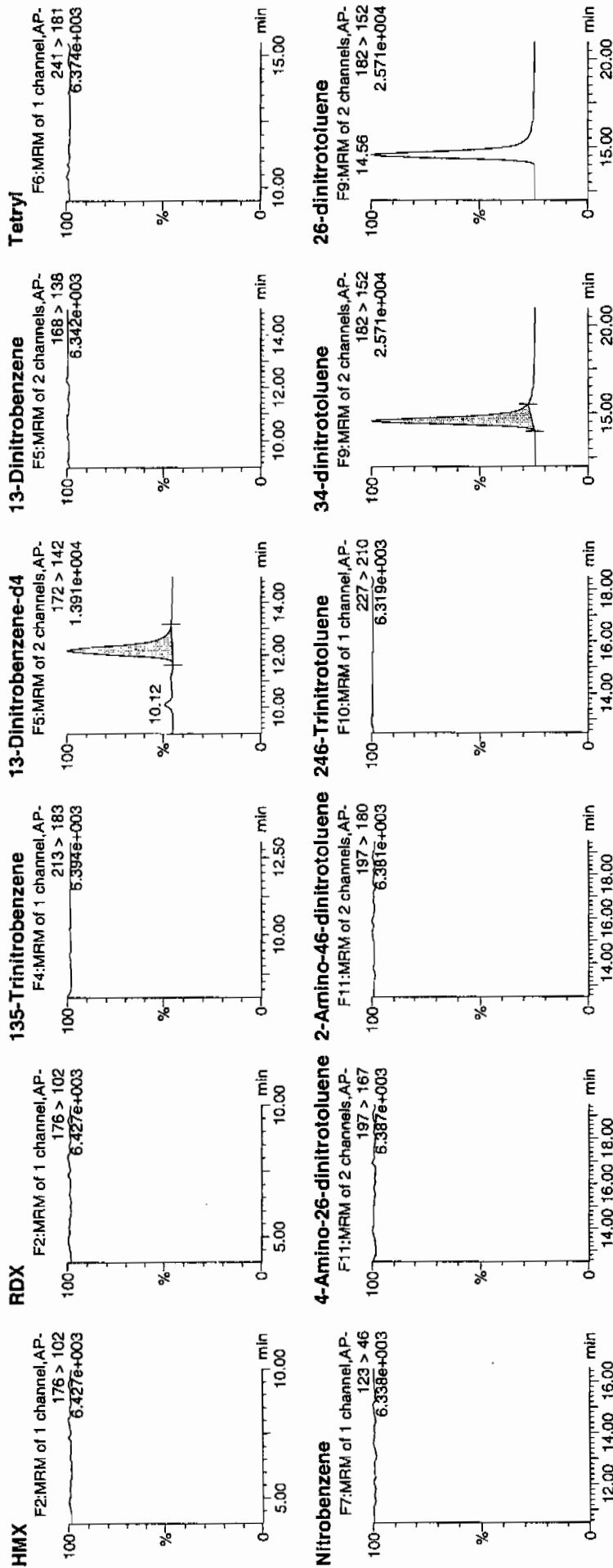
Time: 17:14:10

ID: 245979004

Vial: 2:6,B

MA
3/3/10

WAV 948577 / Sars / 21

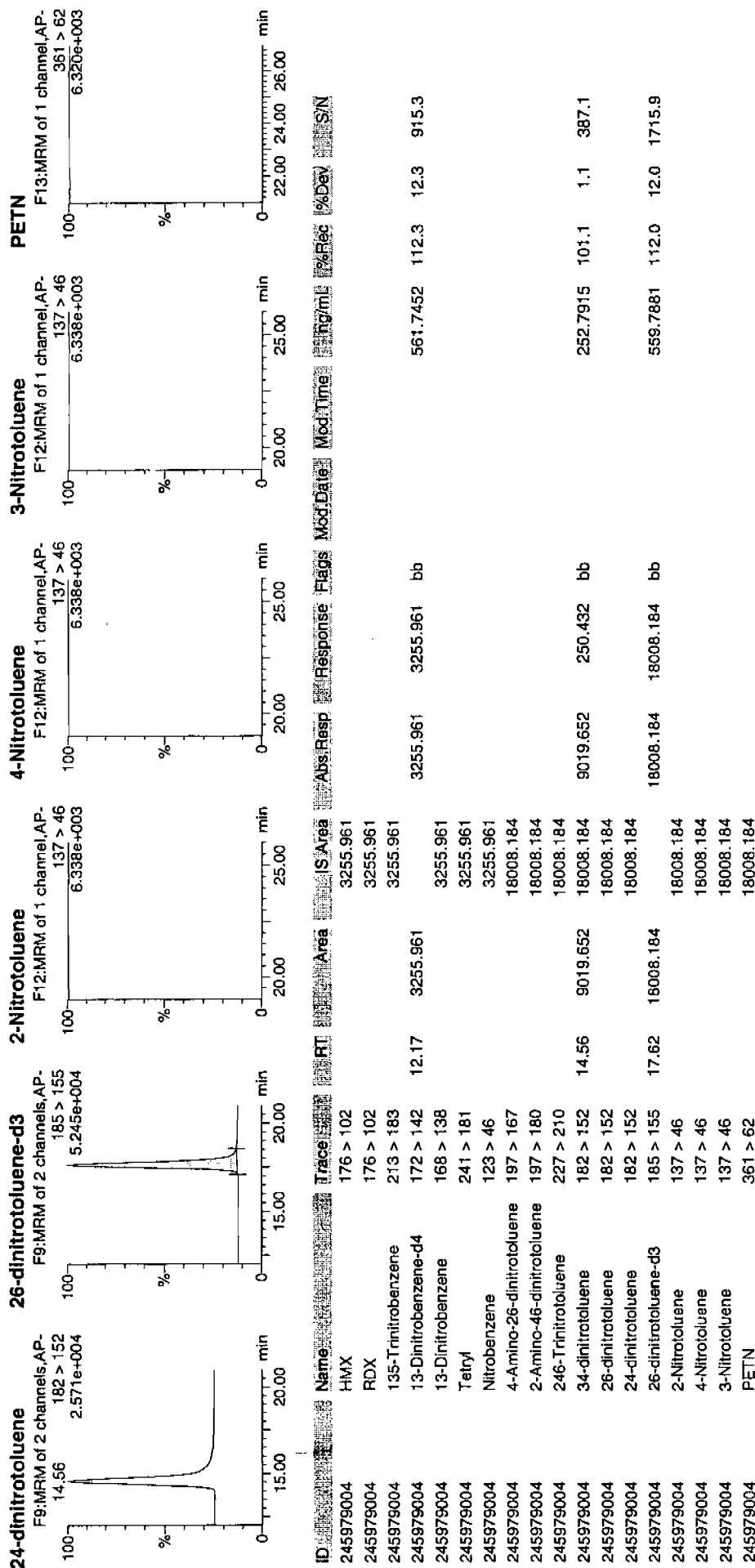


Amw
03/04/10

Printed: Wed Mar 03 09:10:52 2010, Page 42 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7979

Lab Code: GEI

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979004

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240015.wiff

Date Analyzed: 24-FEB-10 13:38

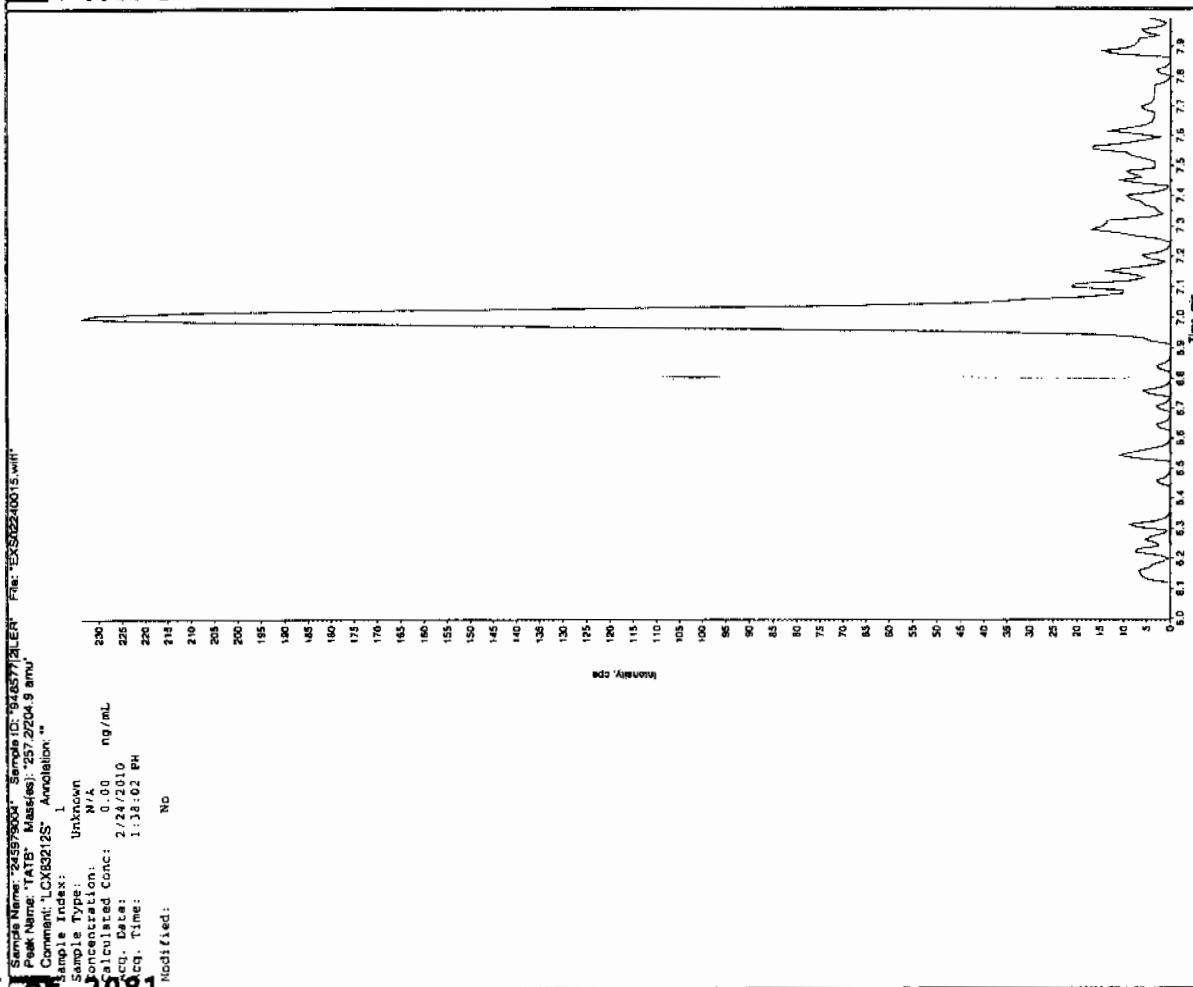
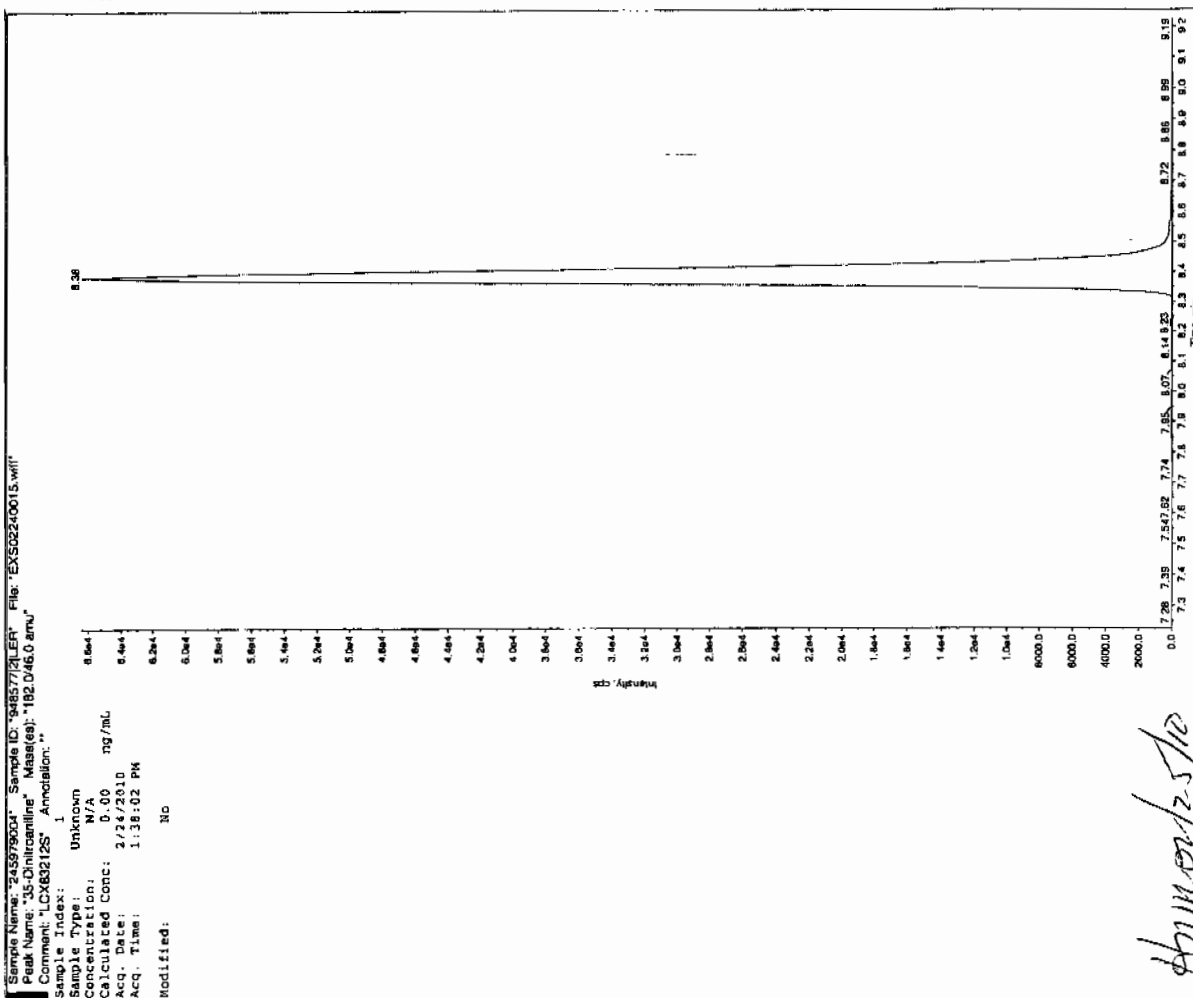
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value	X	<u>Concentrated Extract Volume</u>	X	Dilution Factor
		Sample Amount		

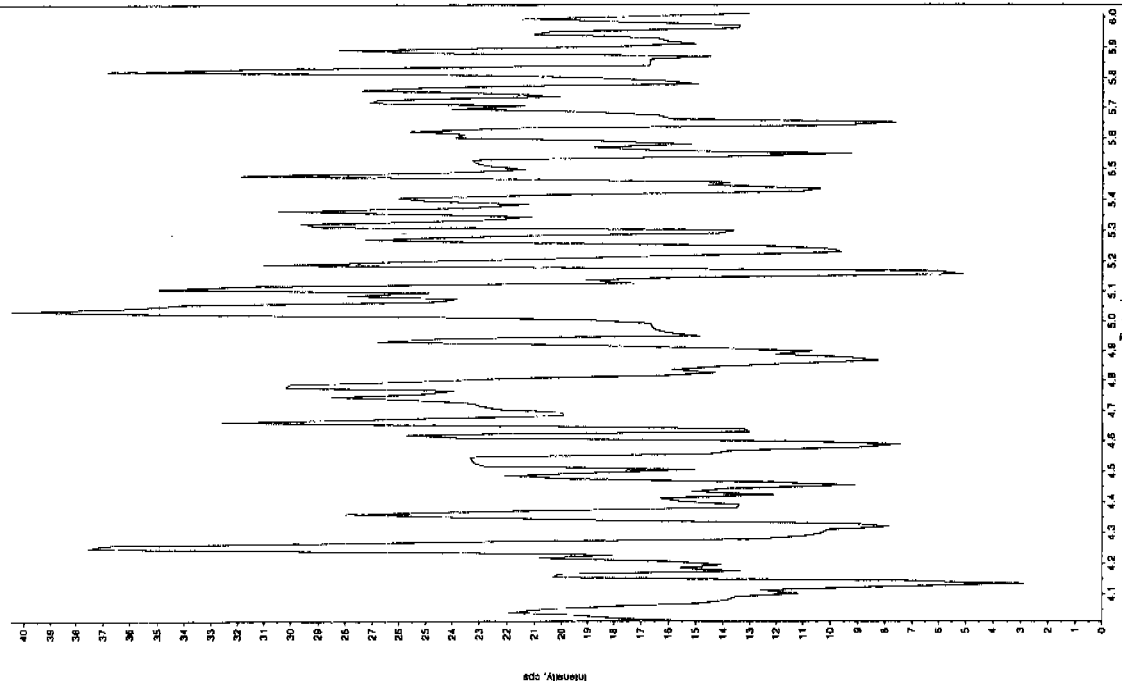
See 2/25/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

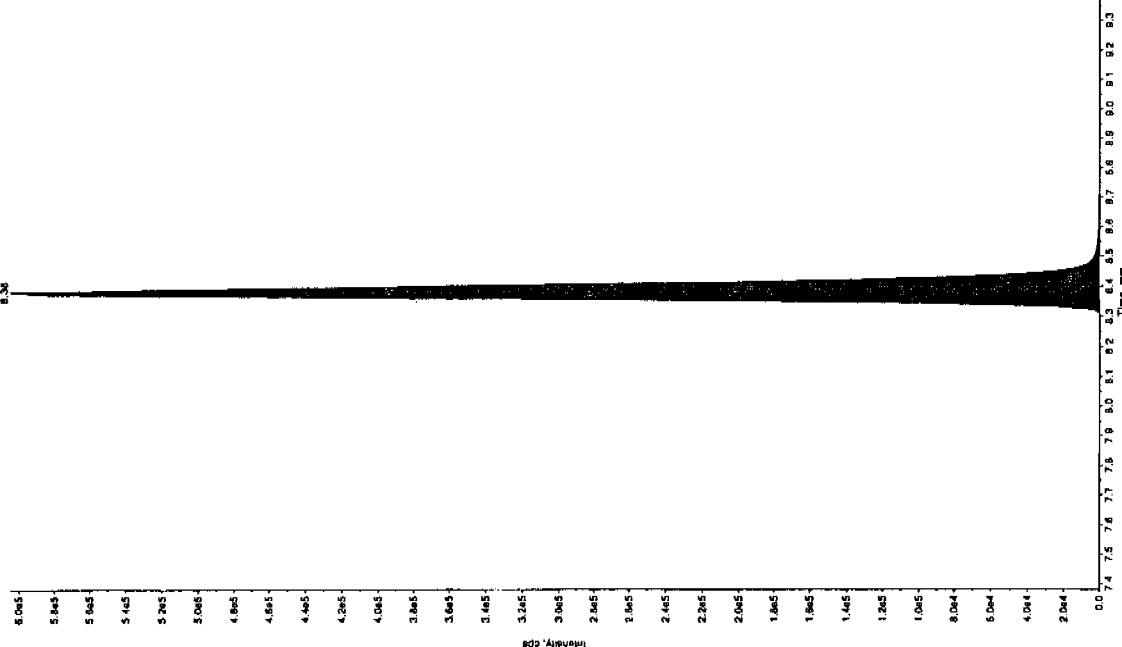
Sample Name: "245979004" Sample ID: "948577121ER" File: "EX502240015.wif"
 Peak Name: "26-Olanino-4-nitrooluen" Mass(es): "156.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:38:02 PM
 Modified: No

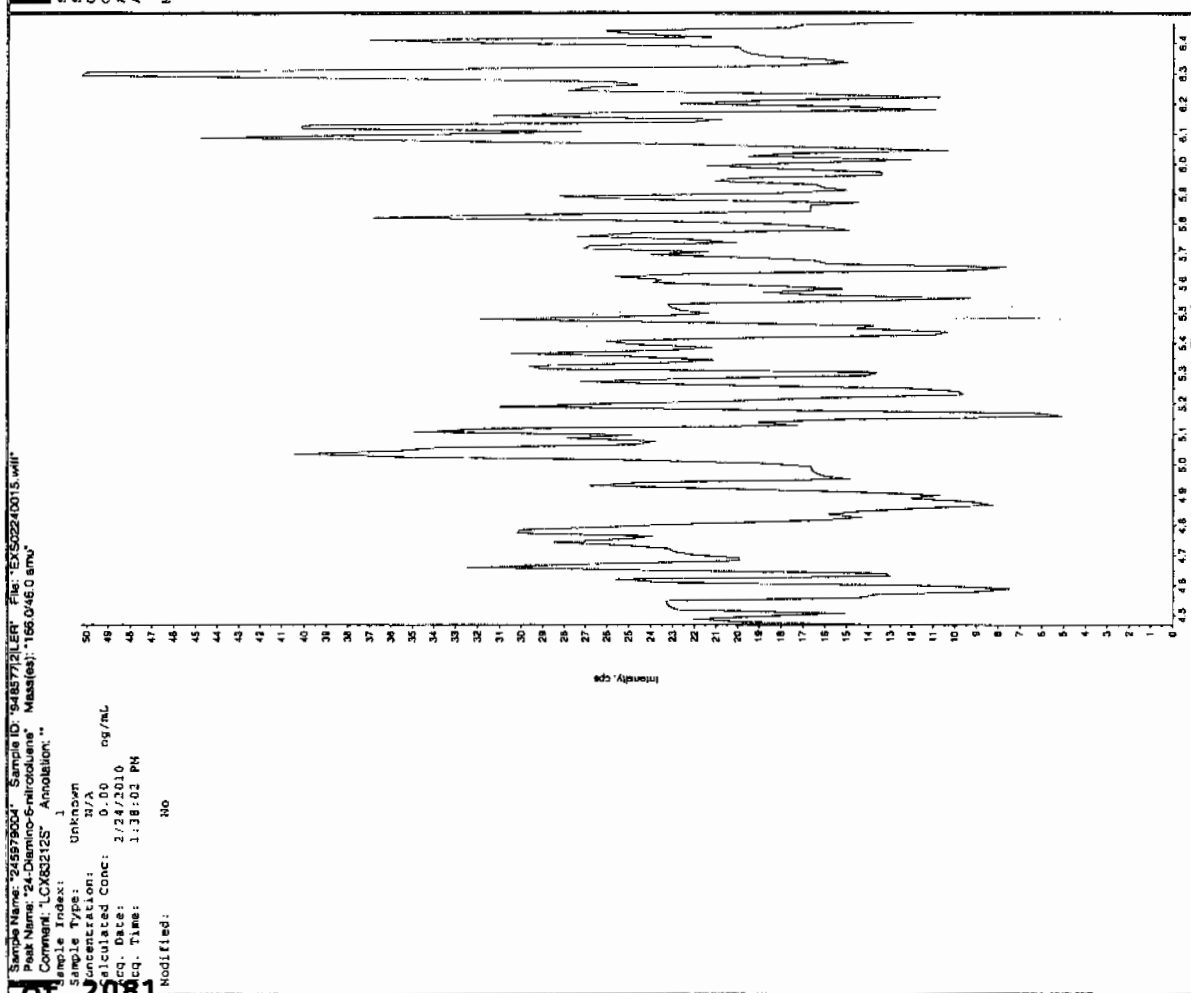
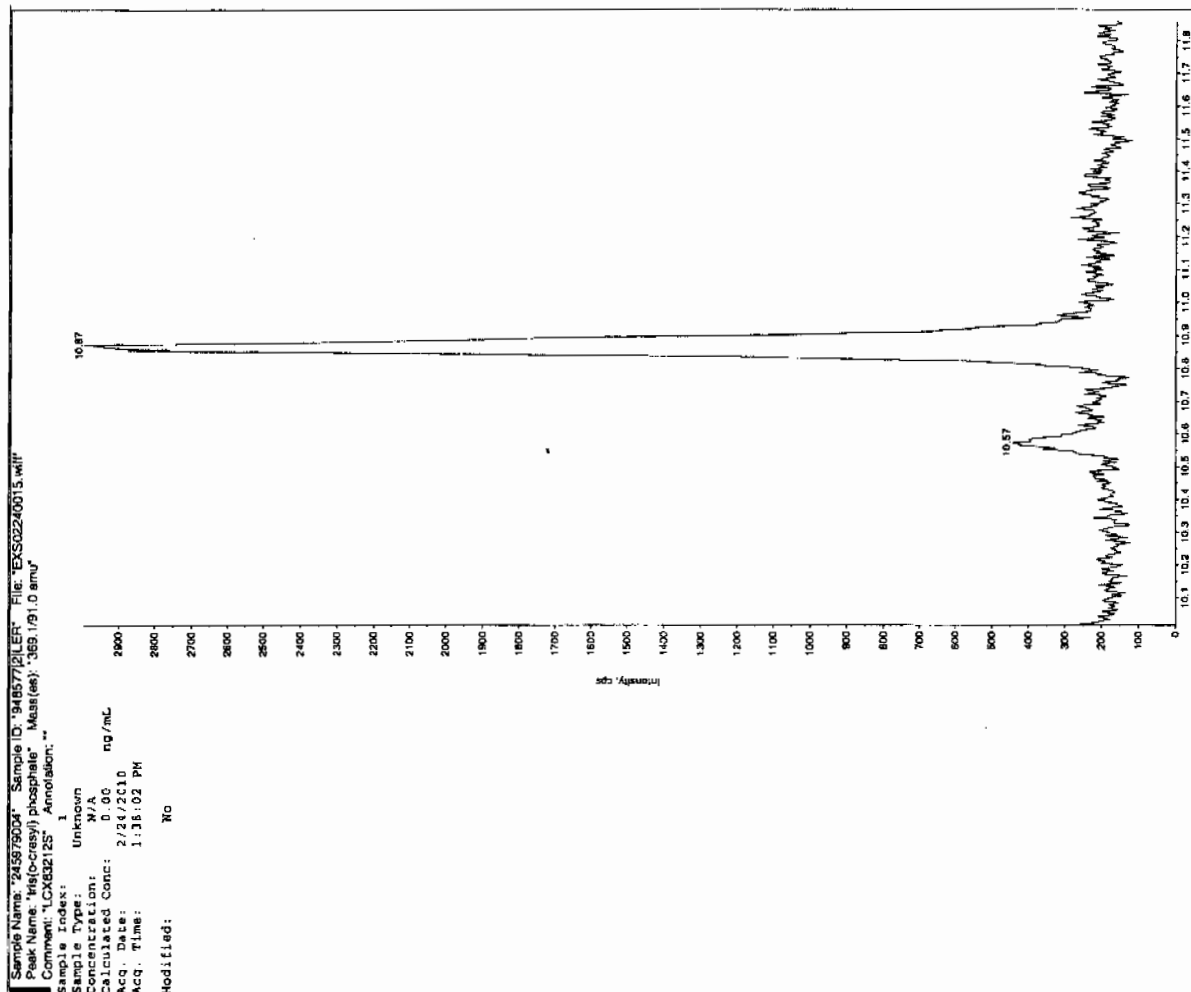


Sample Name: "245979004" Sample ID: "948577121ER" File: "EX502240015.wif"
 Peak Name: "34-Dinitrooluen" Mass(es): "182.1161.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 312. ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:38:02 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQ
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.38 min
 Area: 2.08e+006 counts
 Height: 60466.077 cps
 Start Time: 5.39 min
 End Time: 8.69 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7972

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979005

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301054a

Date Analyzed: 02-MAR-10 17:43

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qid, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301054a

Date: 02-Mar-2010

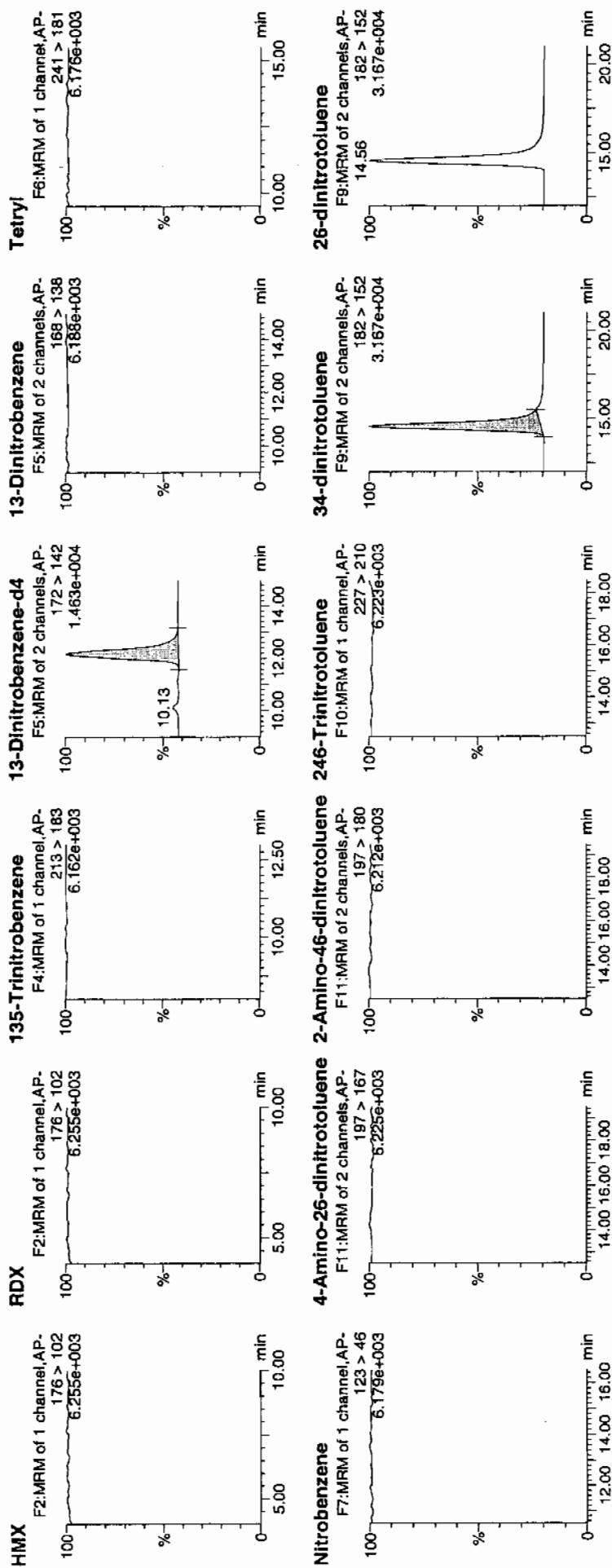
Time: 17:43:40

ID: 245979005

Vial: 2:6,C

4/27/10
3/3/10

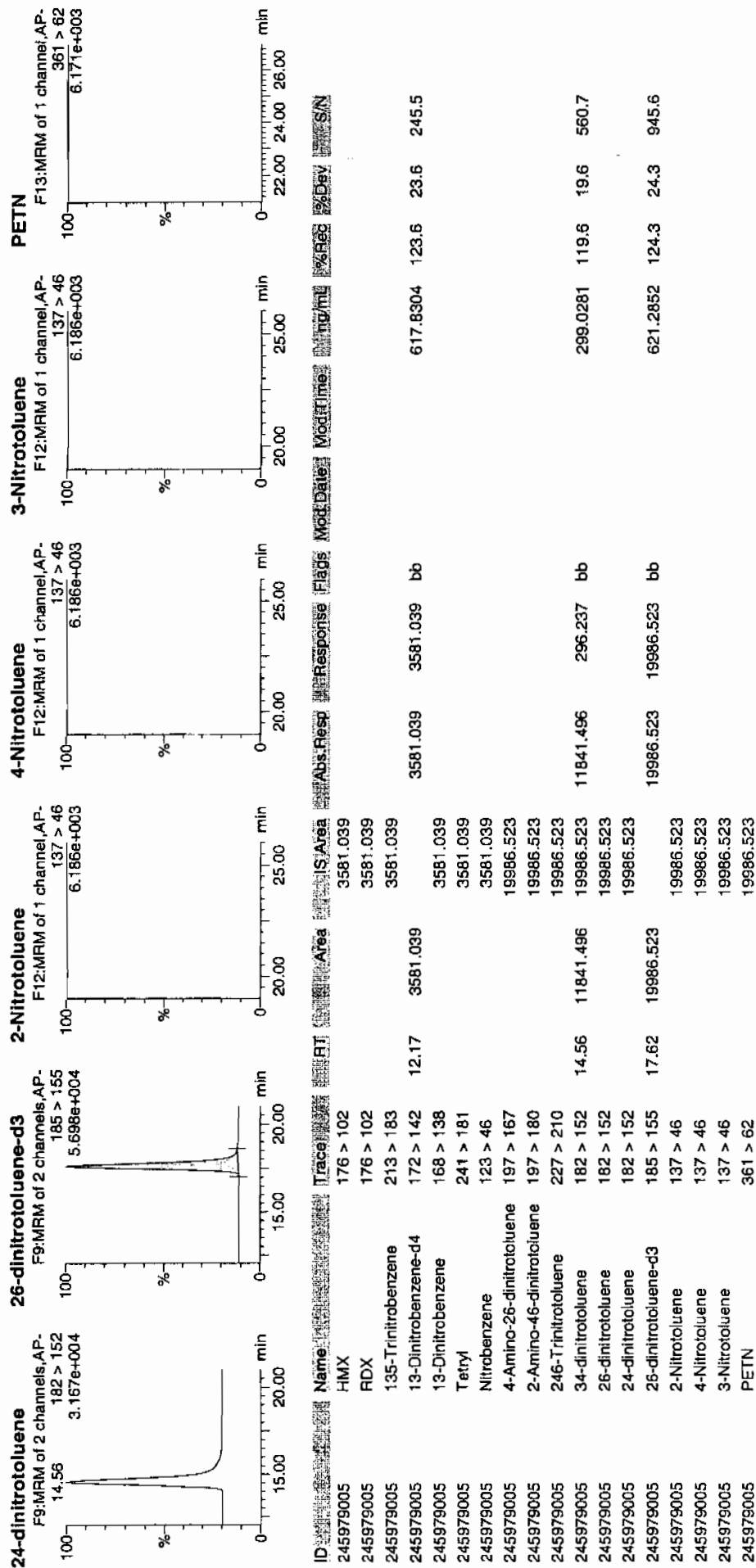
LAU 948577 / 8022 / 21



4/27/10
03/04/10

Quantify Sample Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PROV030110expA1.qid, Time: Wed Mar 03 09:00:43 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7972

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979005

Sample Amount 2

Moisture: 8.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240016.wiff

Date Analyzed: 24-FEB-10 13:53

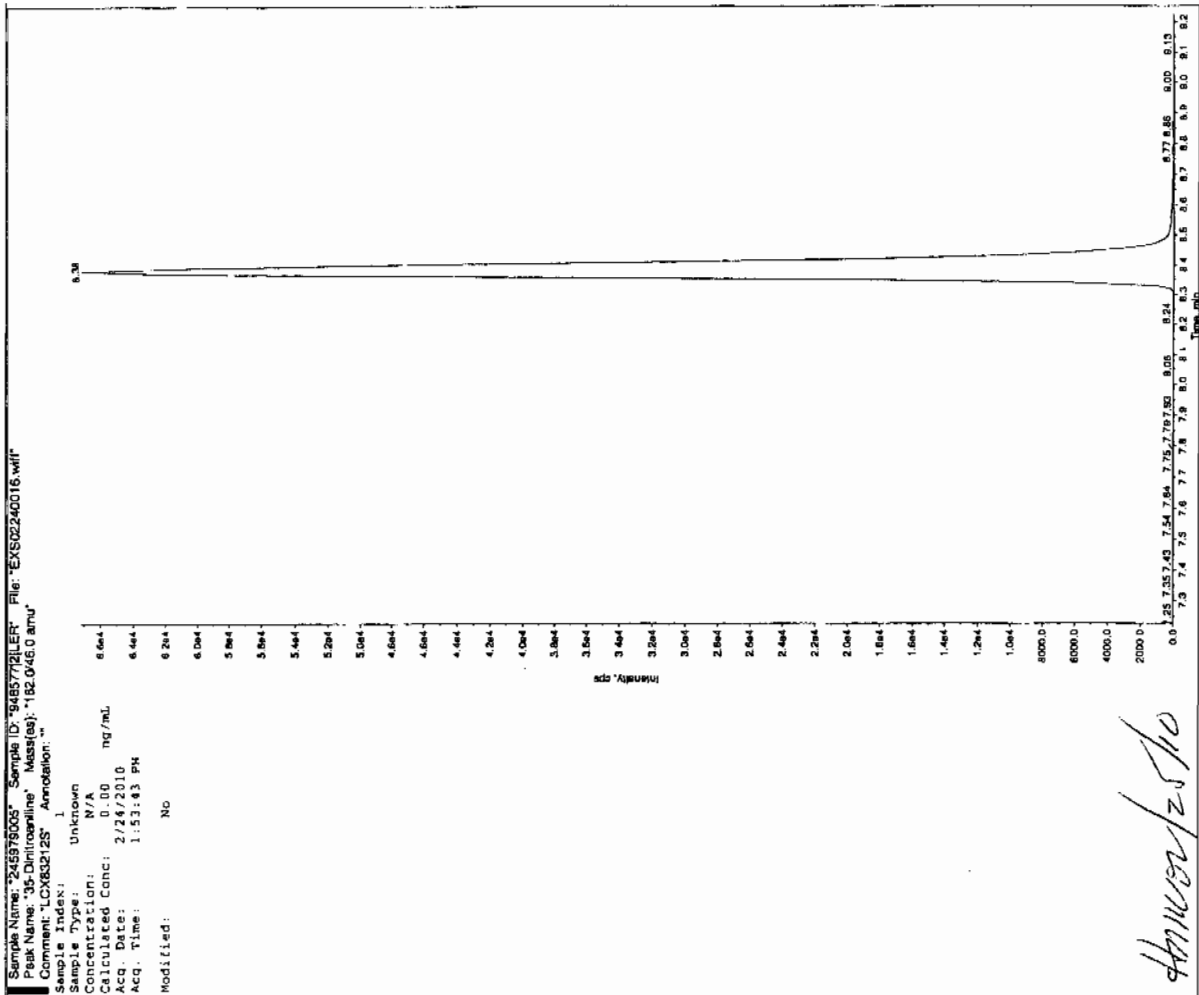
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

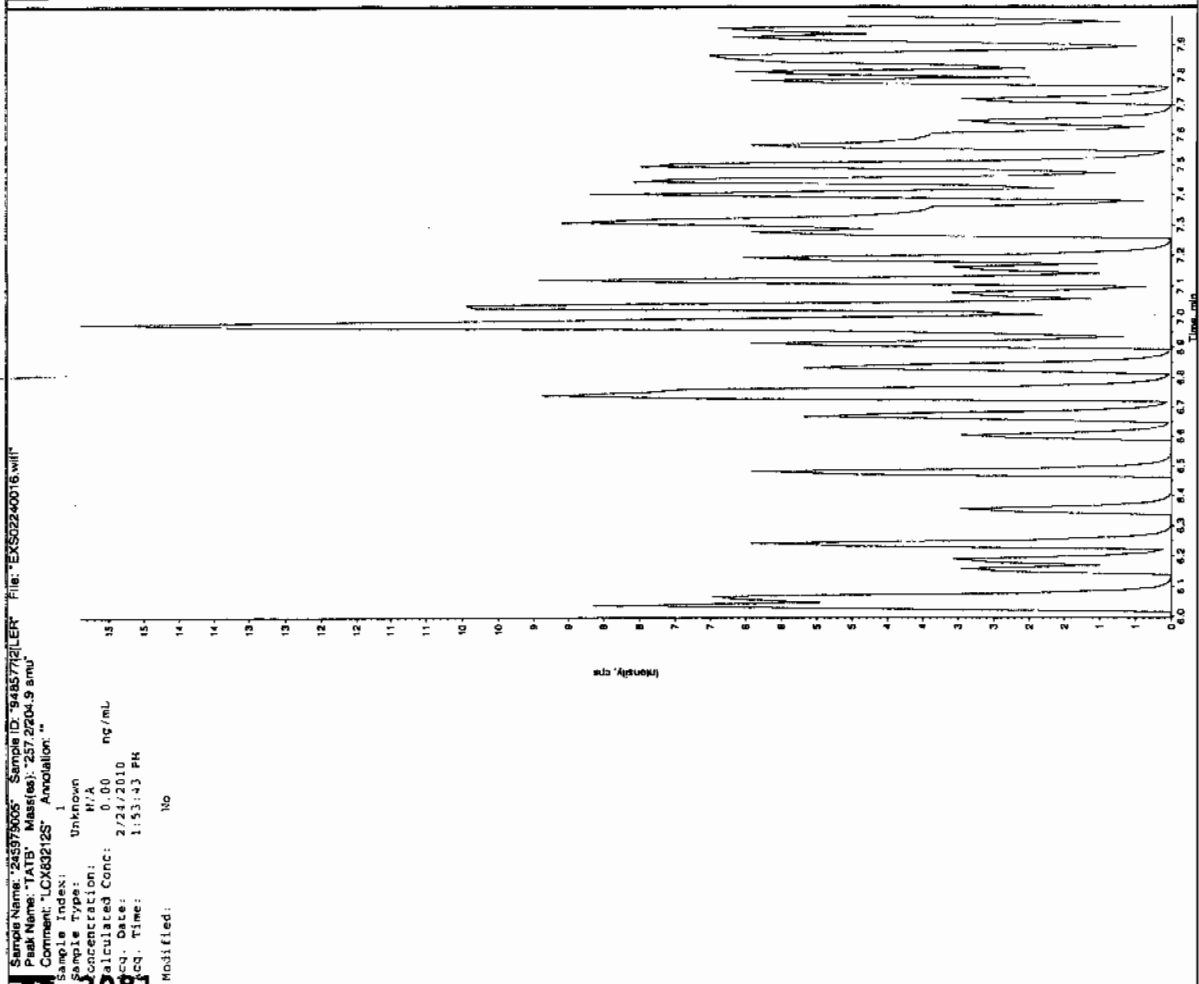
*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

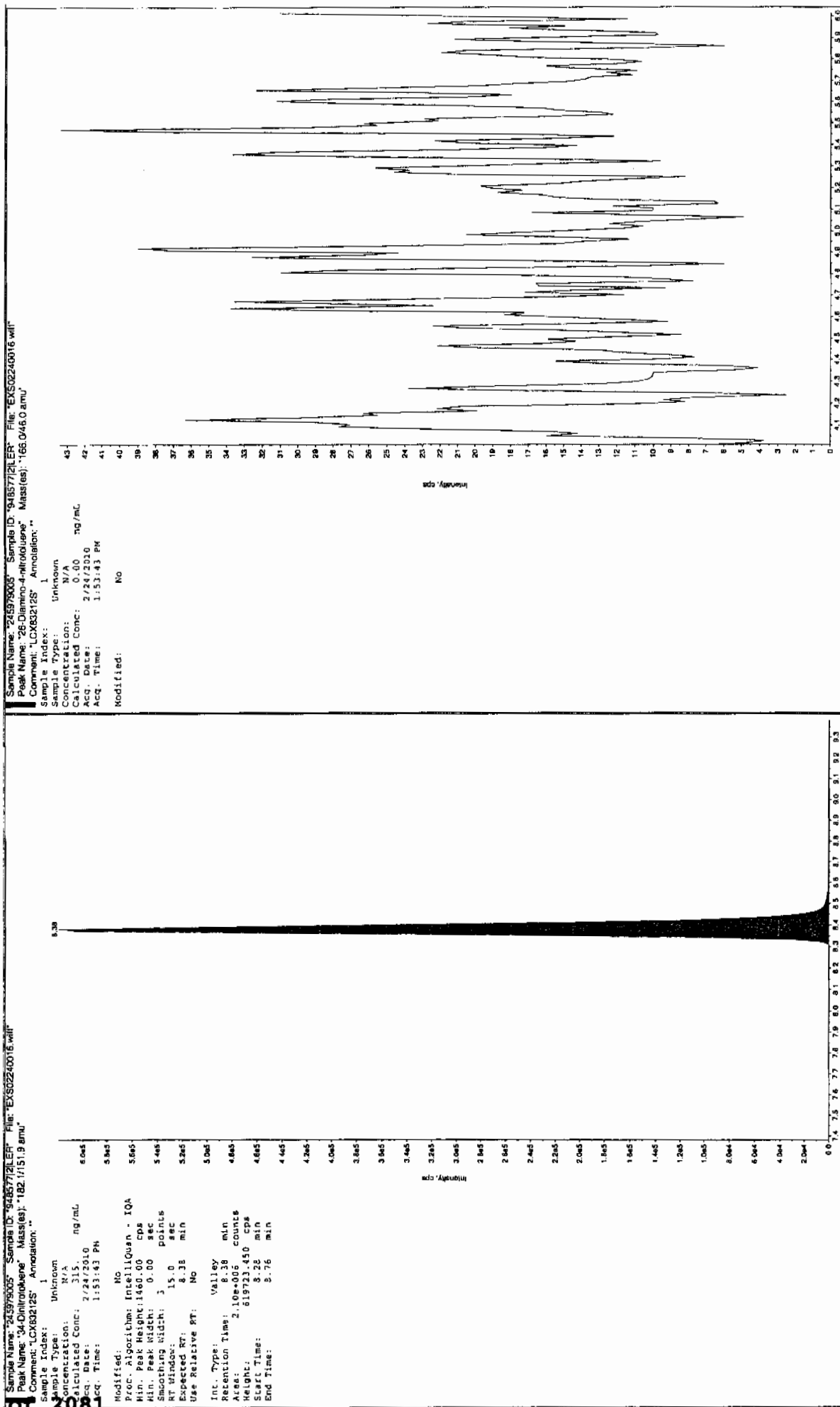
Gen 2/25/10



4/11/10/25/10



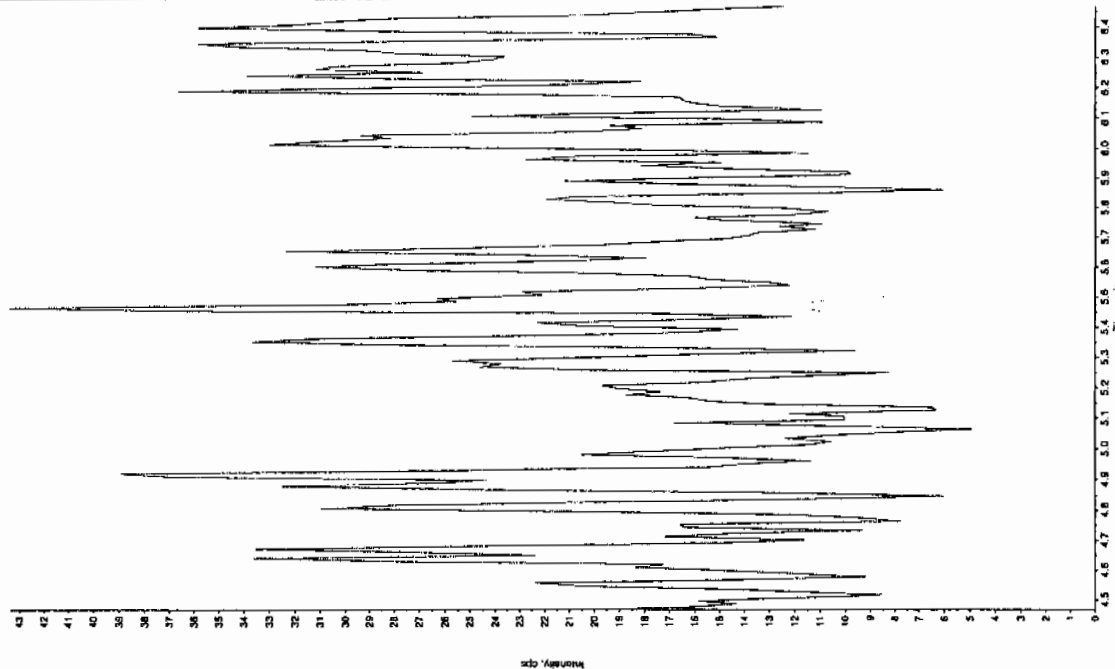
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



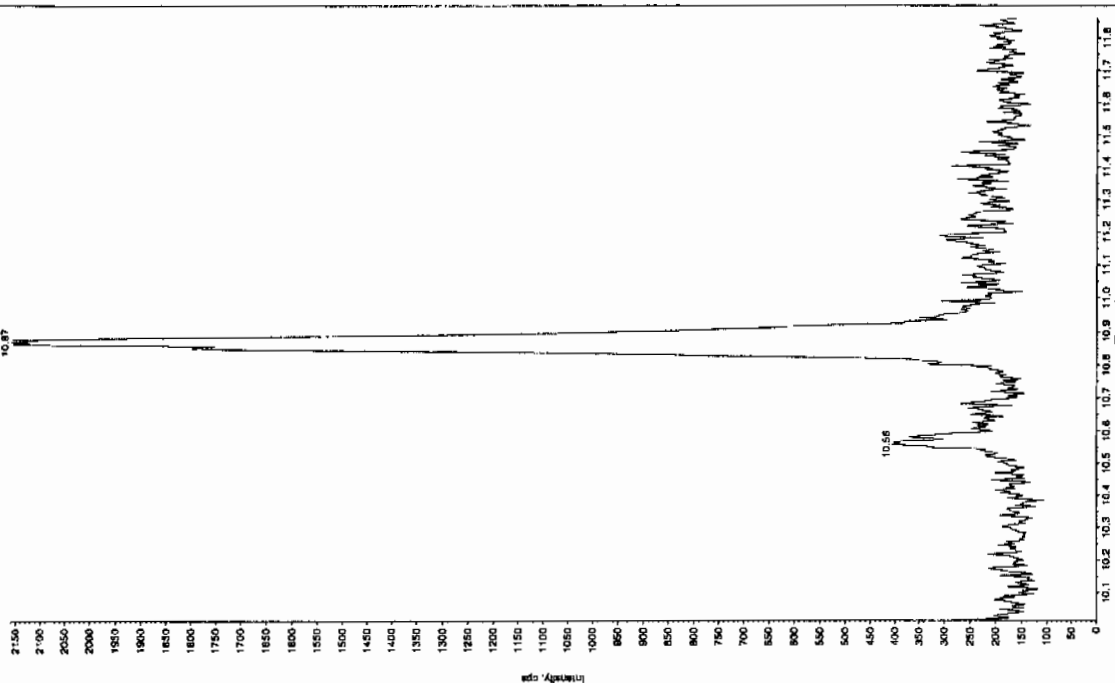
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245979005" Sample ID: "948577121.ER" File: "EXS02240016.wif"
 Peak Name: "166.046.0 amu" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:33:43 PM
 Modified: No



Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:33:43 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7957

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979006

Sample Amount 2

Moisture: 22.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301055a

Date Analyzed: 02-MAR-10 18:13

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Printed: Wed Mar 03 09:10:52 2010, Page 45 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0301055a

Date: 02-Mar-2010

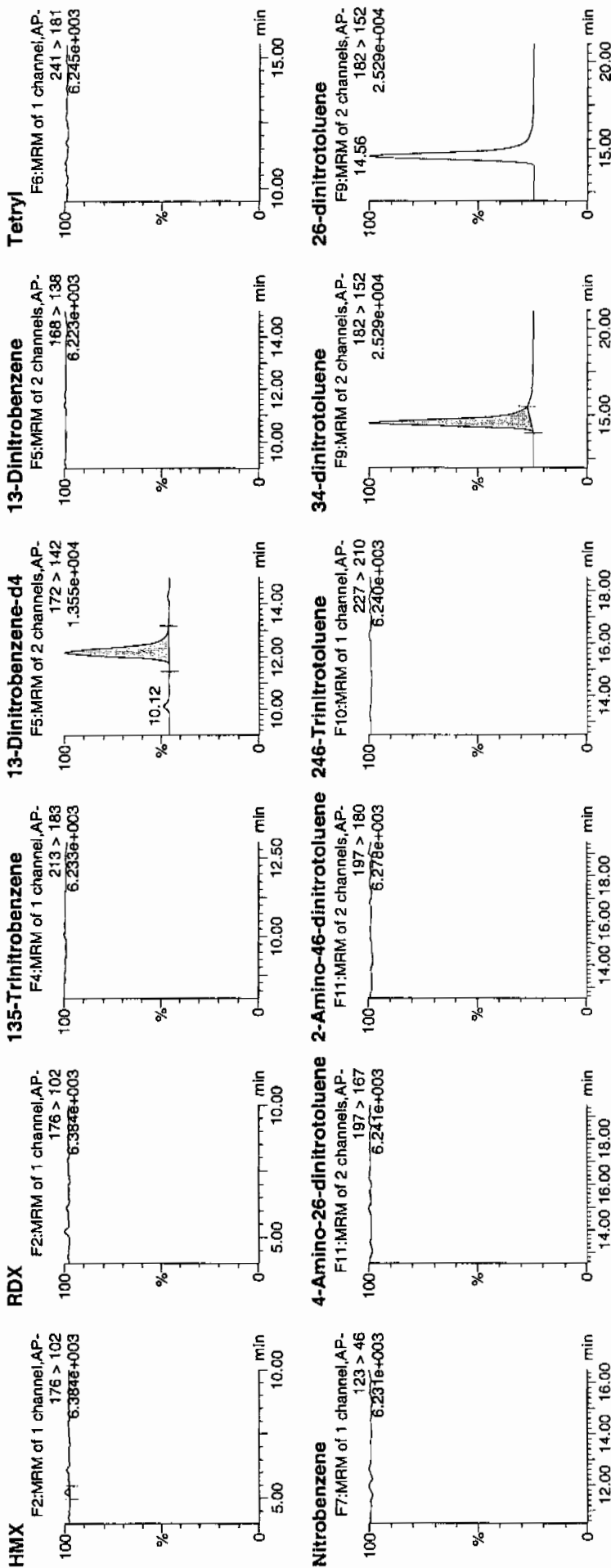
Time: 18:13:10

ID: 245979006

Vial: 2:6,D

12/10

1948577 / 8000 / 21

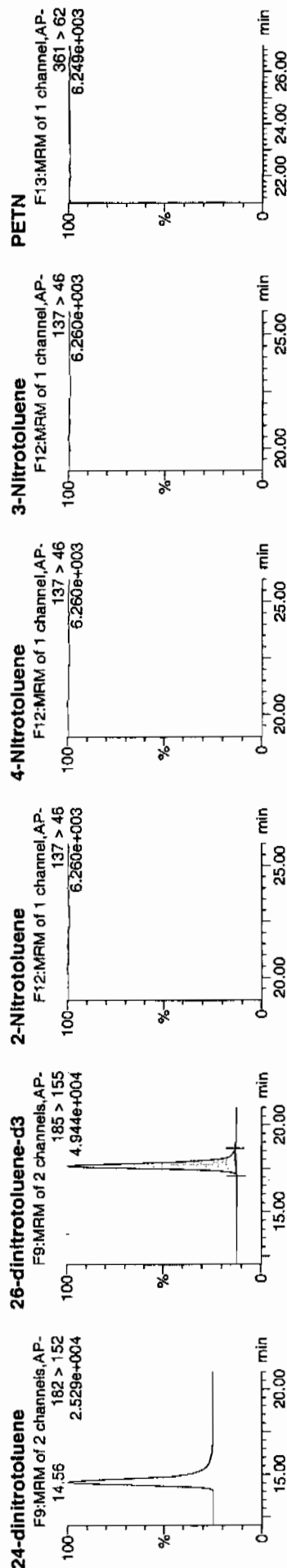


4/10/10

Printed: Wed Mar 03 09:10:52 2010, Page 46 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	% Rec	% Dev	S/N
245979006	HMX	176 > 102	5.24	37.283	3035.070	37.283	6.142	bb			1.6100		5.4
245979006	RDX	176 > 102			3035.070								
245979006	135-Trinitrobenzene	213 > 183			3035.070								
245979006	13-Dinitrobenzene-d4	172 > 142	12.17	3035.070		3035.070	3035.070	bb			523.6353	104.7	269.4
245979006	13-Dinitrobenzene	168 > 138			3035.070								
245979006	Tetryl	241 > 181			3035.070								
245979006	Nitrobenzene	123 > 46			17152.828								
245979006	4-Amino-26-dinitrotoluene	197 > 167			17152.828								
245979006	2-Amino-46-dinitrotoluene	197 > 180			17152.828								
245979006	246-Trinitrotoluene	227 > 210			17152.828								
245979006	34-dinitrotoluene	182 > 152	14.56	8875.198	17152.828	8875.198	258.709	bb			261.1470	104.5	501.0
245979006	26-dinitrotoluene	182 > 152			17152.828								
245979006	24-dinitrotoluene	182 > 152			17152.828								
245979006	26-dinitrotoluene-d3	185 > 155	17.62	17152.828		17152.828	17152.828	bb			533.1992	106.6	1344.0
245979006	2-Nitrotoluene	137 > 46			17152.828								
245979006	4-Nitrotoluene	137 > 46			17152.828								
245979006	3-Nitrotoluene	137 > 46			17152.828								
245979006	PETN	361 > 62			17152.828								

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7957

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979006

Sample Amount 2

Moisture: 22.8

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240017.wiff

Date Analyzed: 24-FEB-10 14:09

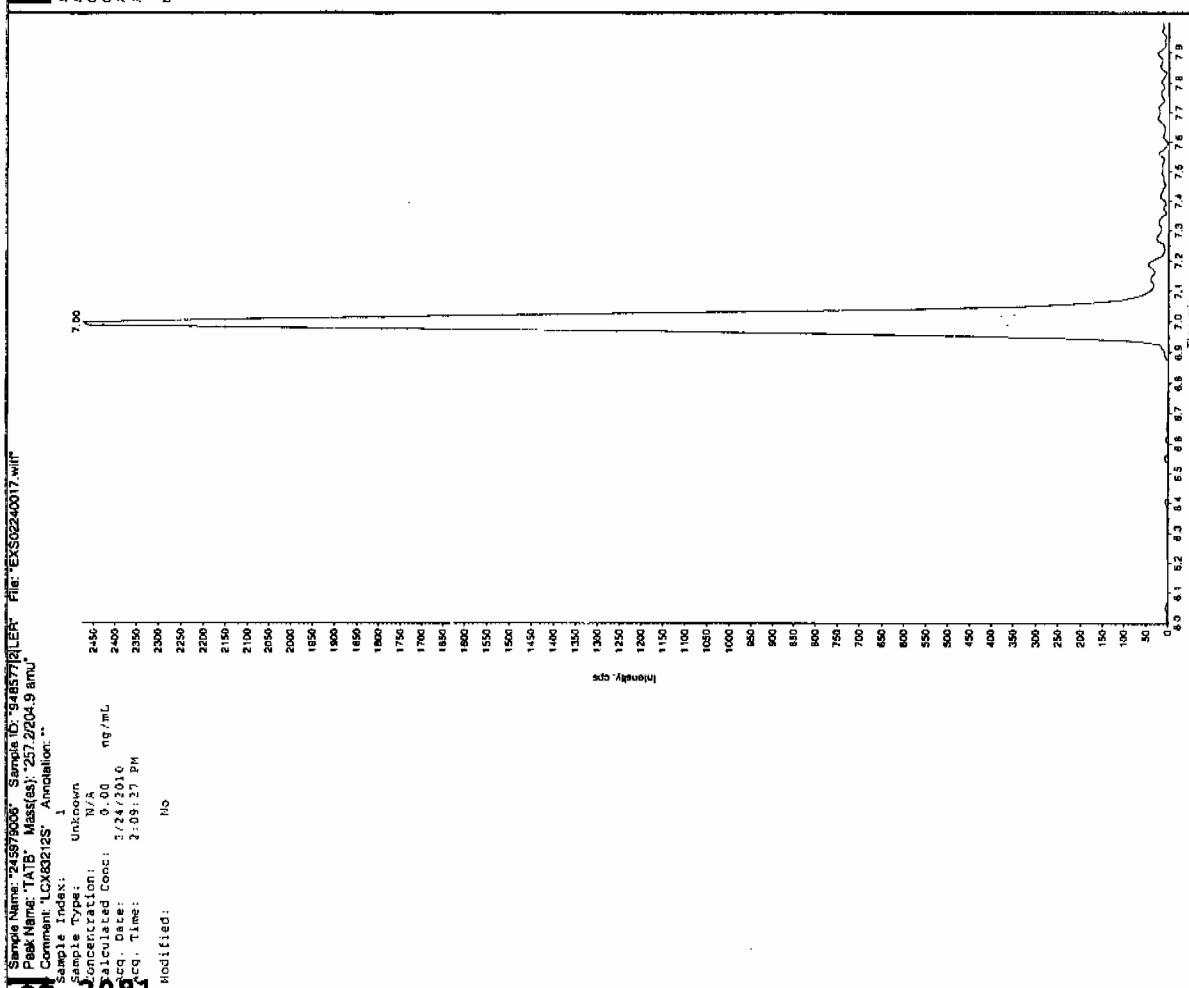
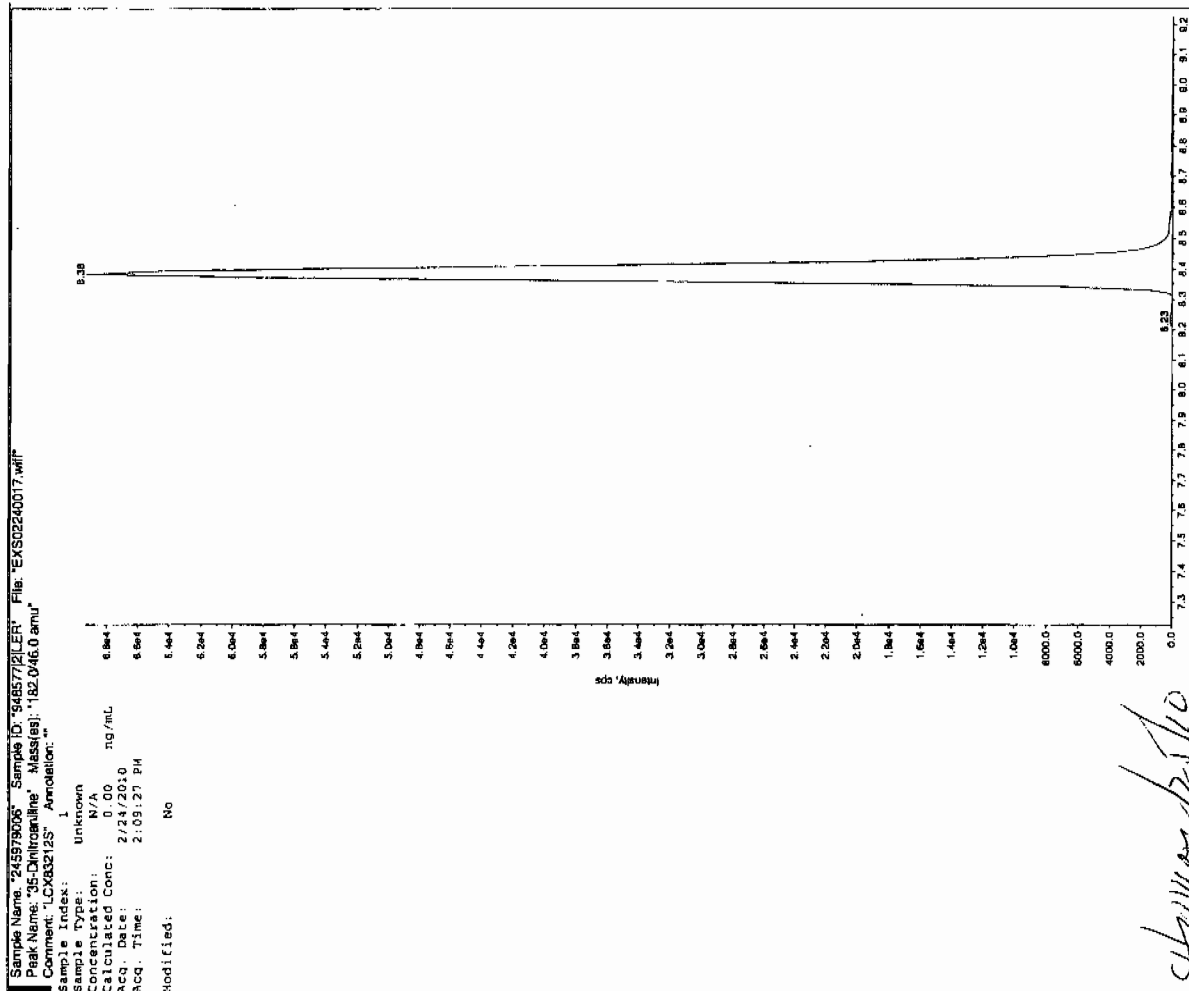
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

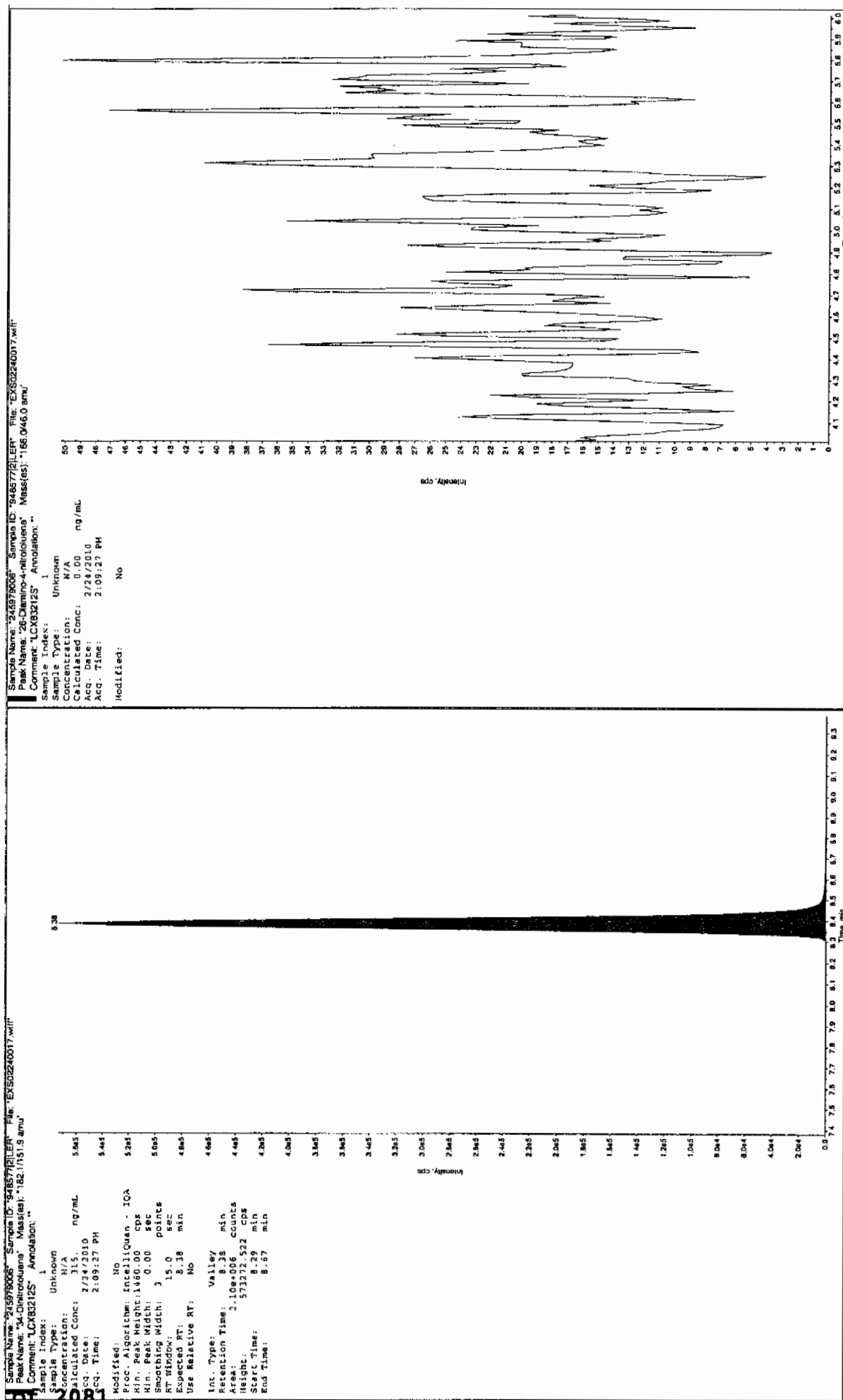
*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

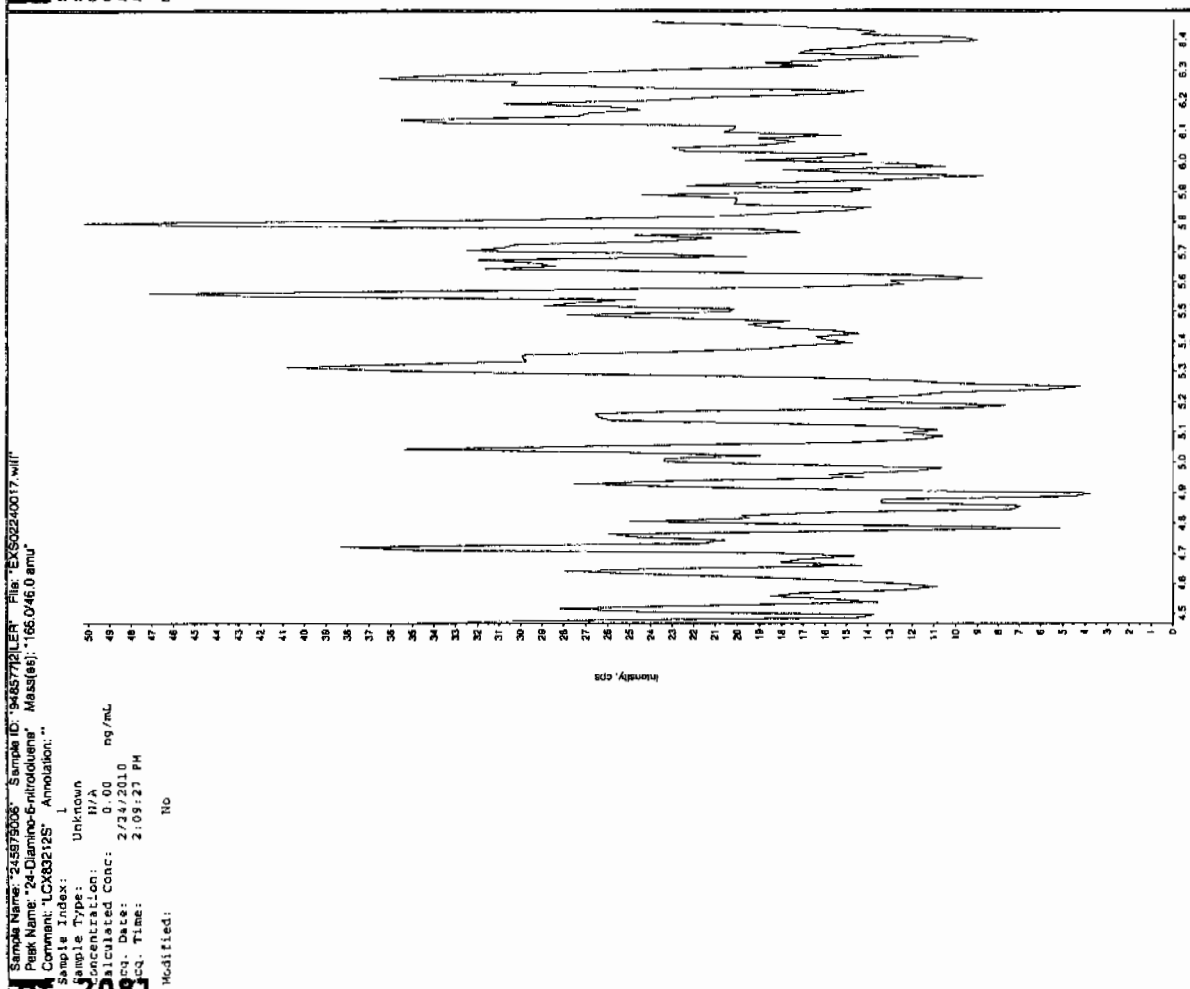
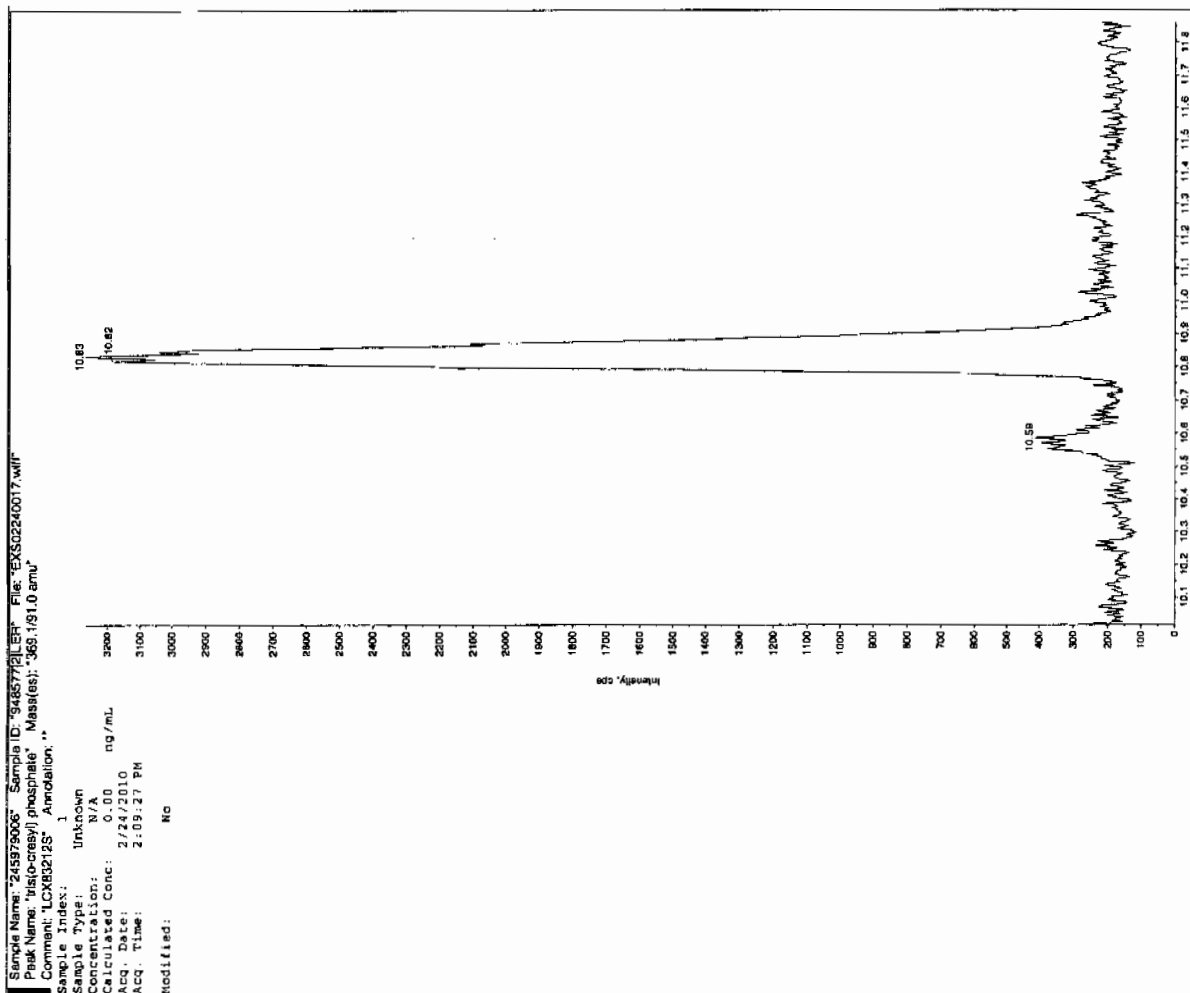
Jan 2/28/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7974

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979007

Sample Amount 2

Moisture: 5.1

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301059a

Date Analyzed: 02-MAR-10 20:11

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PROV030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP\PROV030110expA1\EXP0301059a

Date: 02-Mar-2010

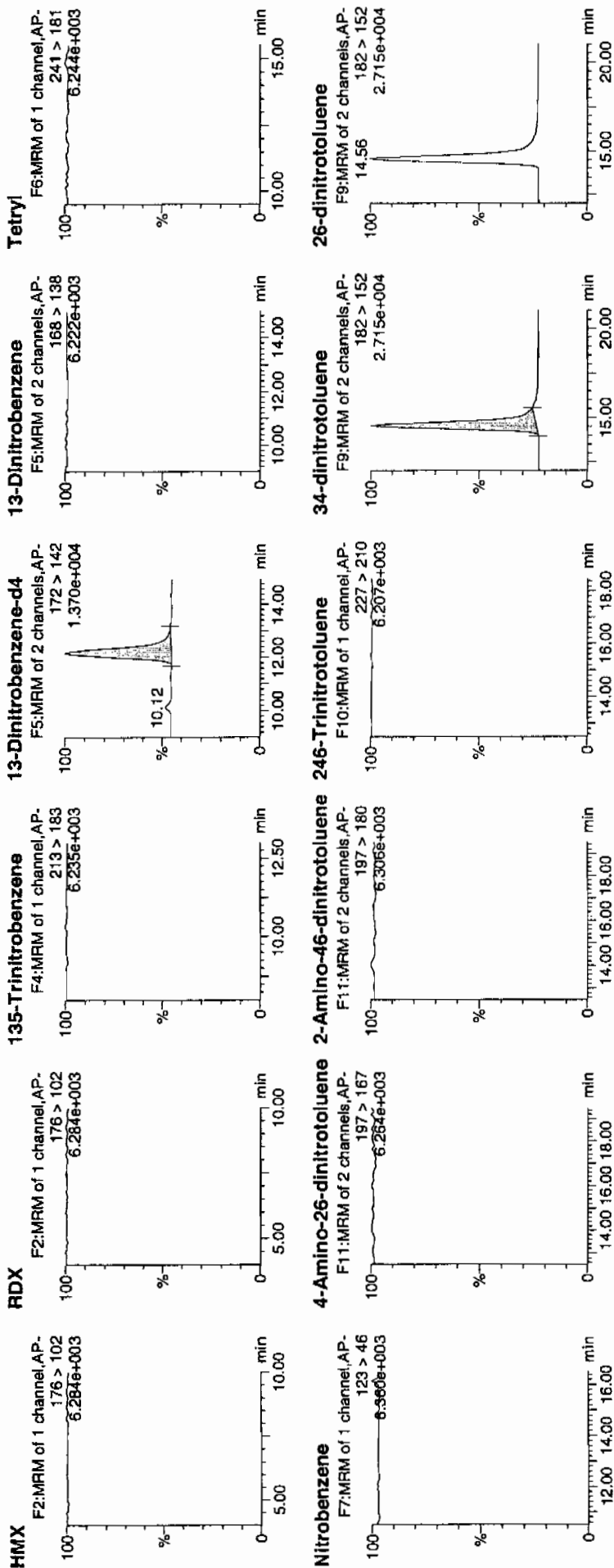
Time: 20:11:11

ID: 245979007

Vial: 2:6,E

1077
3/3/10

94577 / 2 / 2

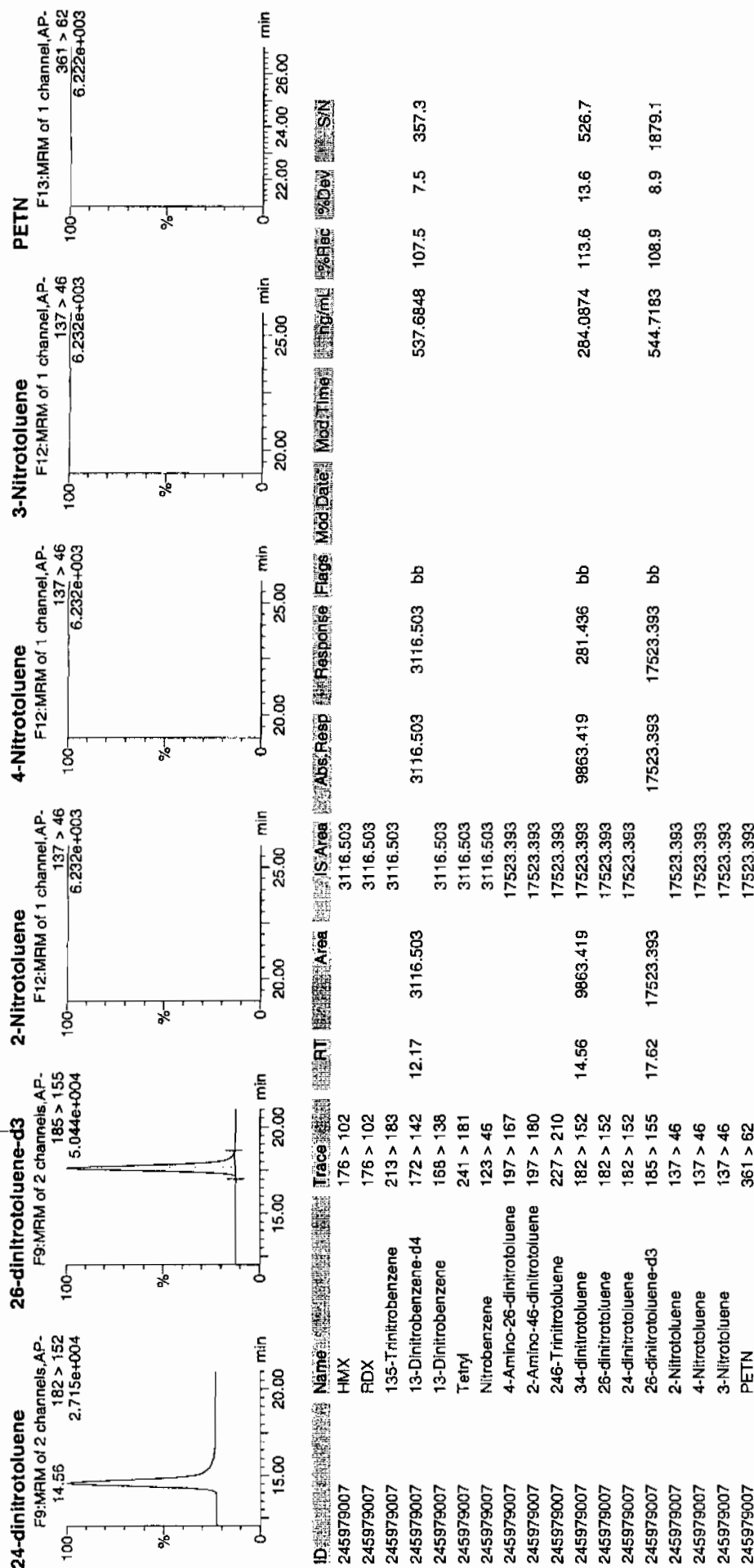


Handwritten note: 1077 3/3/10

Printed: Wed Mar 03 09:10:52 2010, Page 54 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7974

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979007

Sample Amount 2

Moisture: 5.1

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240018.wiff

Date Analyzed: 24-FEB-10 14:25

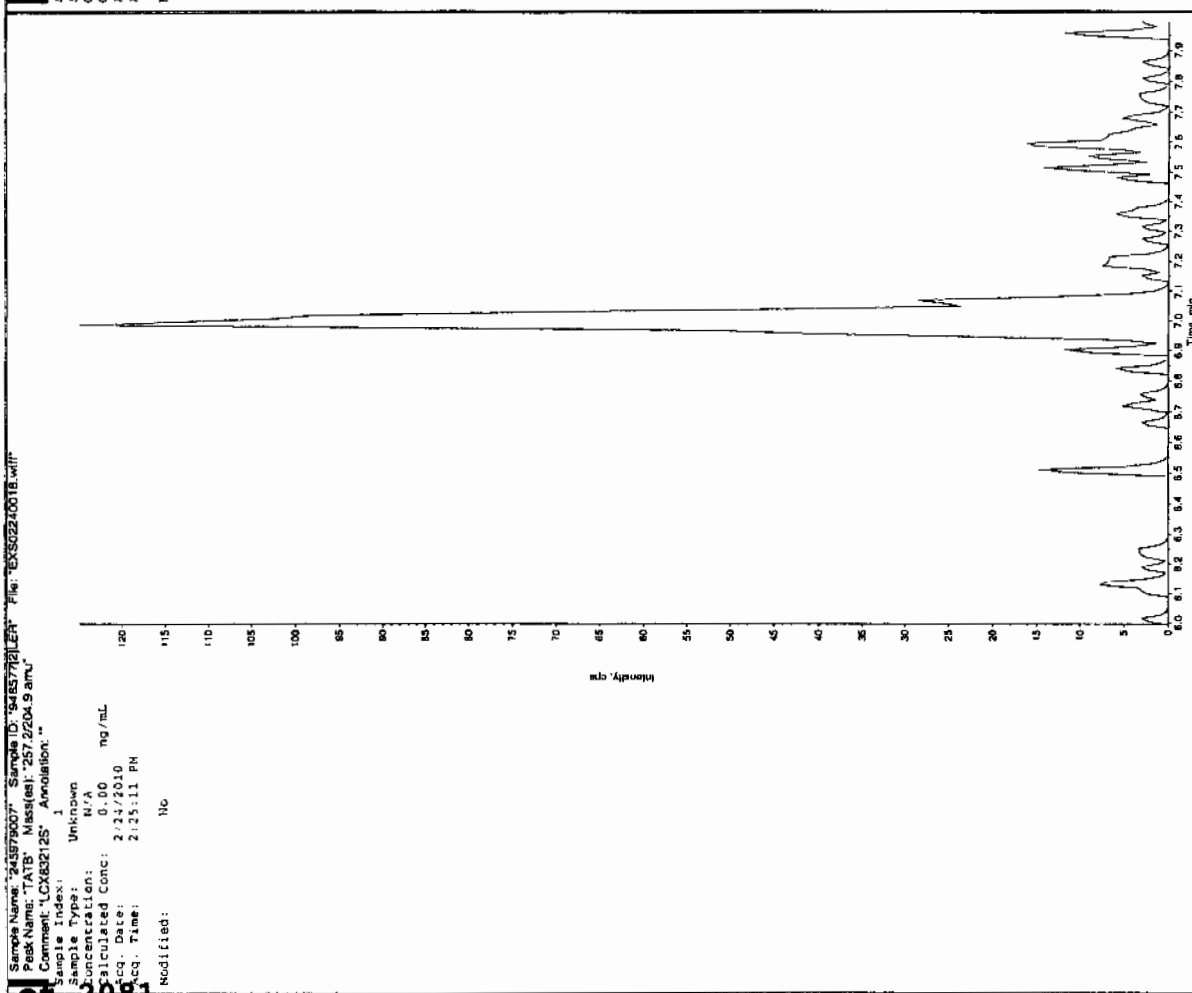
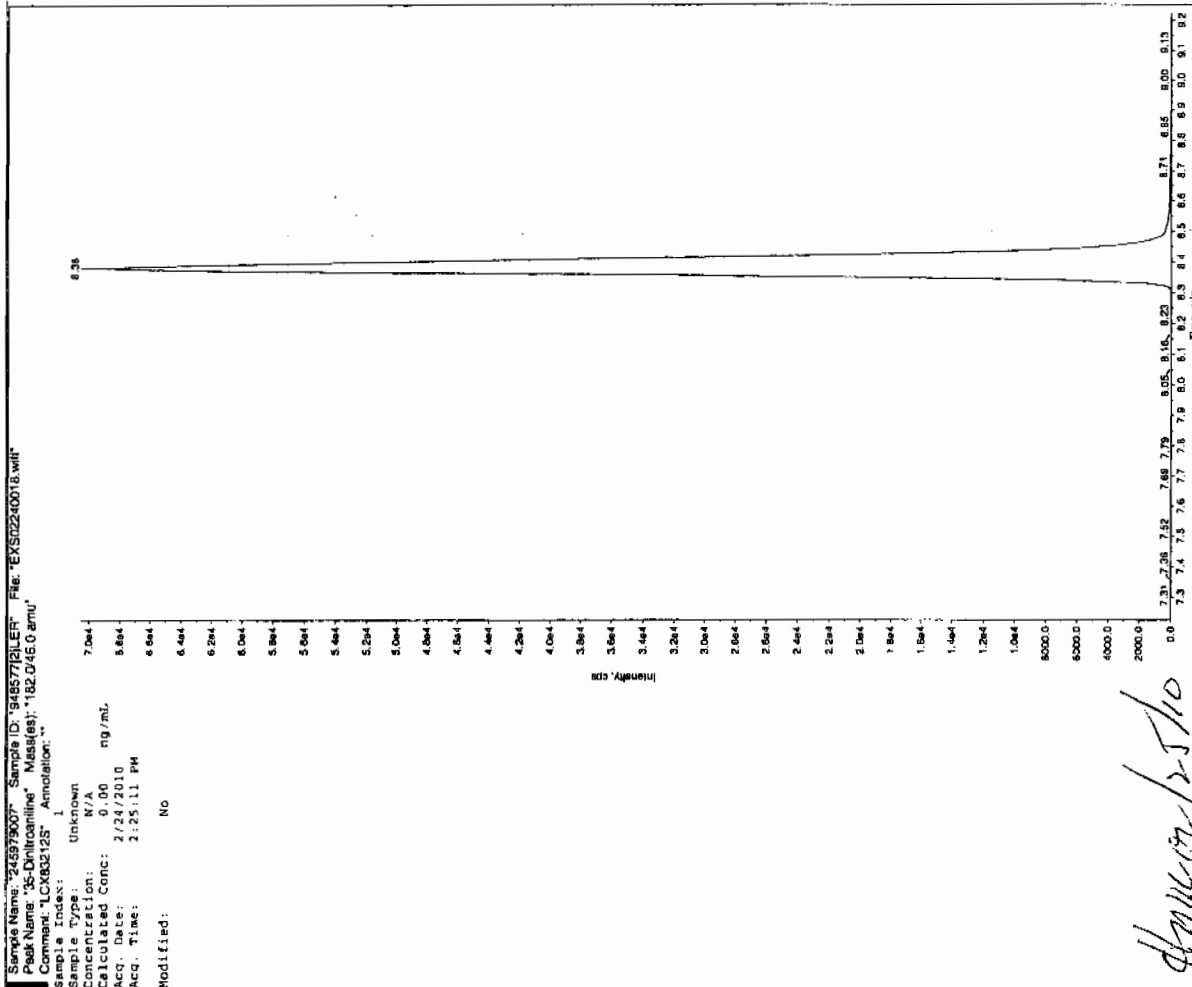
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

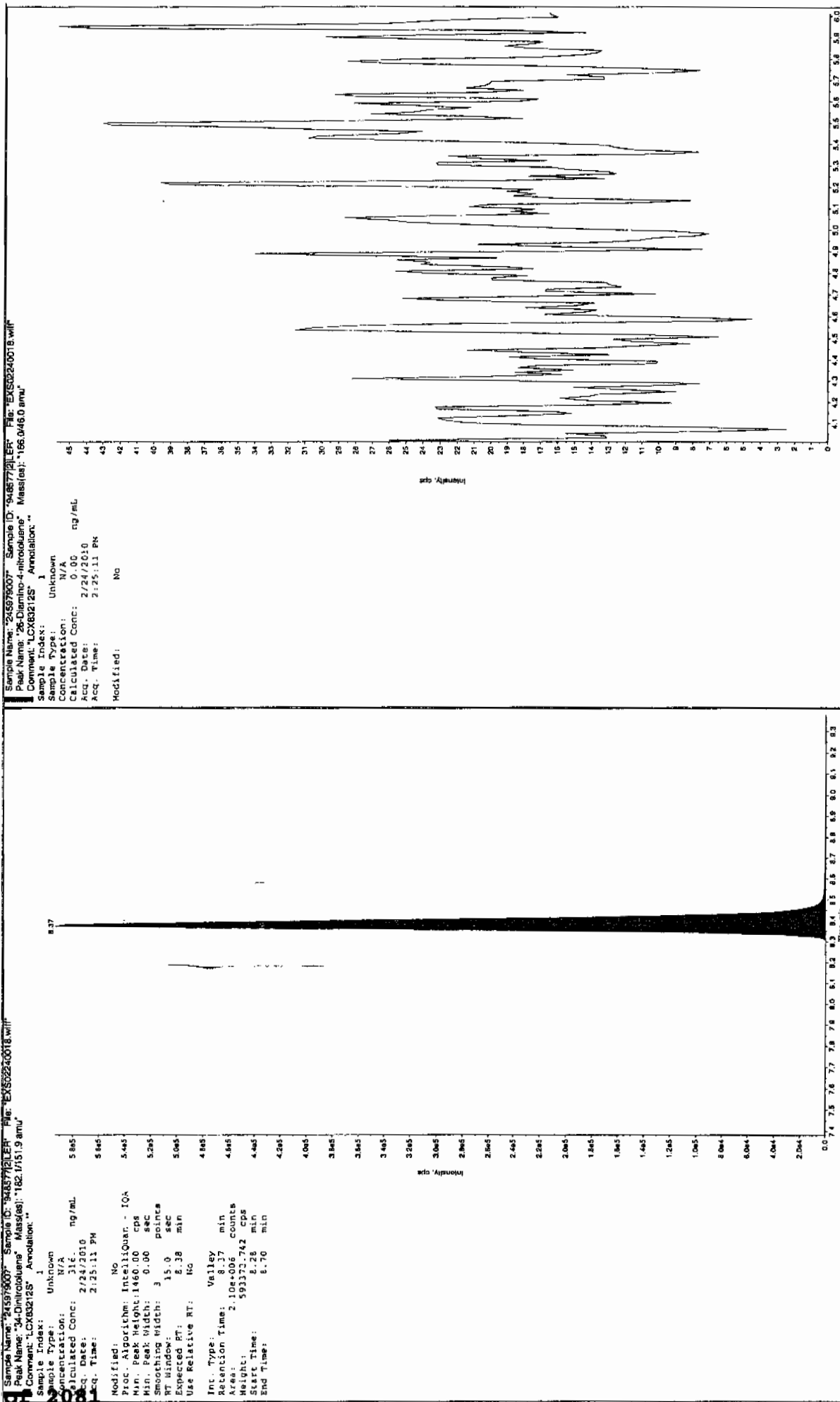
*Concentration =

Instrument	X	<u>Concentrated Extract Volume</u>	X	Dilution
Value		<u>Sample Amount</u>		Factor

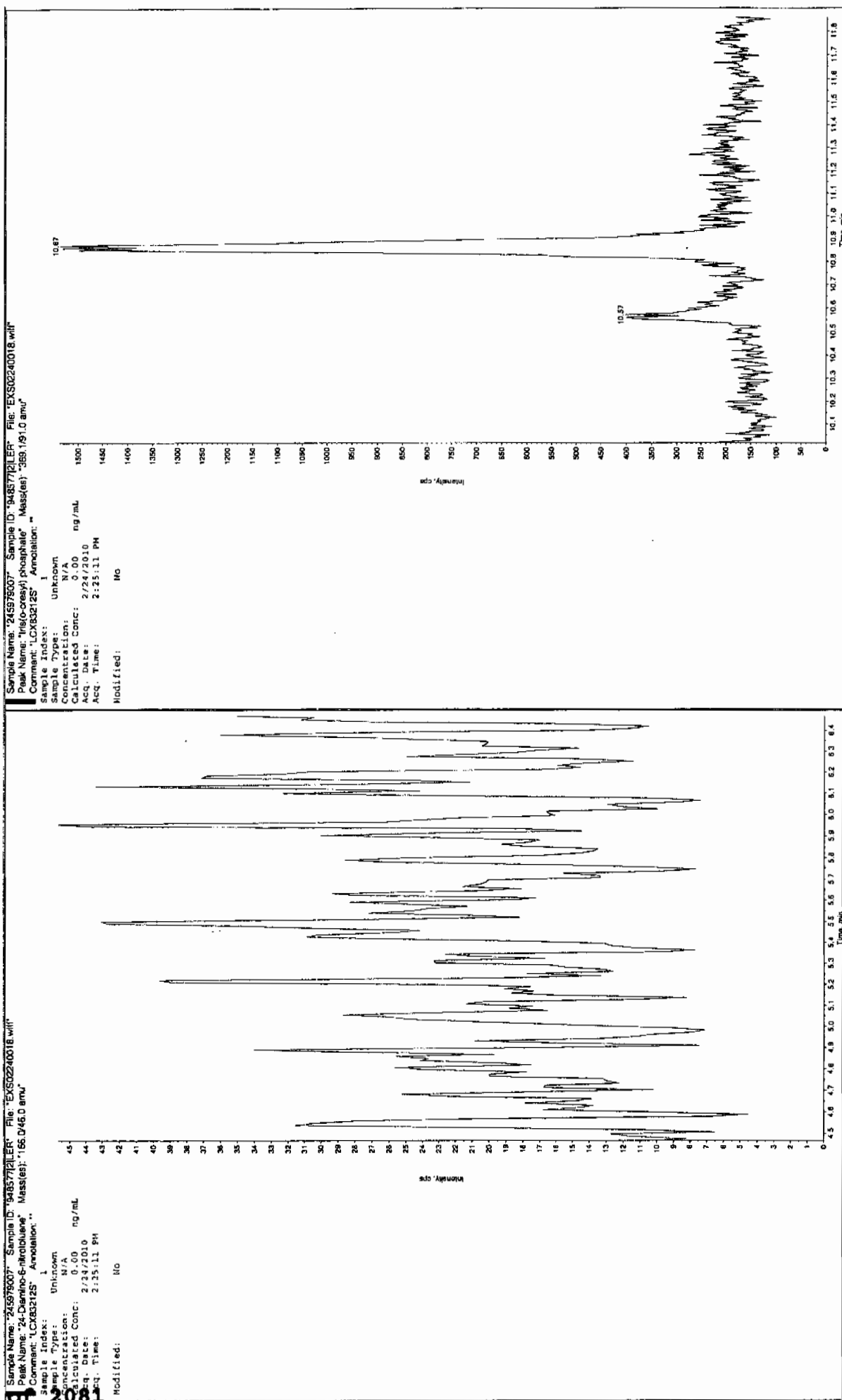
Jan 21/2010



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7961

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979008

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301060a

Date Analyzed: 02-MAR-10 20:40

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	263	J
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301060a

Date: 02-Mar-2010

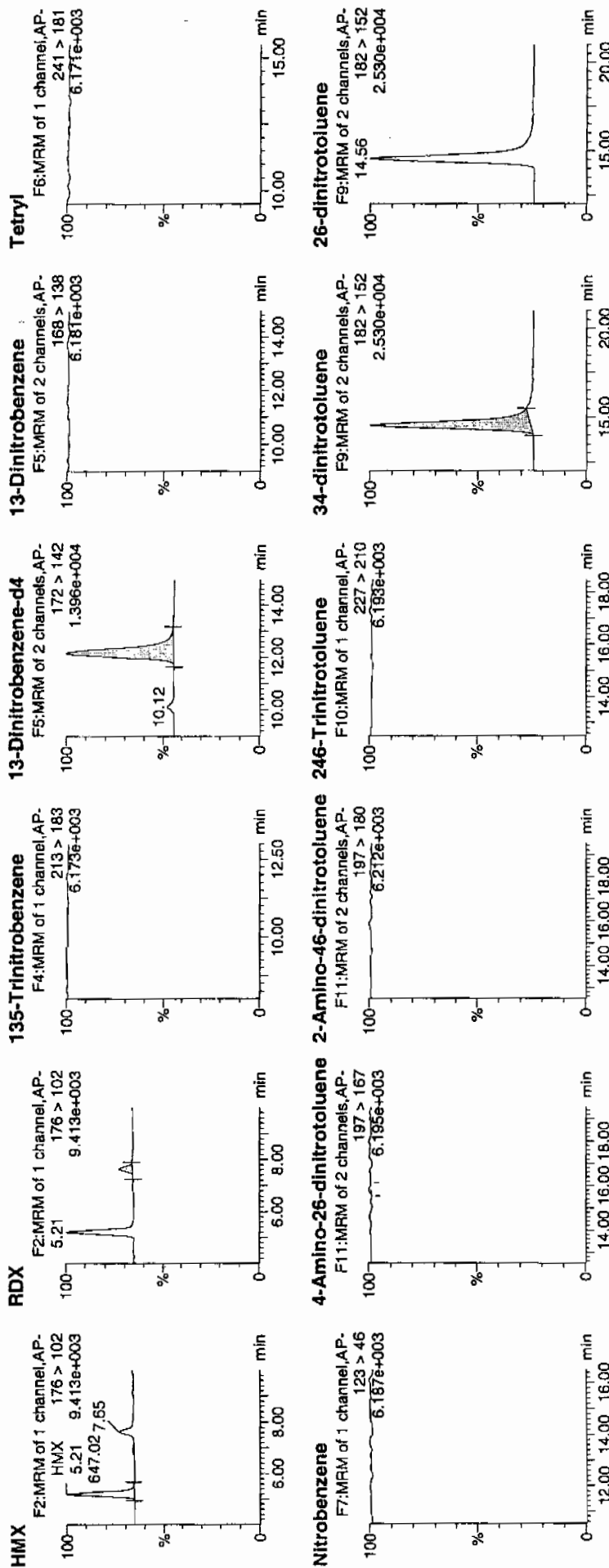
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ID: 245979008

Vial: 2:6,F

1677
3/3/10

WAX 948577 | Soas | 21



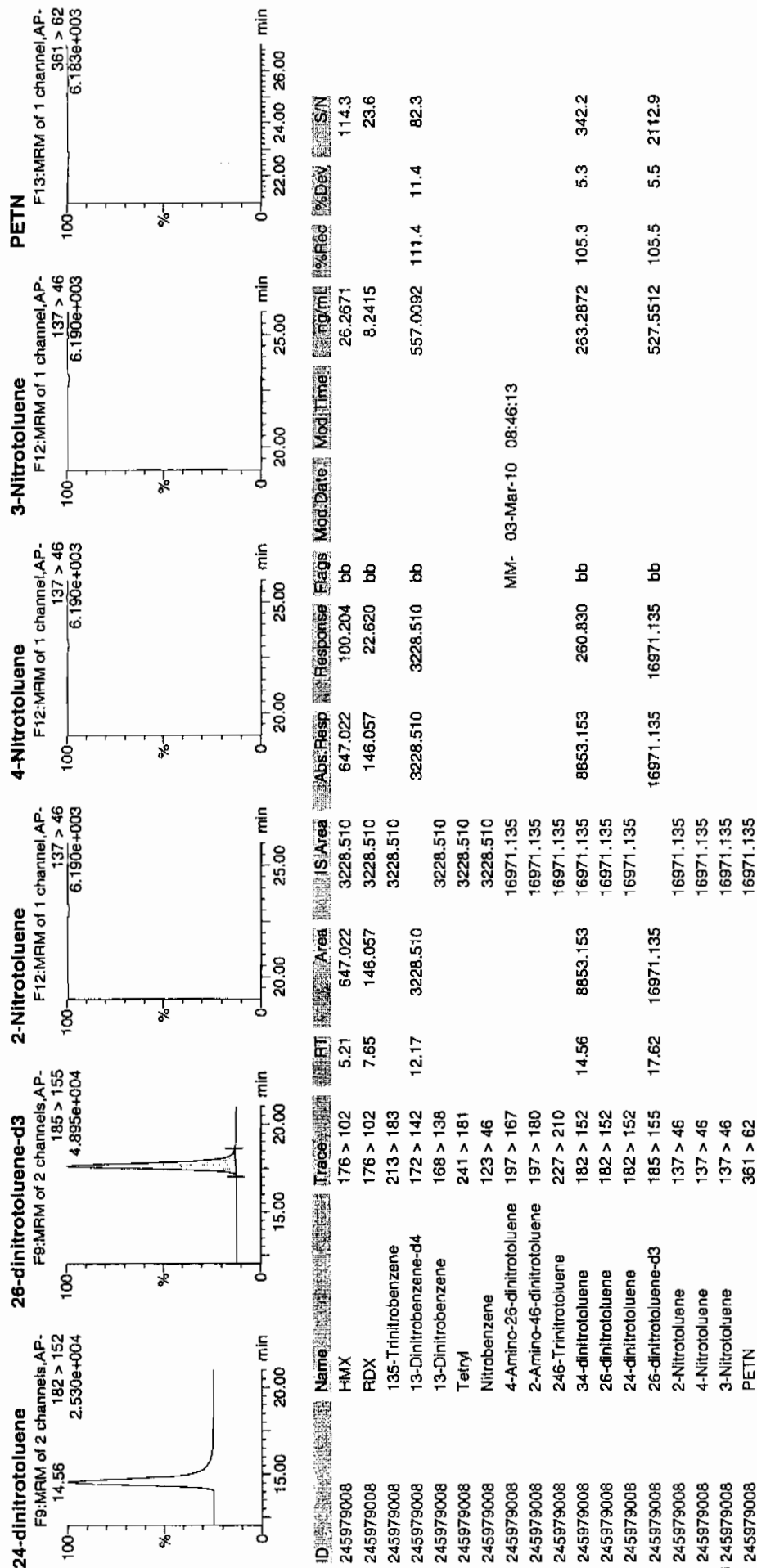
Handwritten: 03/04/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 56 of 103

Dataset: C:\MASSLYN\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7961

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979008

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240019.wiff

Date Analyzed: 24-FEB-10 14:40

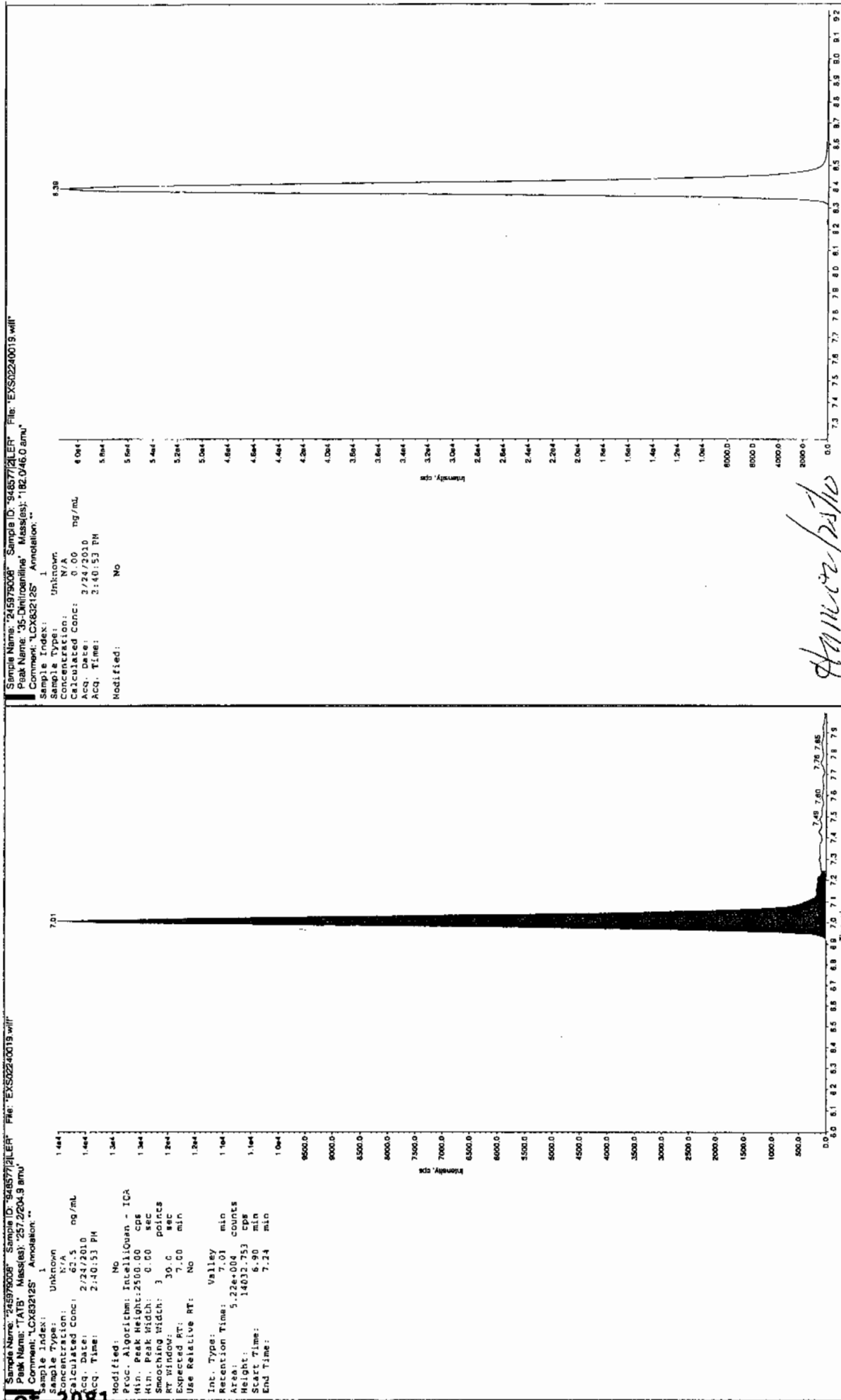
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	625	J
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

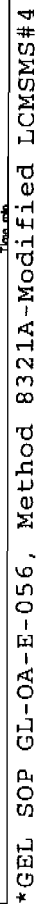
*Concentration =

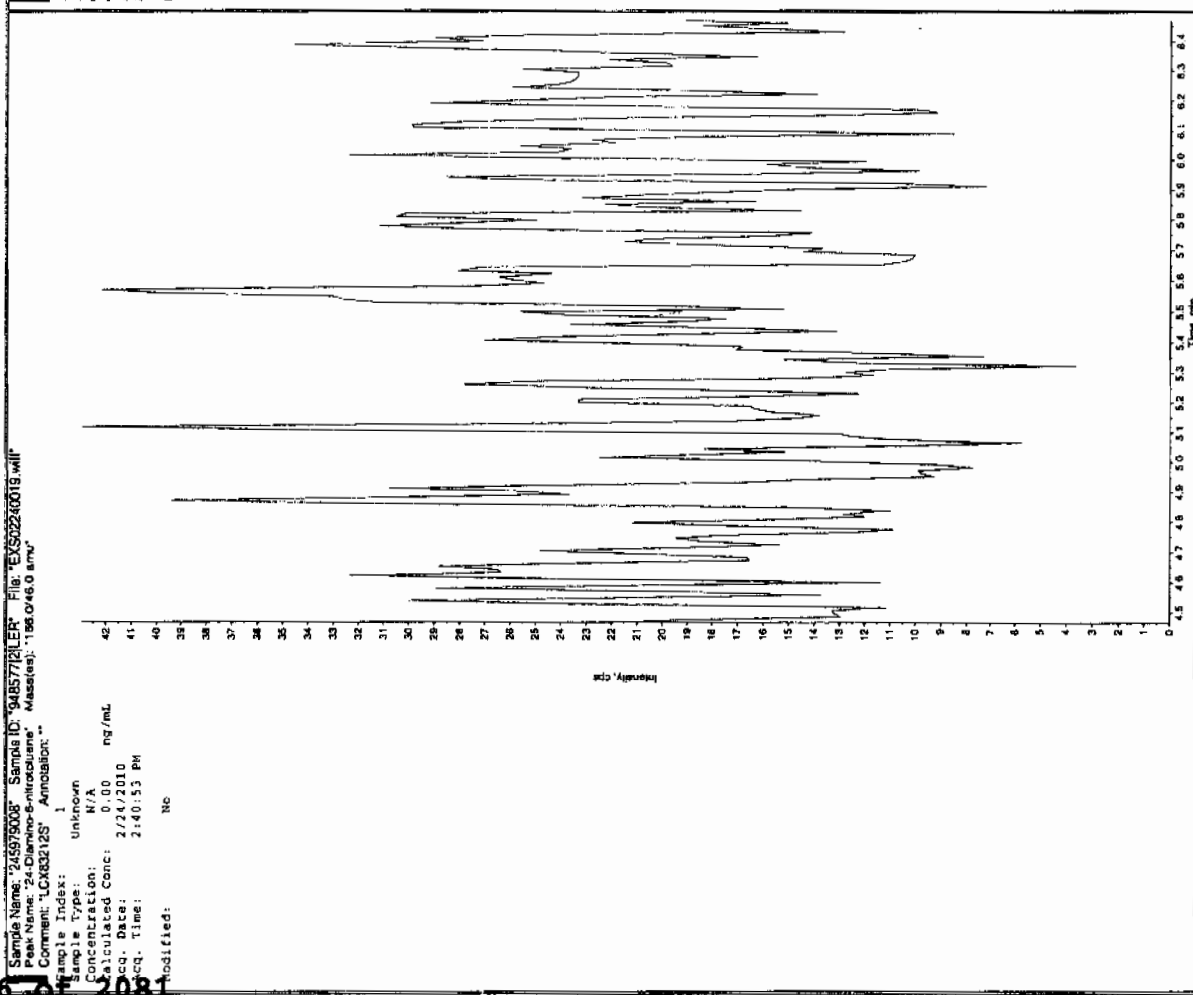
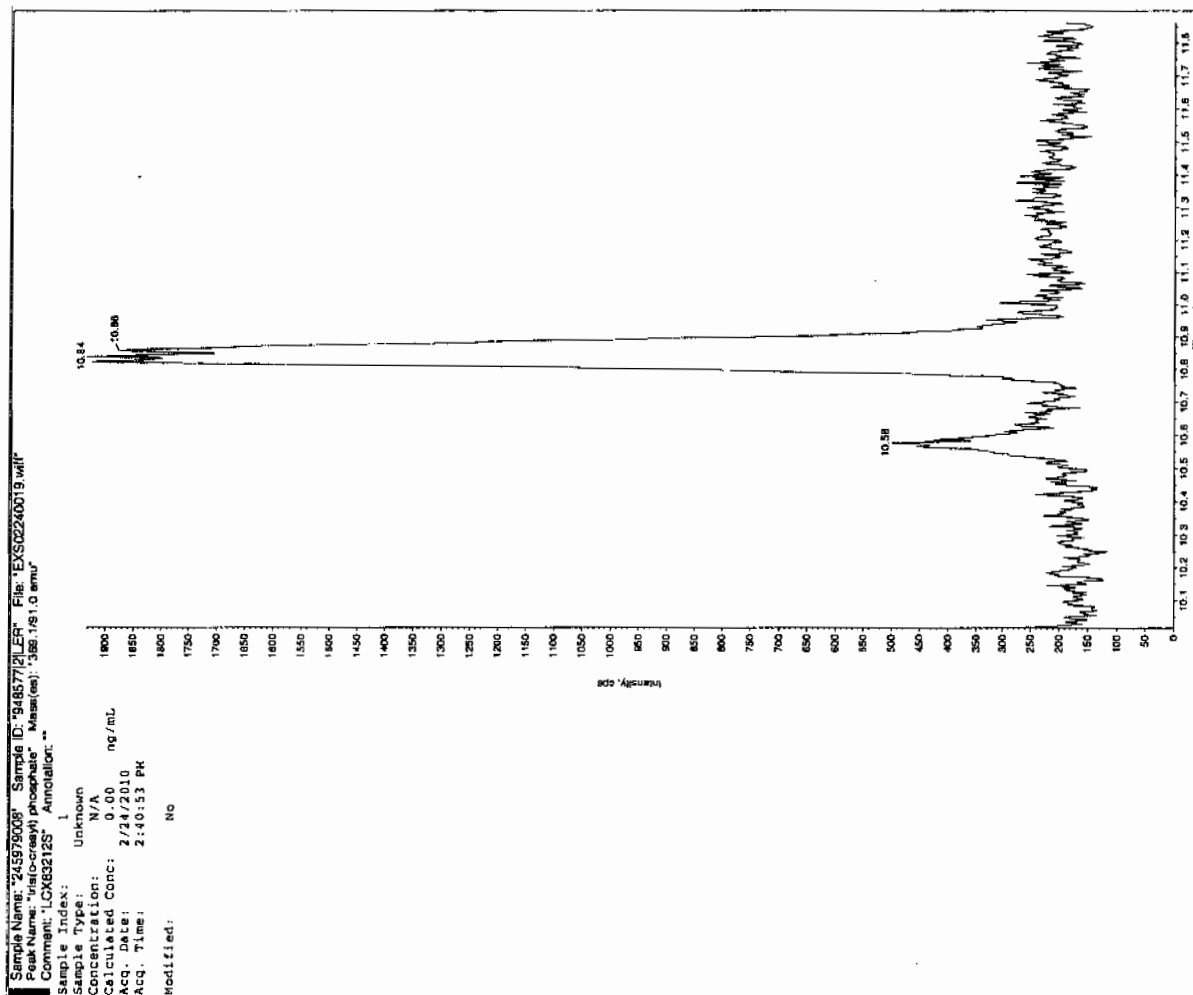
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

264 2/28/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7971

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979009

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301061a

Date Analyzed: 02-MAR-10 21:10

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO1030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP\PRO1030110expA1.qld

Date: 02-Mar-2010

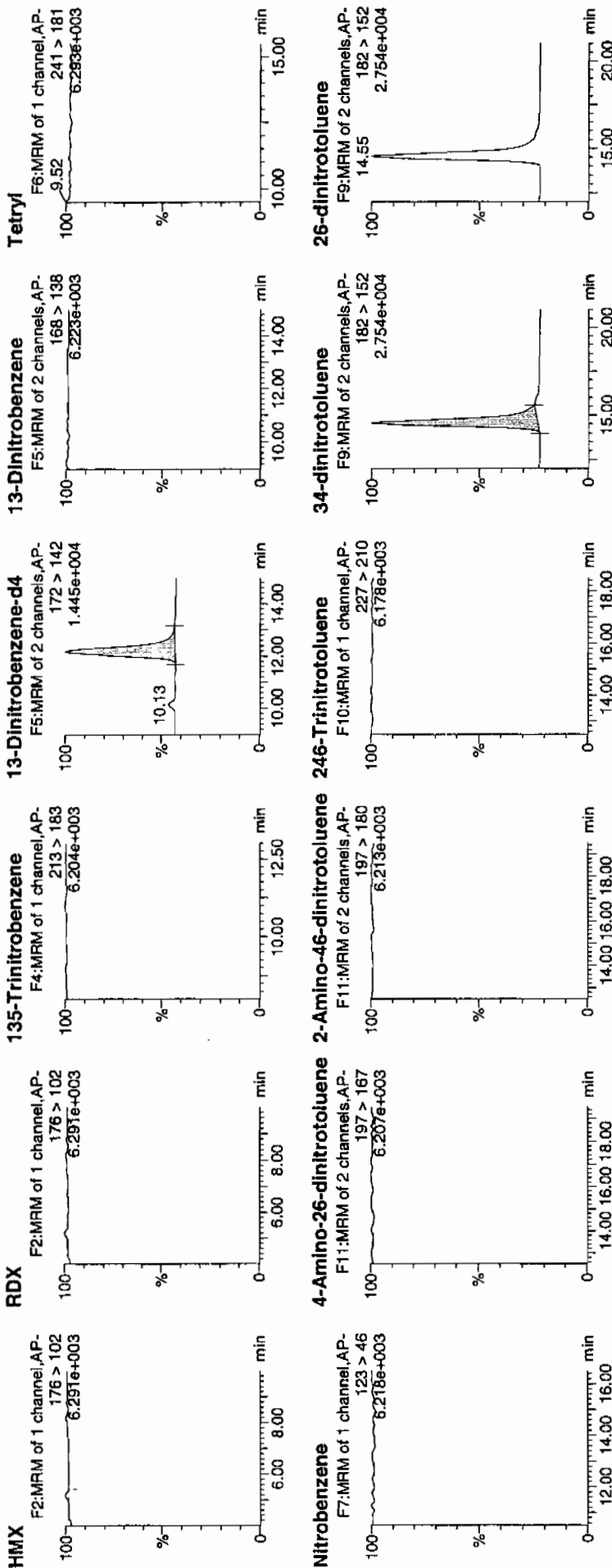
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ID: 245979009

Vial: 2:7,A

447
3/3/10

WAVE 948577 (SOL) 121



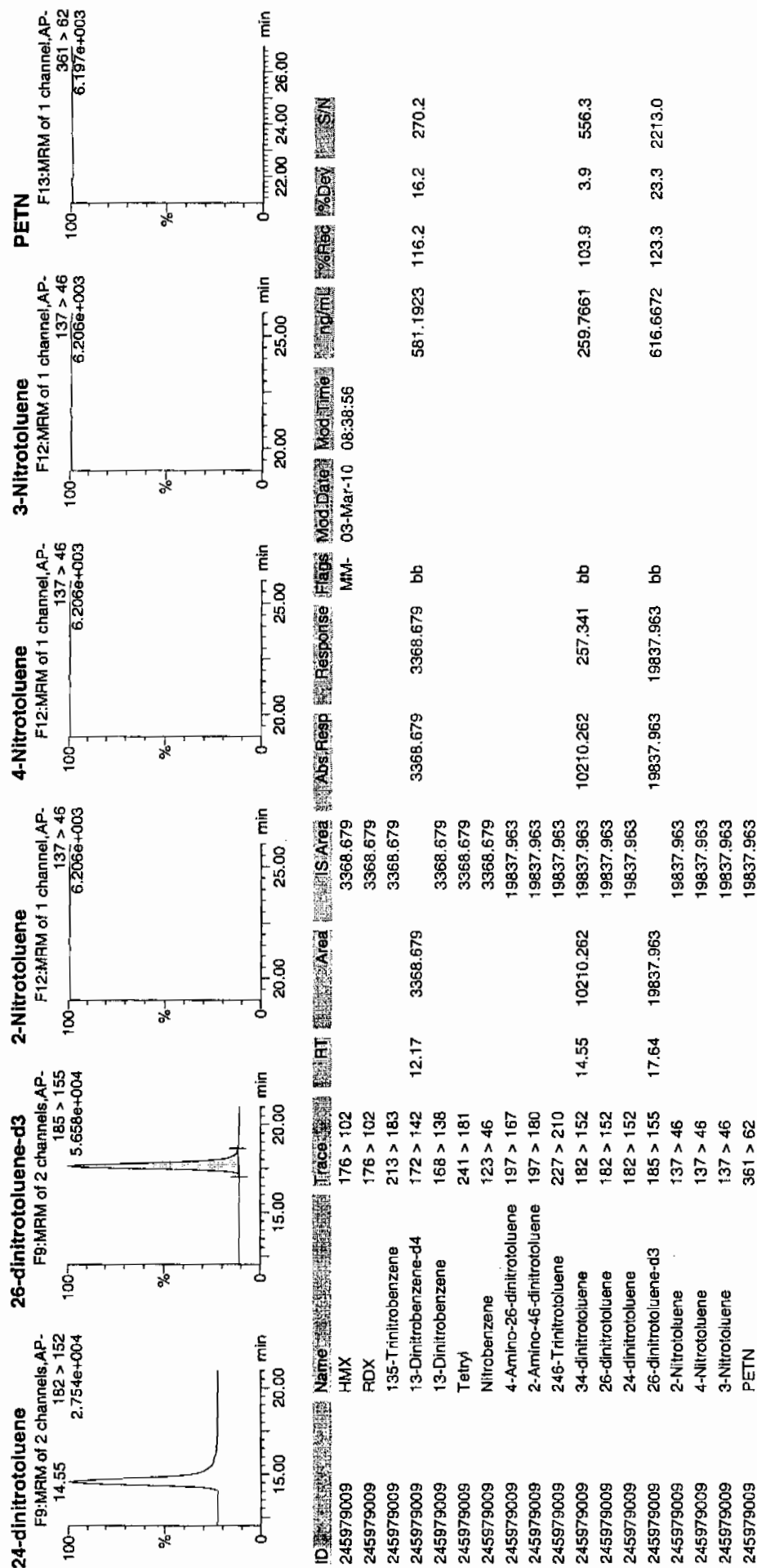
447
03/04/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 58 of 103

Dataset: C:\MASSLYNX\New_Exp\PRO030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7971

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979009

Sample Amount 2

Moisture: 25.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240020.wiff

Date Analyzed: 24-FEB-10 14:56

Units: ug/kg

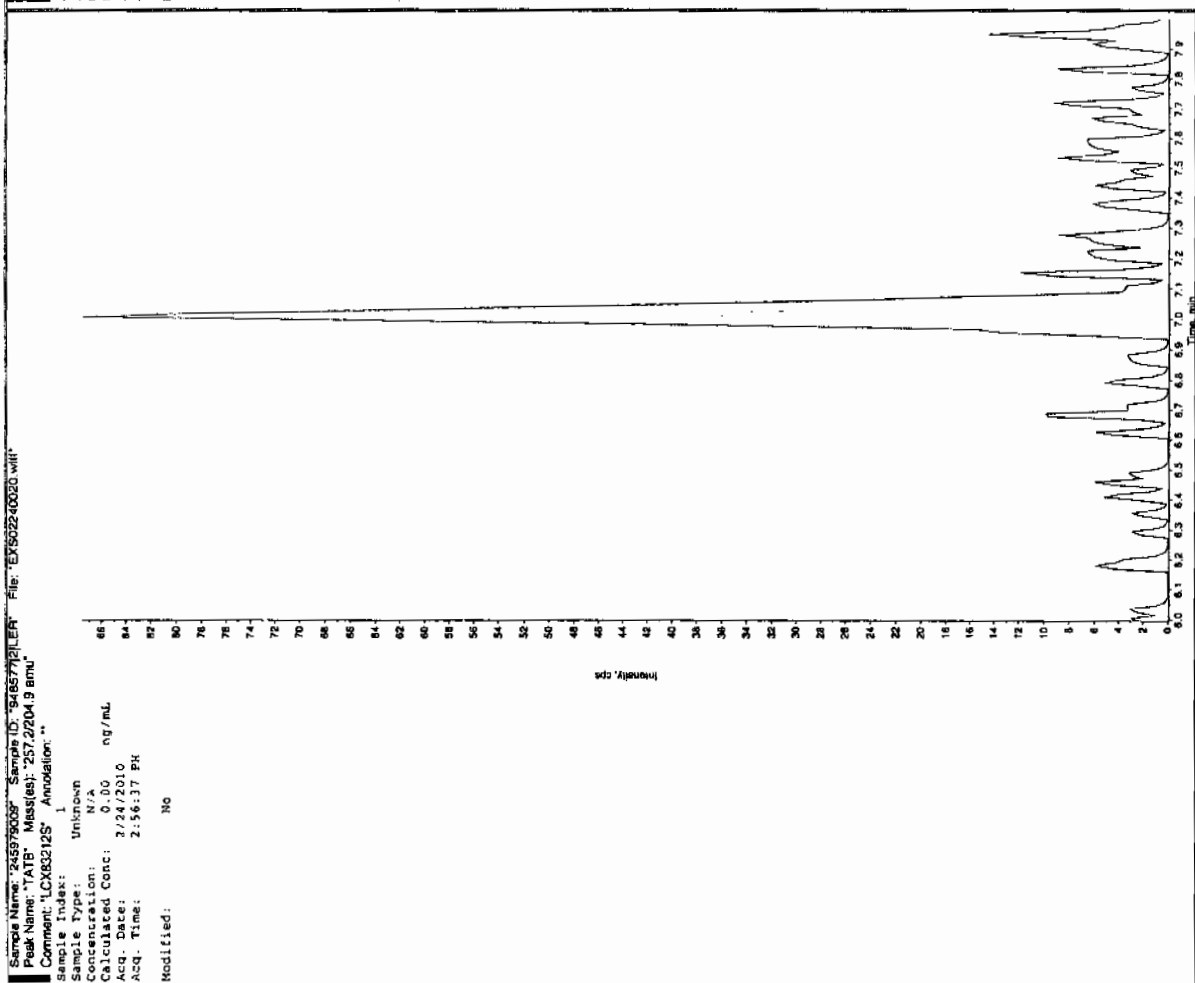
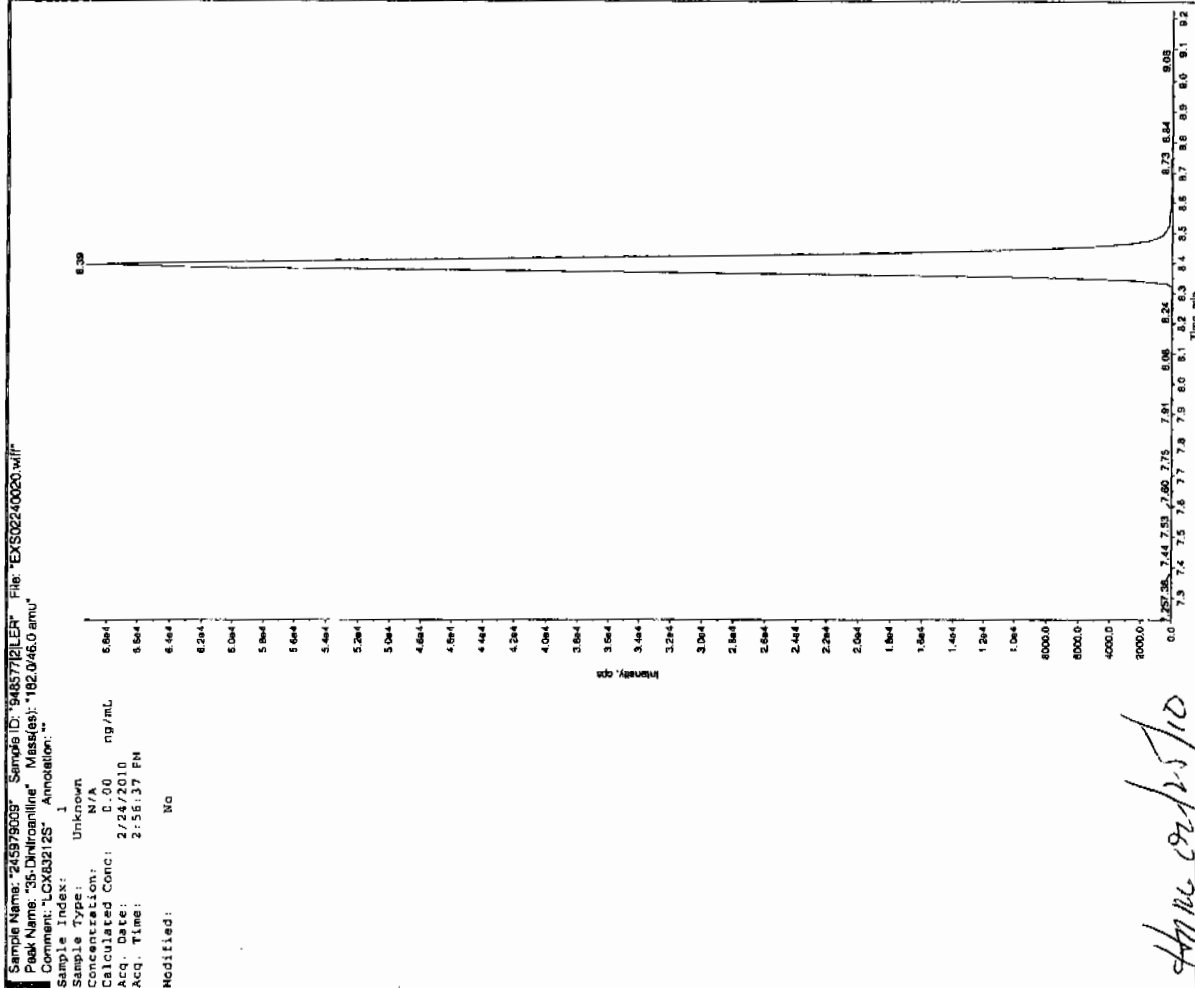
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

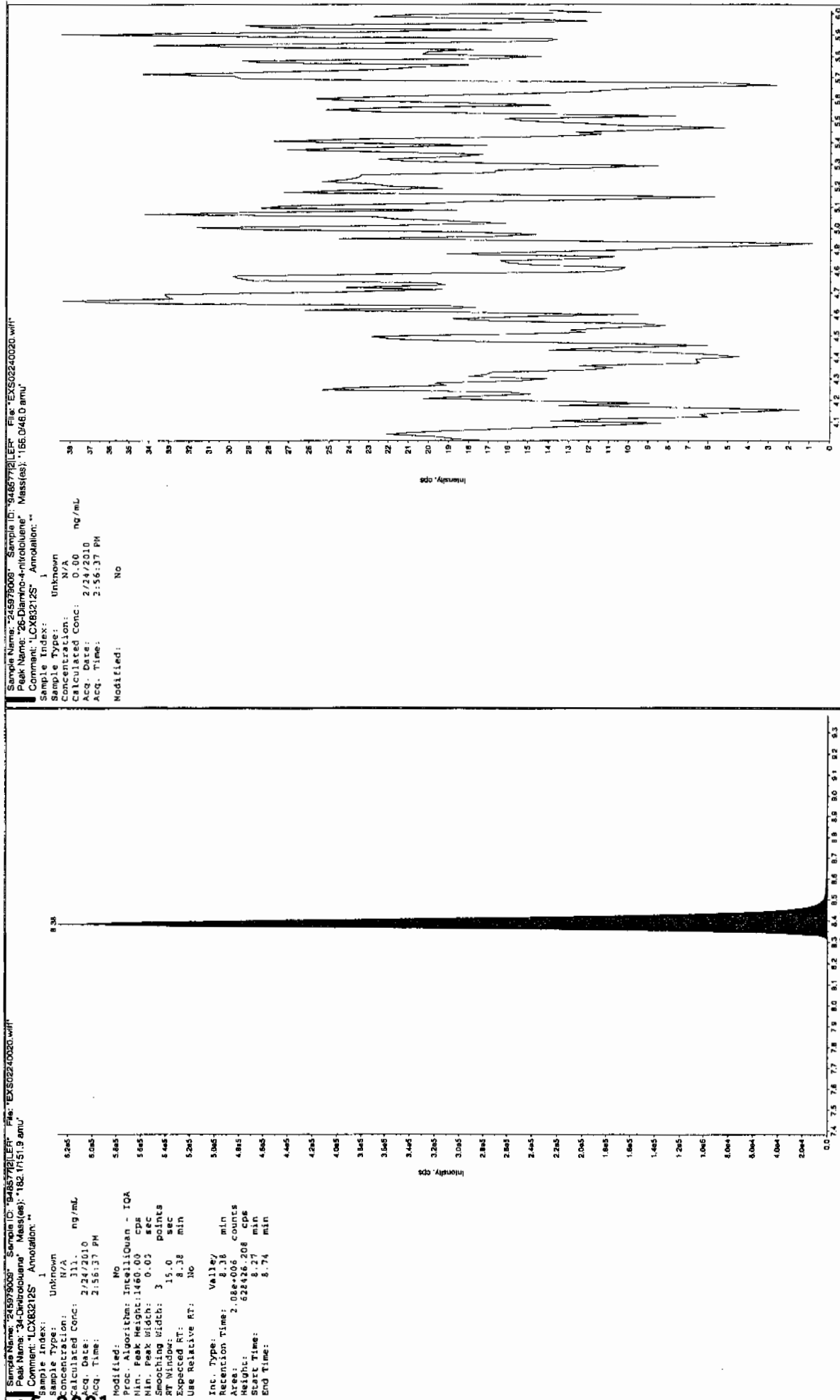
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Gen 2125110

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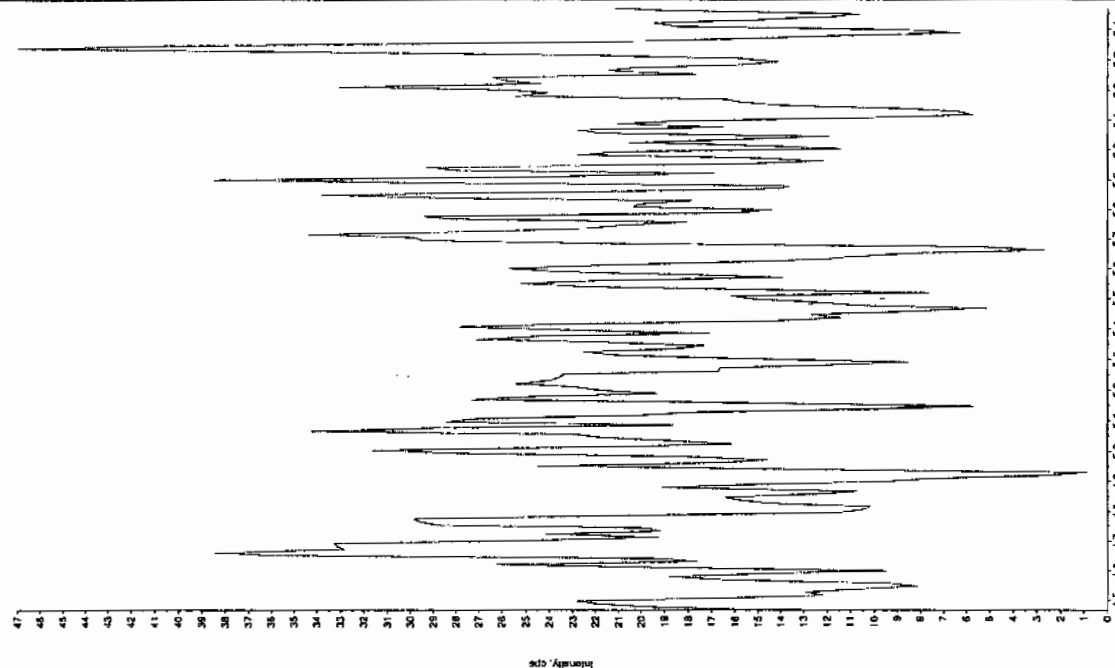
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

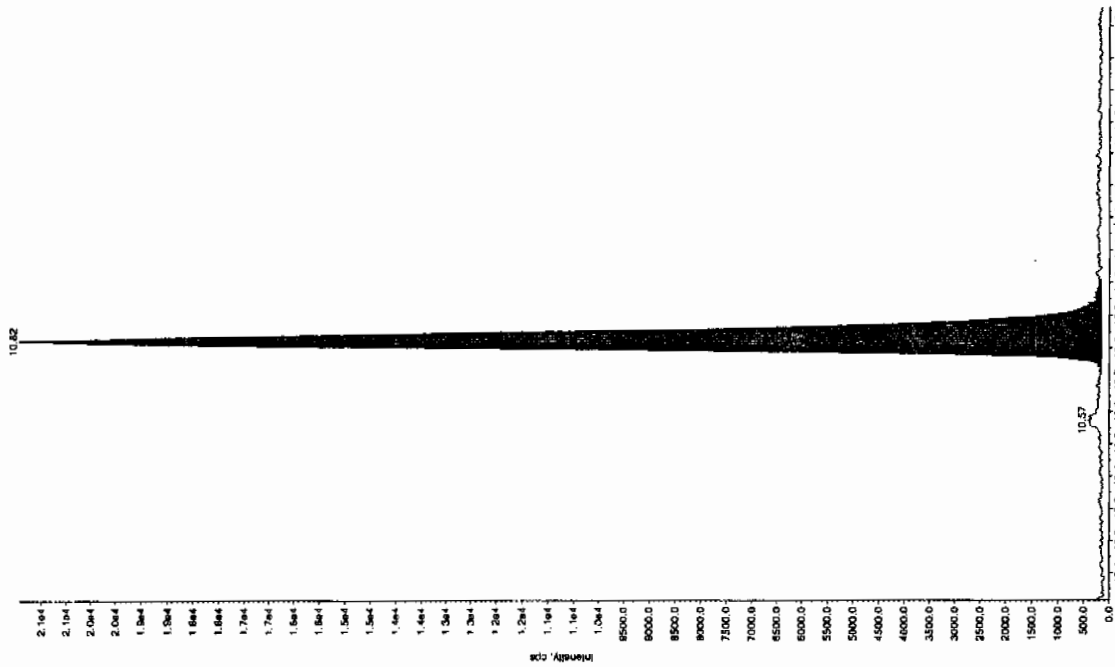
Sample Name: "245979009" Sample ID: "948577121ER" File: "EX02240020.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "186.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.20 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 2:56:37 PM
 Acq. Time: 2:56:37 PM
 Modified: No



Sample Name: "245979009" Sample ID: "948577121ER" File: "EX02240020.wif"
 Peak Name: "1,1,1-Trichloro-2,2,2-trifluoroethane" Mass(es): "131.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 4.72 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 2:56:37 PM
 Acq. Time: 2:56:37 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 8.01e09 cps
 Height: 2111833 cps
 Start Time: 10.7 min
 End Time: 11.0 min



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7966

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979010

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301062a

Date Analyzed: 02-MAR-10 21:39

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	135	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	1430	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Printed: Wed Mar 03 09:10:52 2010, Page 59 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0301062a

Date: 02-Mar-2010

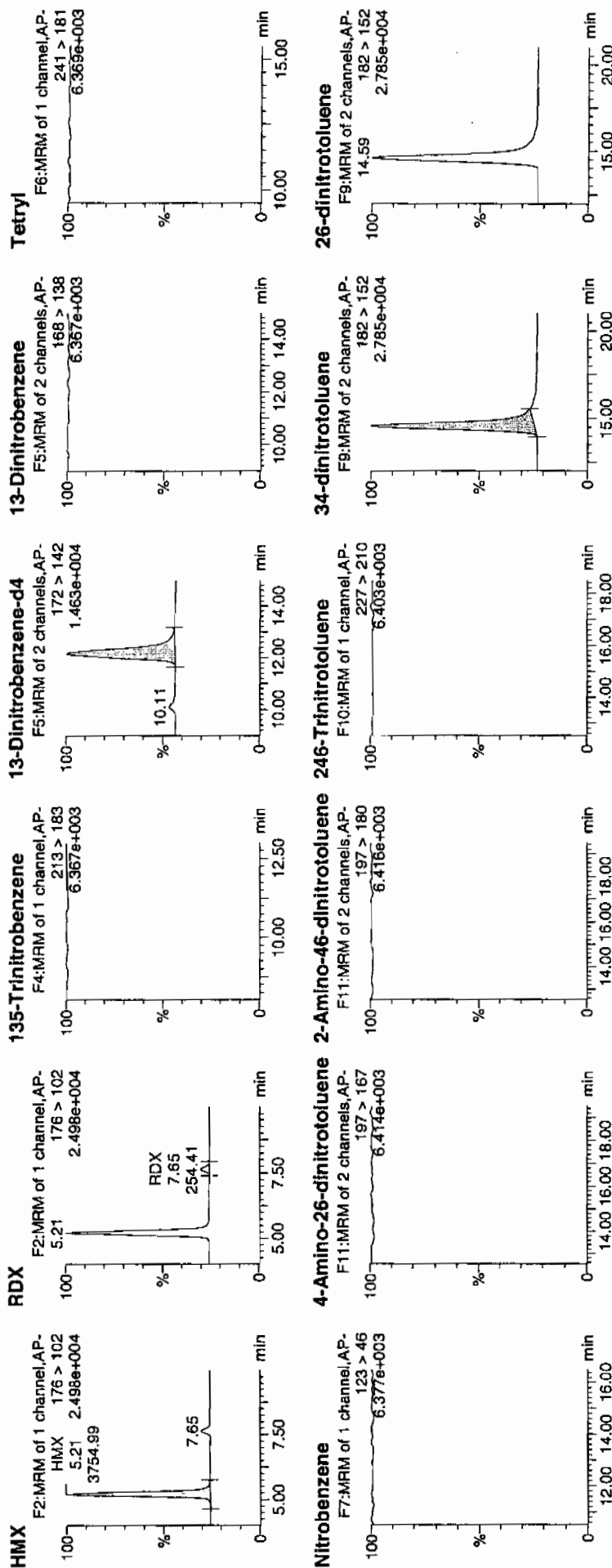
Time: 21:39:43

ID: 245979010

Vial: 2:7,B

147
3/3/10

LAU 948577 / 8022 / 2

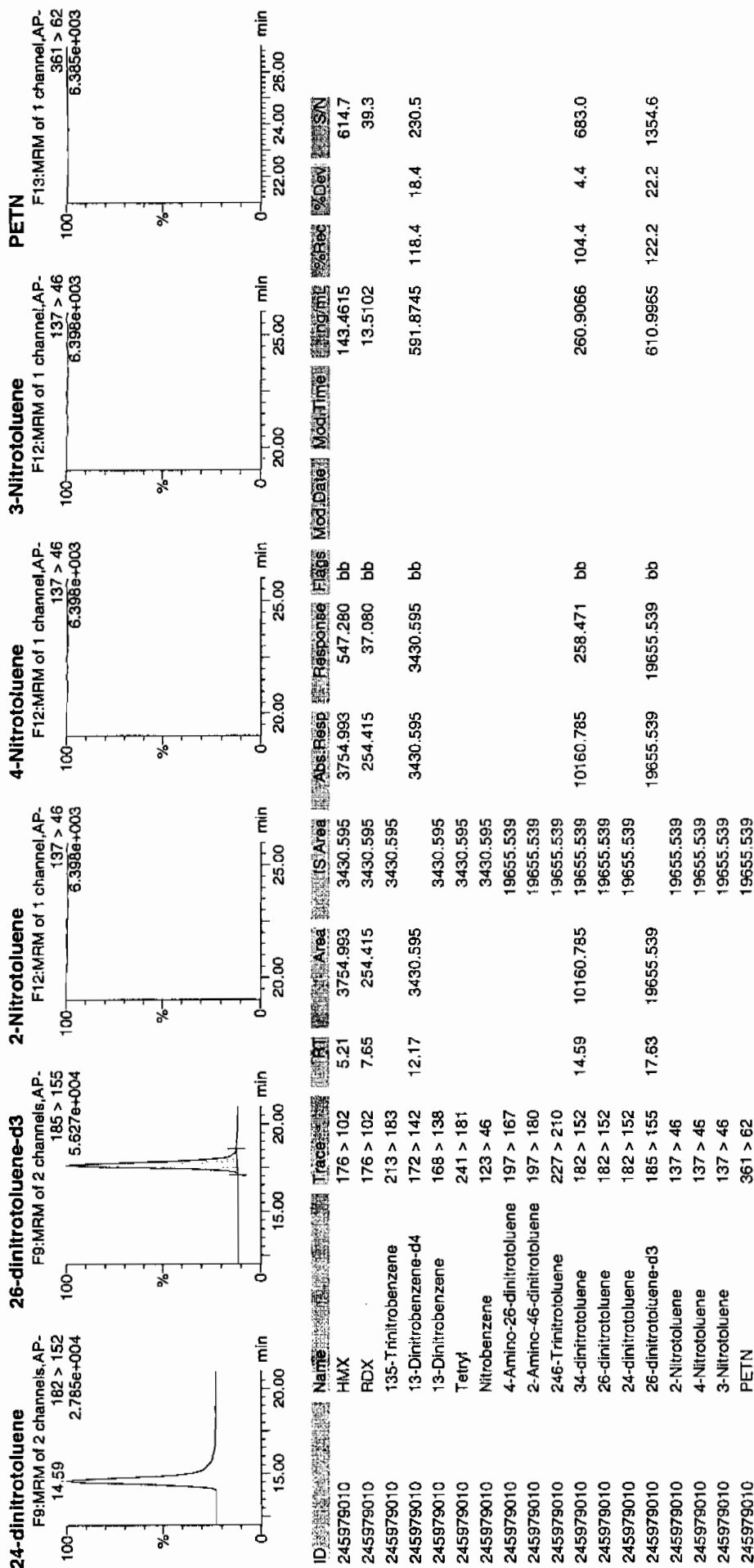


47116 03/04/10

Printed: Wed Mar 03 09:10:52 2010, Page 60 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7966

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979010

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240021.wiff

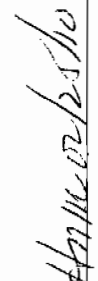
Date Analyzed: 24-FEB-10 15:12

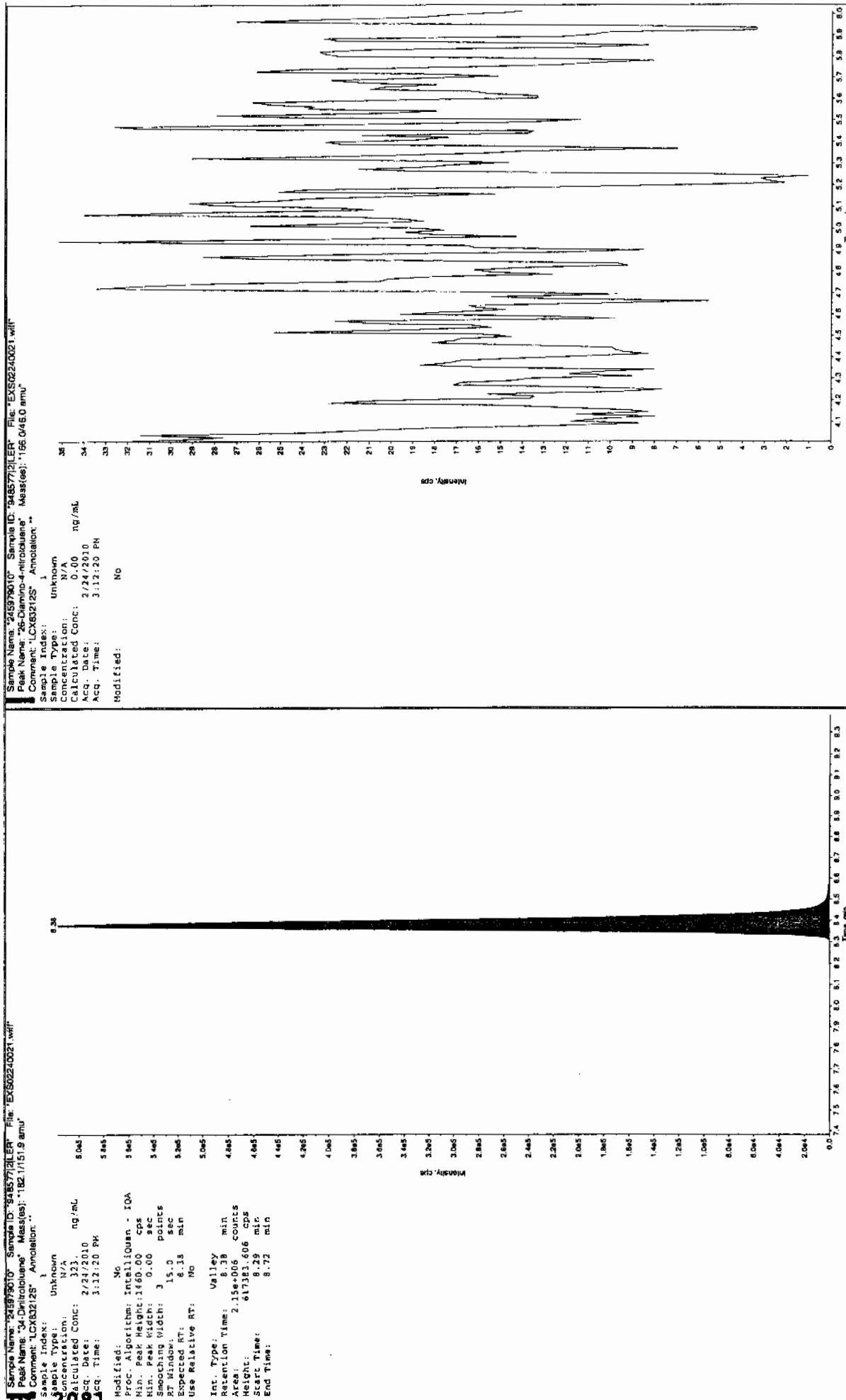
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	331	J
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

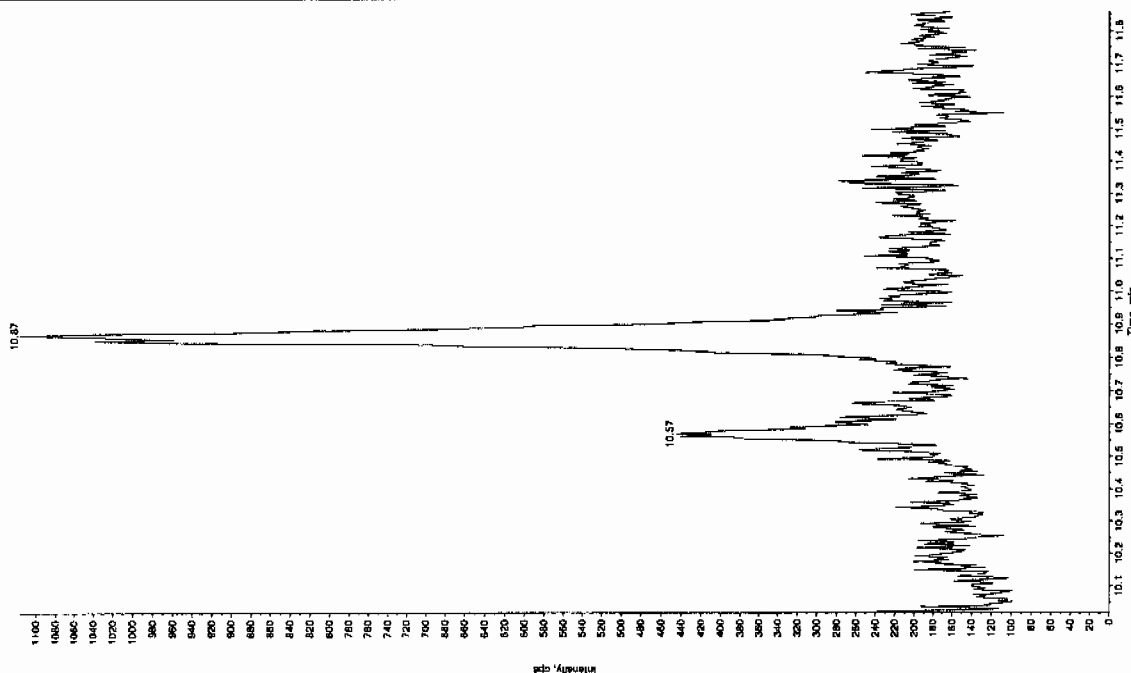




*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

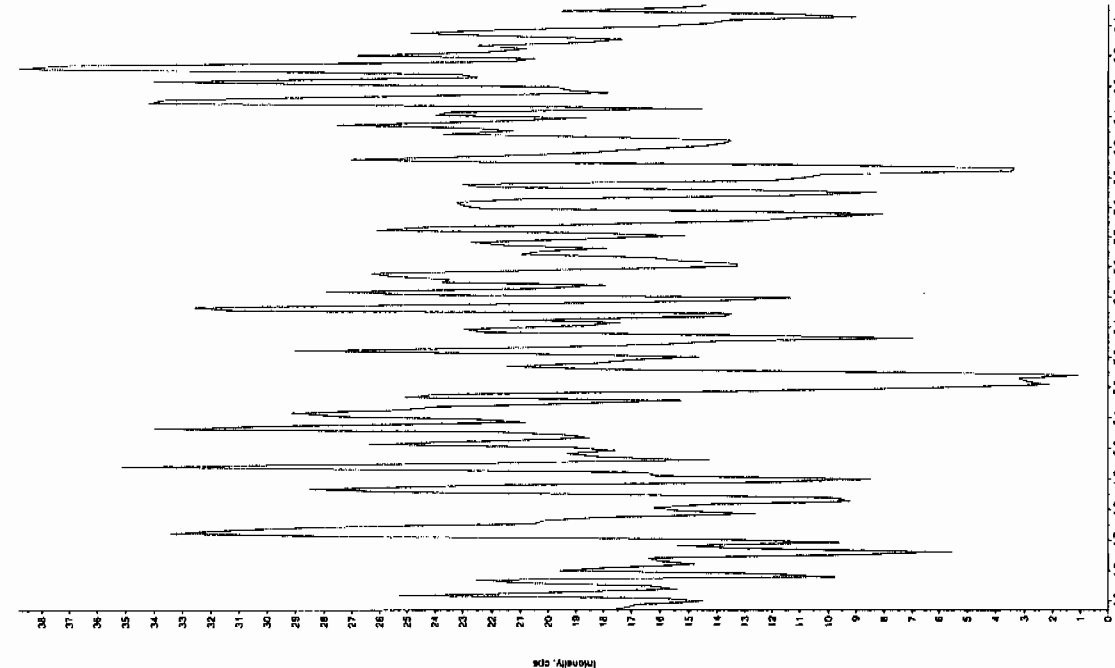
Sample Name: "245975010" Sample ID: "94857721ER" File: "EXS02240021.wif"
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 3:12:20 PM
 Modified: No



Sample Name: "245975010" Sample ID: "94857721ER" File: "EXS02240021.wif"
 Peak Name: "24-Diamino-6-nitrothiouracil" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 3:12:20 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7959

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979011

Sample Amount 2

Moisture: 20.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301063a

Date Analyzed: 02-MAR-10 22:09

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 61 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301063a

Date: 02-Mar-2010

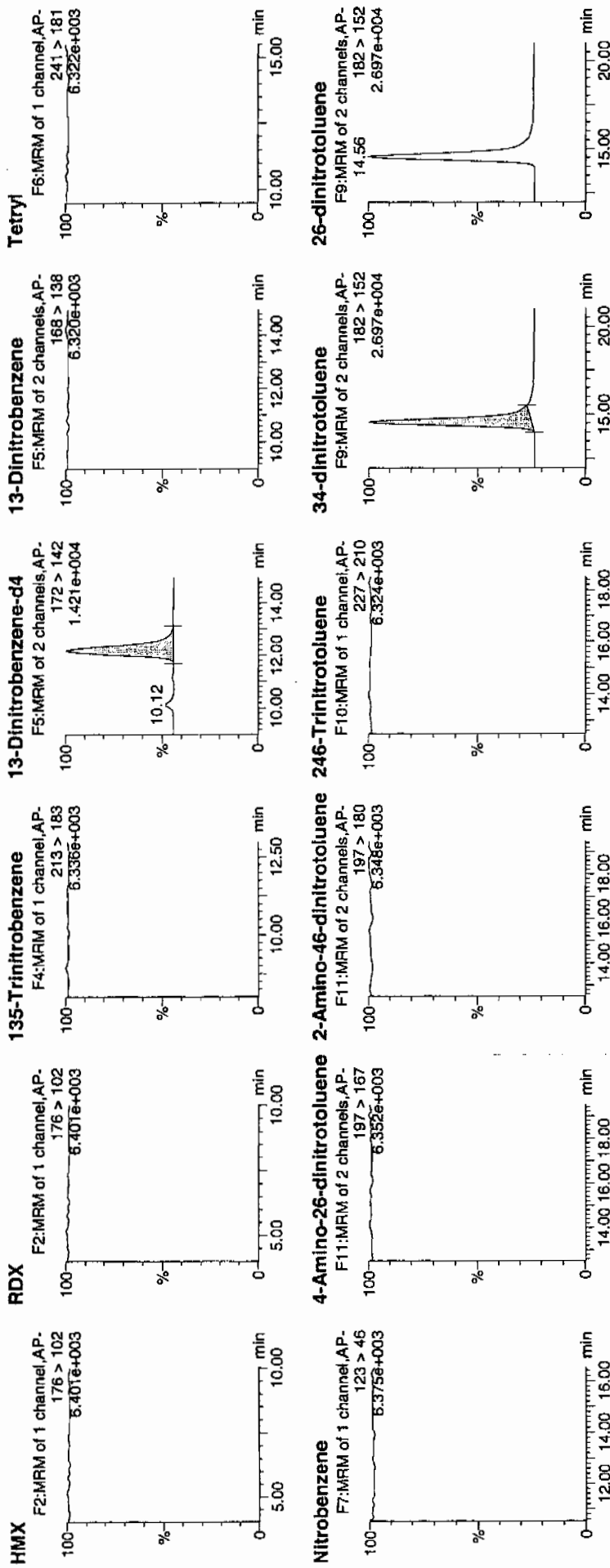
Time: 22:09:14

ID: 245979011

Vial: 2:7,C

4777
3/3/10

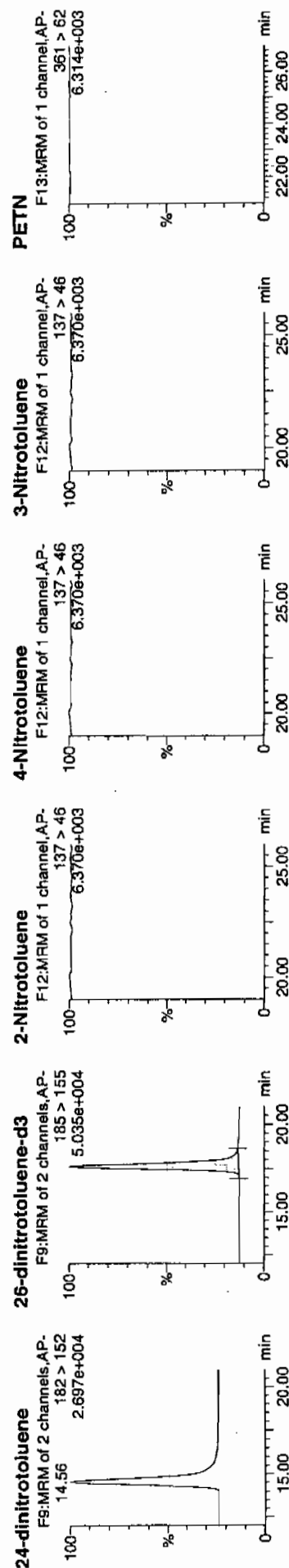
948577 / 21



4777
03/04/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Flags	Mod	Time	%Rec	%Dev	S/N
245979011	HMX	176 > 102		3309.823								
245979011	RDX	176 > 102		3309.823								
245979011	135-Trinitrobenzene	213 > 183		3309.823								
245979011	13-Dinitrobenzene-d4	172 > 142	12.17	3309.823			bb		571.0380	114.2	14.2	396.1
245979011	13-Dinitrobenzene	168 > 138		3309.823								
245979011	Tetryl	241 > 181		3309.823								
245979011	Nitrobenzene	123 > 46		3309.823								
245979011	4-Amino-26-dinitrotoluene	197 > 167		17384.195								
245979011	2-Amino-46-dinitrotoluene	197 > 180		17384.195								
245979011	246-Trinitrotoluene	227 > 210		17384.195								
245979011	34-dinitrotoluene	182 > 152	14.56	9626.674	17384.195	9626.674	bb		279.4888	111.8	11.8	724.9
245979011	26-dinitrotoluene	182 > 152		17384.195								
245979011	24-dinitrotoluene	182 > 152		17384.195								
245979011	26-dinitrotoluene-d3	185 > 155	17.64	17384.195	17384.195	17384.195	bb		540.3913	108.1	8.1	1796.5
245979011	2-Nitrotoluene	137 > 46		17384.195								
245979011	4-Nitrotoluene	137 > 46		17384.195								
245979011	3-Nitrotoluene	137 > 46		17384.195								
245979011	PETN	361 > 62		17384.195								

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7959

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979011

Sample Amount 2

Moisture: 20.9

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240022.wiff

Date Analyzed: 24-FEB-10 15:28

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

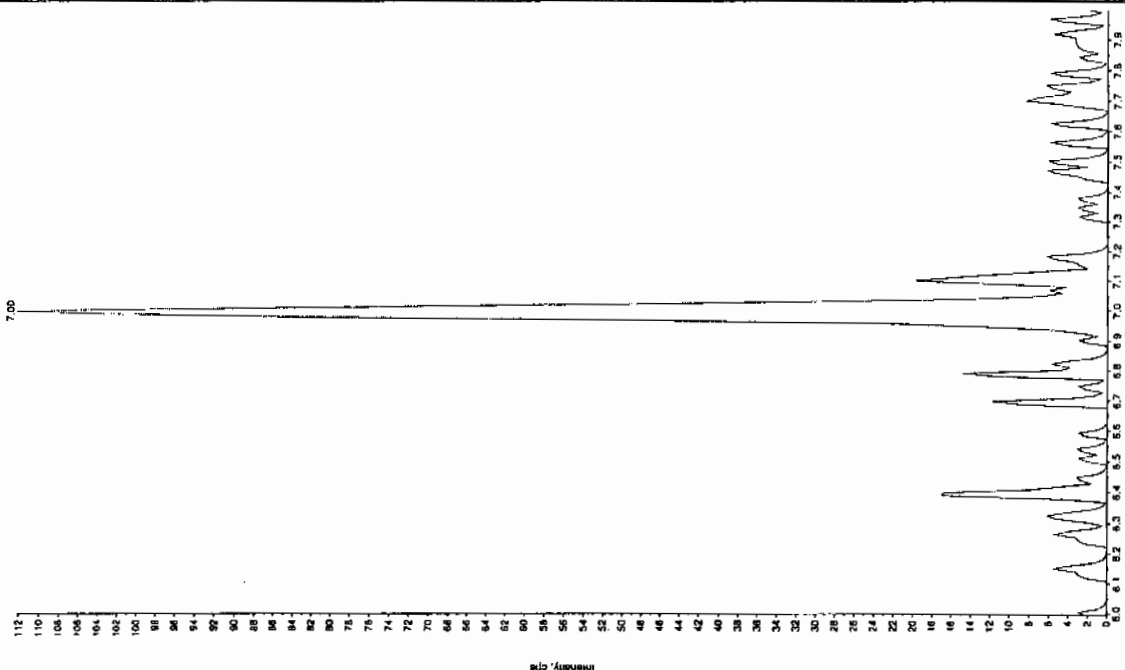
Jan 2/25/10

Sample Name: "245975011" Sample ID: "94857721ER" File: "EX502240022.wif"

Peak Name: "35-Dinitrobenzidine" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/24/2010 ng/mL
 Acq. Date: 3/23/03 PM
 Acq. Time: 3:23:03 PM
 Modified: No



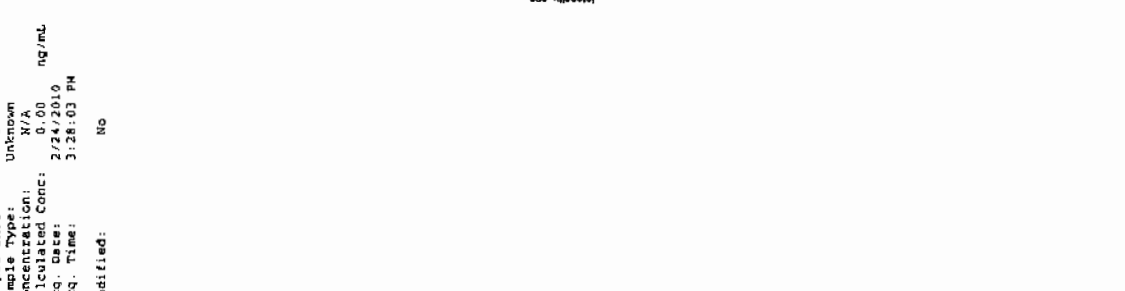
Jan 2/25/10

Sample Name: "245975011" Sample ID: "94857721ER" File: "EX502240022.wif"

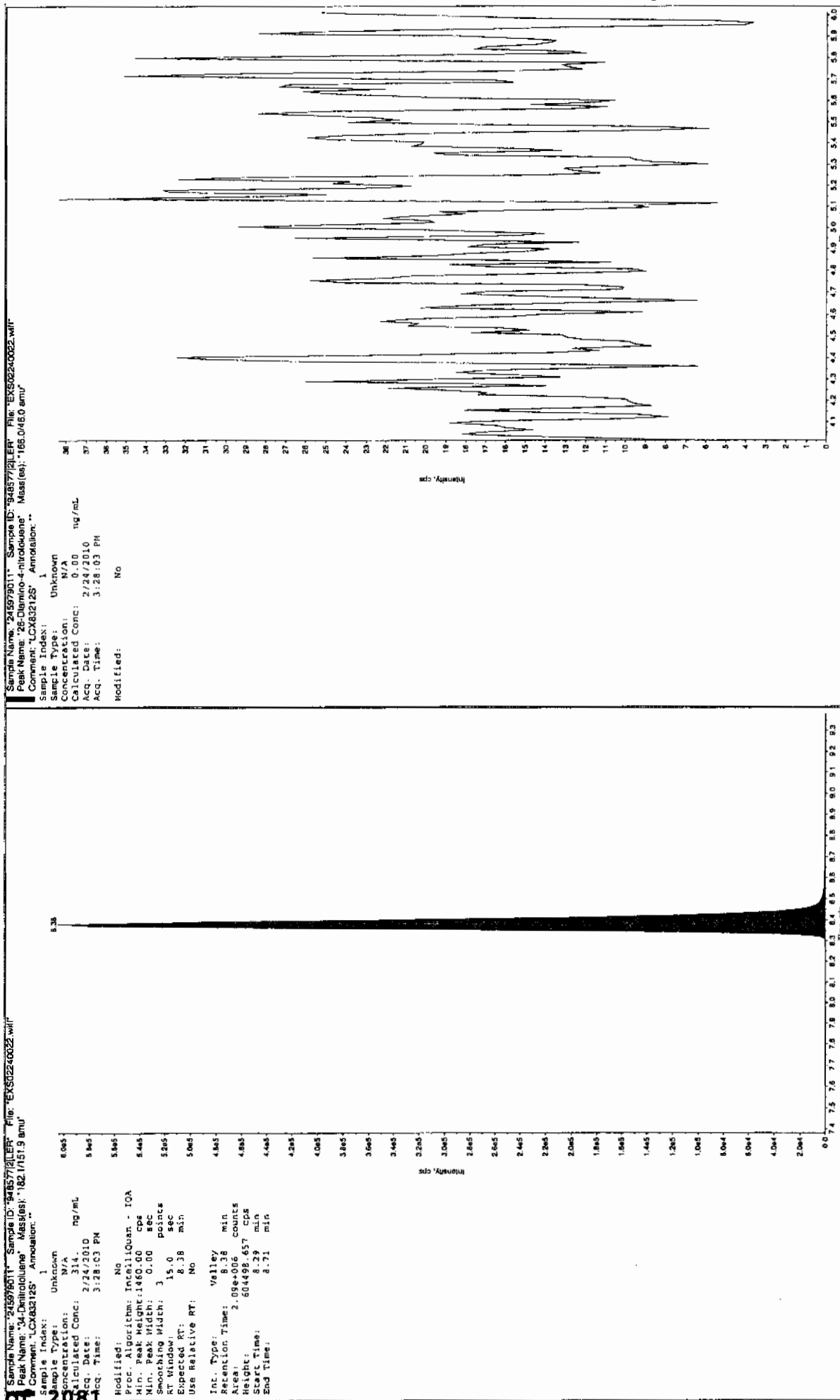
Peak Name: "1A1B" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/24/2010 ng/mL
 Acq. Date: 3/23/03 PM
 Acq. Time: 3:28:03 PM
 Modified: No



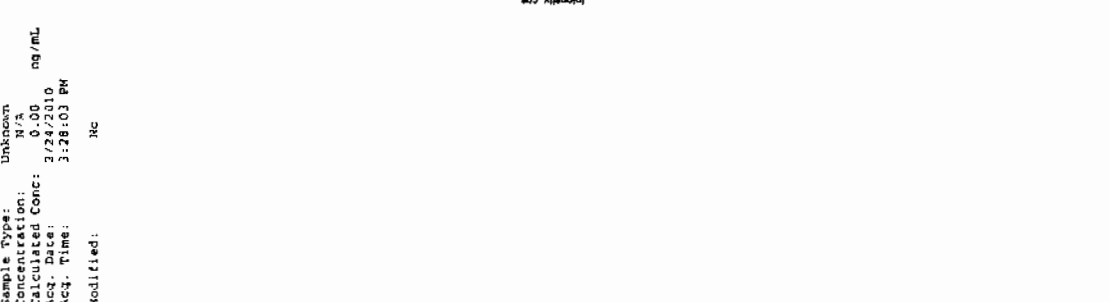
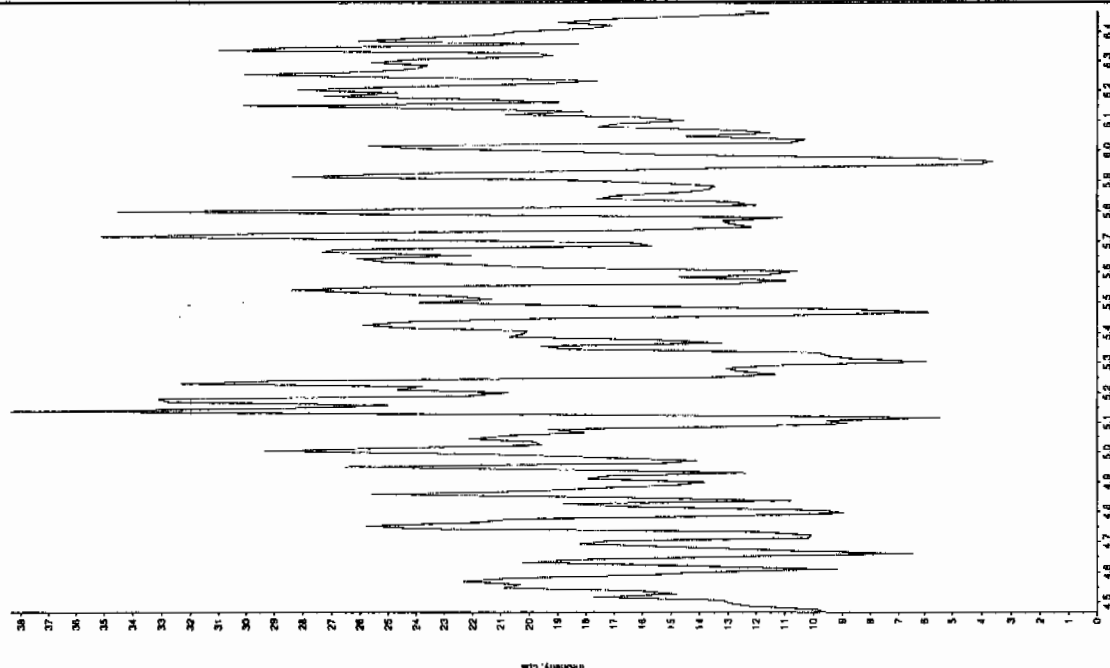
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245979011" Sample ID: "94857721LER" File: "EXS02240022.will"
 Peak Name: "245979011" Peak Name: "245979011" Peak Name: "245979011"
 Comment: "LCX832125" Annotation: "Annotation: "Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Calculated Conc: 12.7 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 3:28:03 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.5 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 1.90e+005 counts
 Height: 53352.215 cps
 Start Time: 10.7 min
 End Time: 11.0 min



Sample Name: "245979011" Sample ID: "94857721LER" File: "EXS02240022.will"
 Peak Name: "245979011" Peak Name: "245979011" Peak Name: "245979011"
 Comment: "LCX832125" Annotation: "Annotation: "Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 3:28:03 PM
 Modified: No

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7969

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979012

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301064a

Date Analyzed: 02-MAR-10 22:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	205	J
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	2160	
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 63 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301064a

Date: 02-Mar-2010

Time: 22:38:44

ID: 245979012

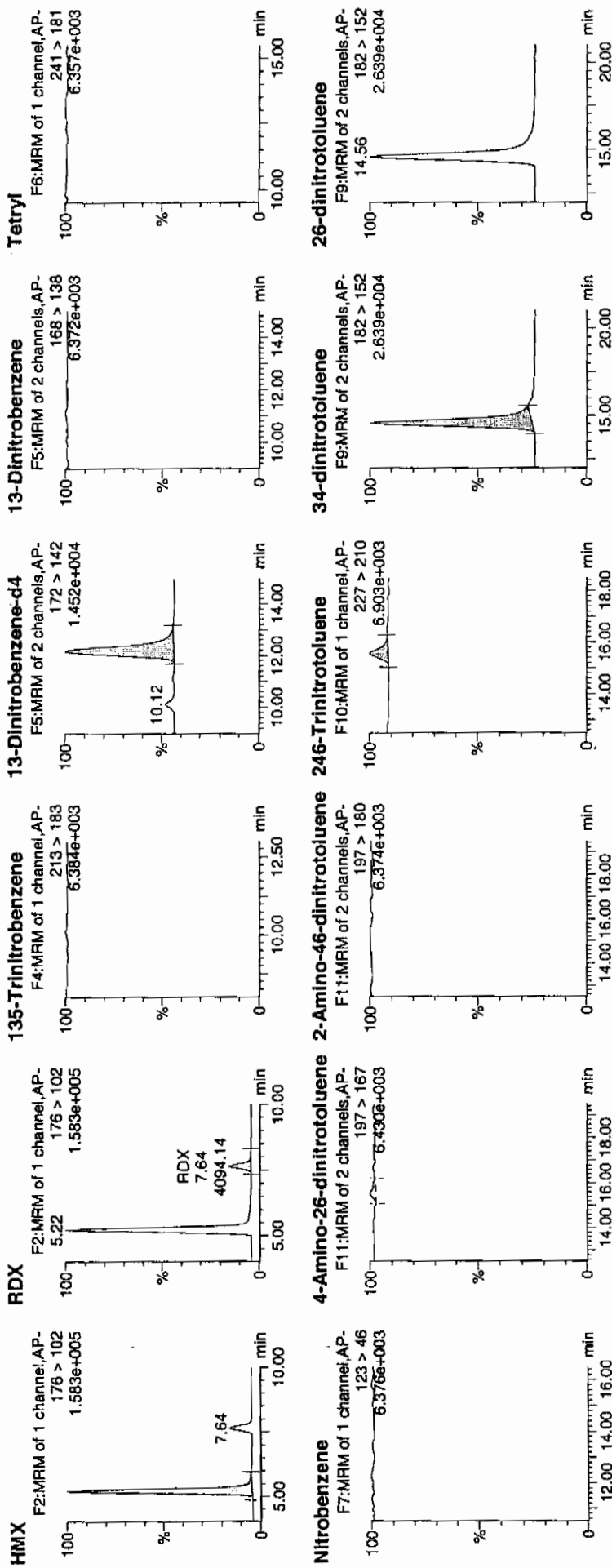
Vial: 2:7,D

See Ex 301100a

See Ex 301100a

3/3/10

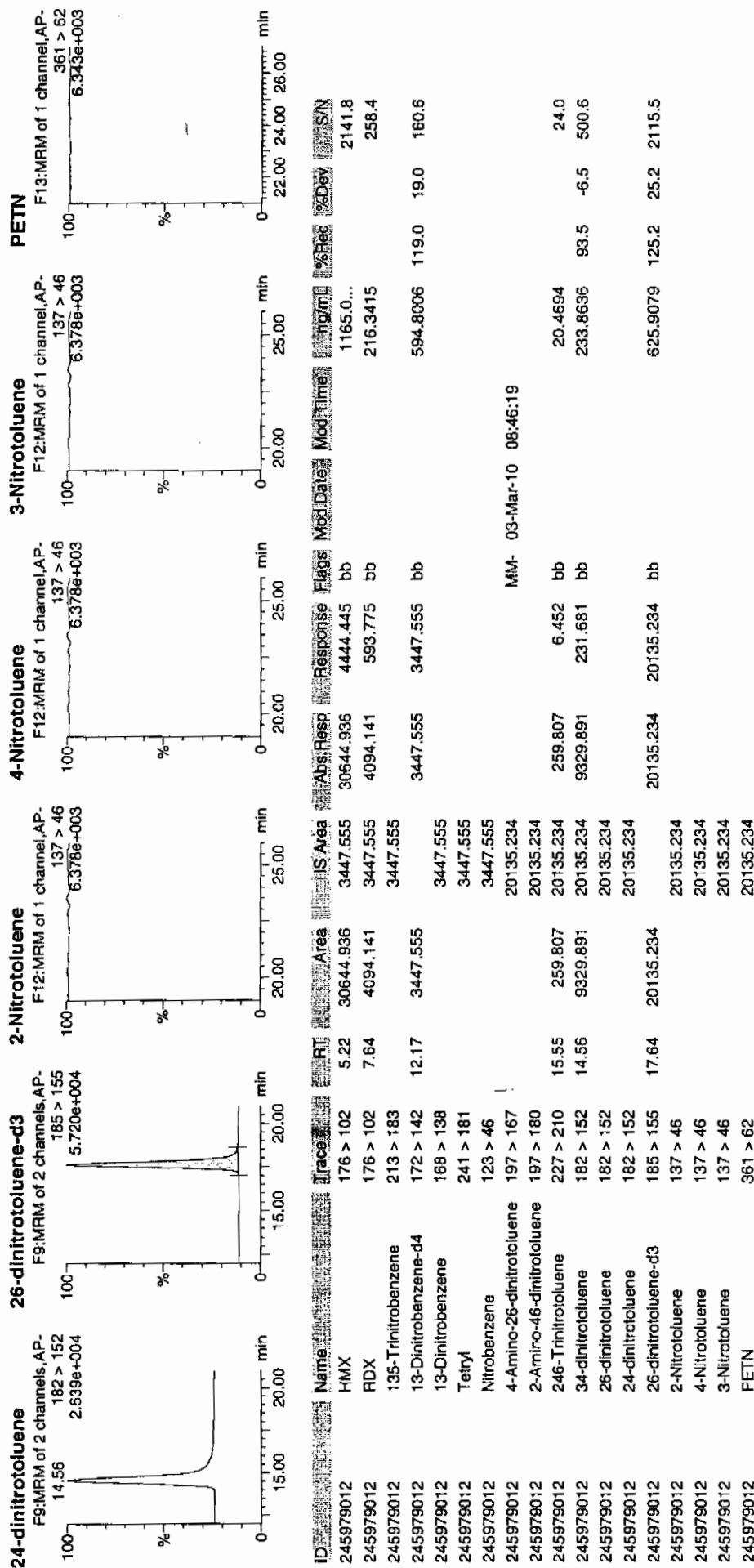
948577 / 2 /



Amu 03/04/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7969

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979012

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 5

Injection Volume (uL): 50

GEL data file: EXP0301100a

Date Analyzed: 03-MAR-10 16:21

Units: ug/kg

Cas No.	Compound	Concentration*	Q
2691-41-0	HMX	10900	

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301100a

Date: 03-Mar-2010

Time: 16:21:56

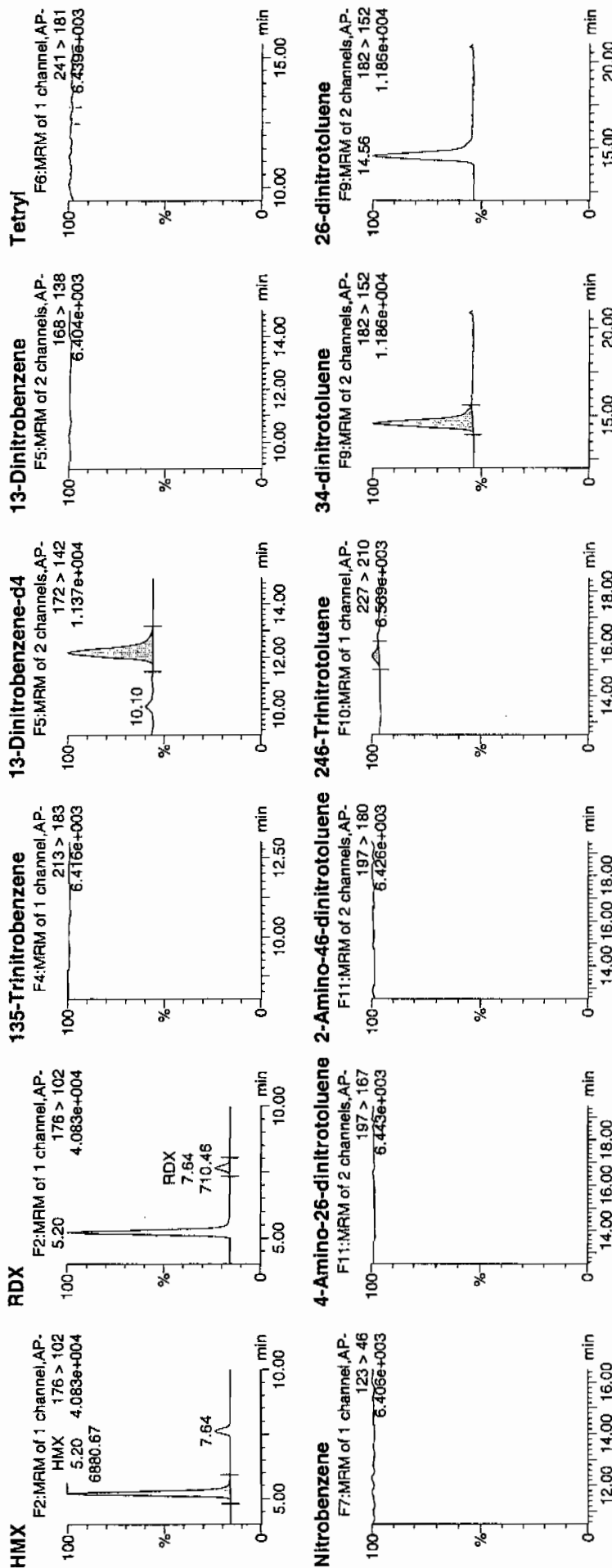
ID: 245979012

Vial: 2:8, B

Reference HPLC / EXP0301064a

NOT
3/4/10

Handwritten notes: 945577 (800) / 51



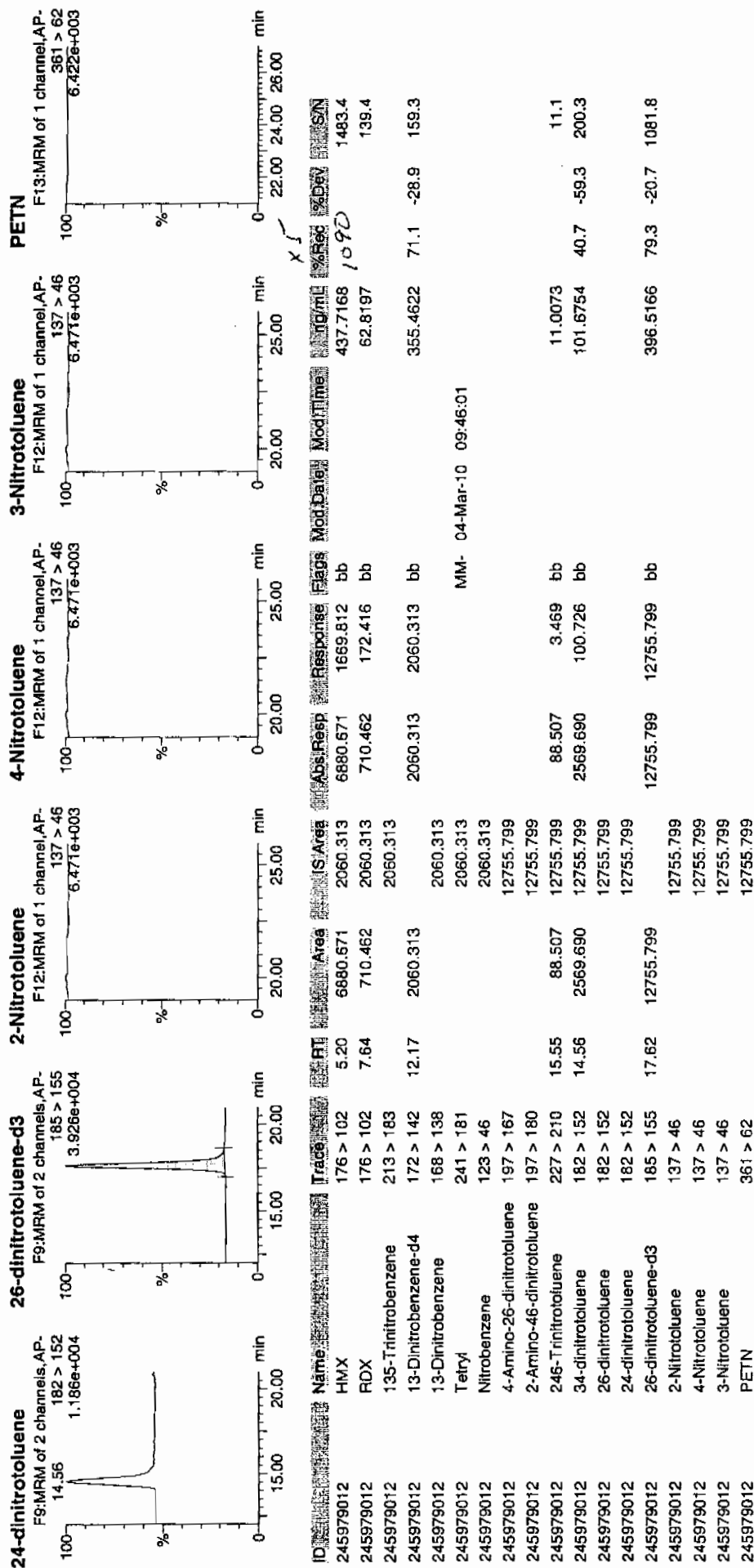
Handwritten note: 4/10/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 04 09:56:46 2010, Page 34 of 81

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7969

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979012

Sample Amount 2

Moisture: 9.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240023.wiff

Date Analyzed: 24-FEB-10 15:43

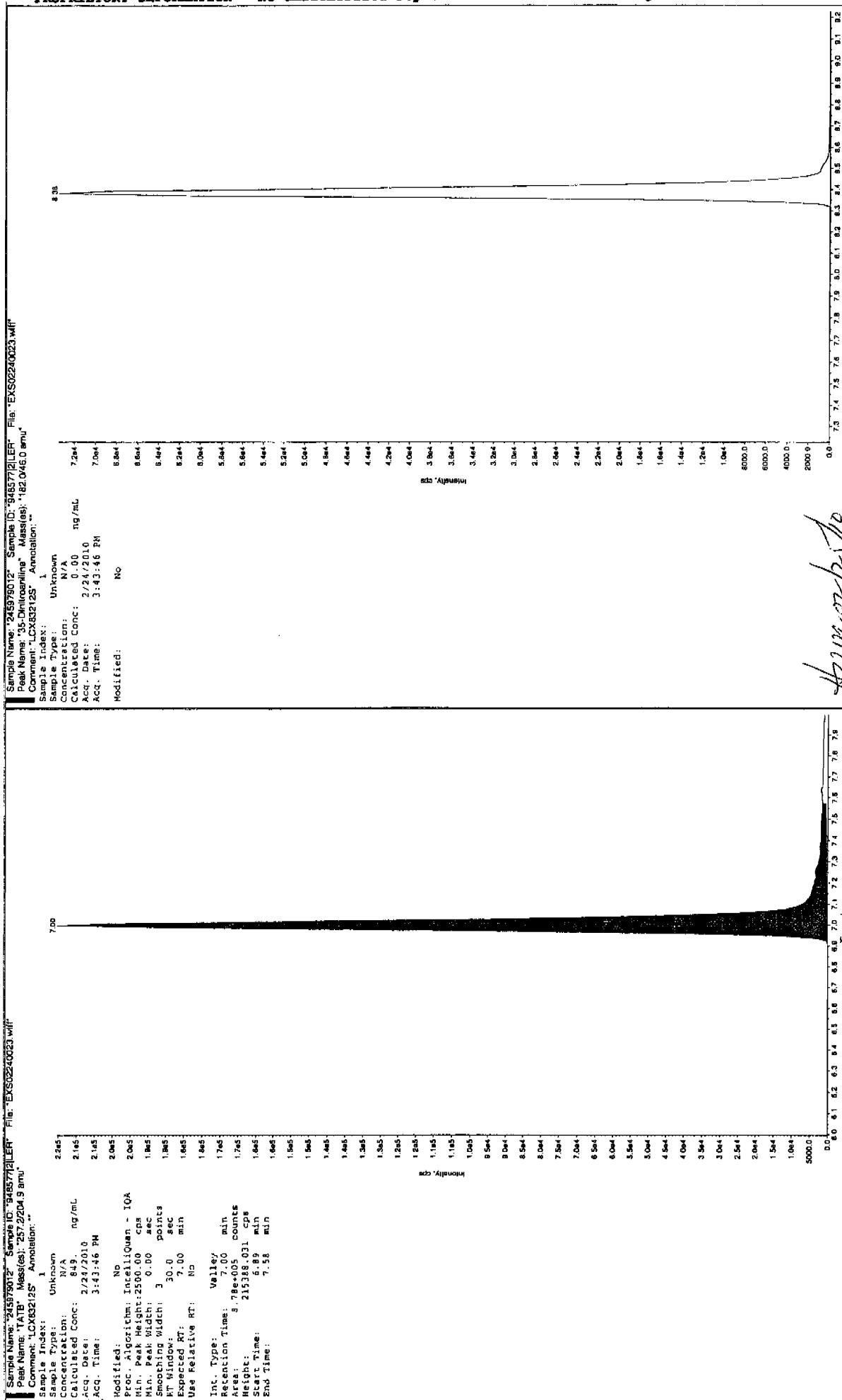
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	8490	
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

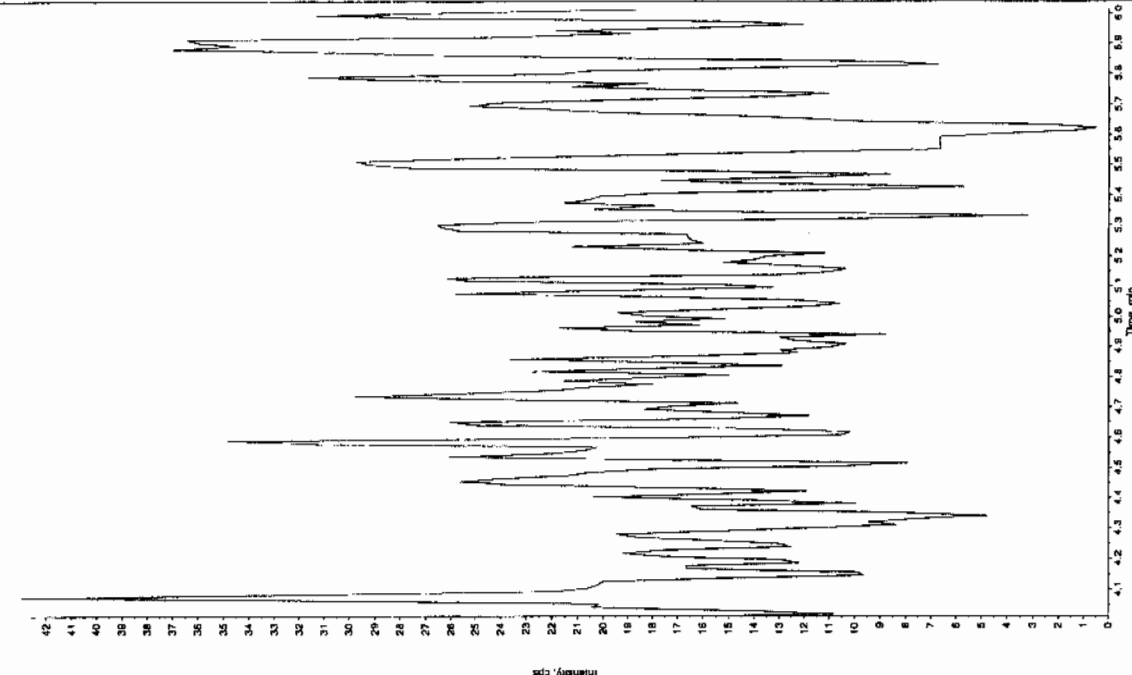
Law 2/28/10



2/28/2010

Sample Name: "245978012" Sample ID: "848577212L1" File: "EX502240023.wif"
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 3:43:46 PM
 Modified: No

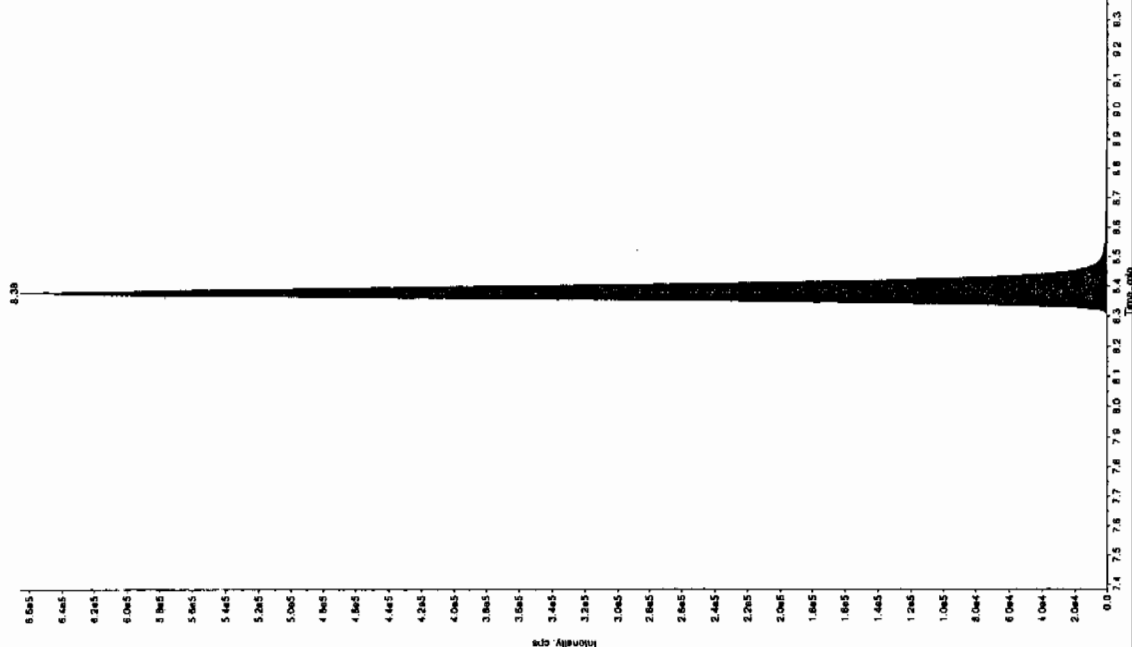


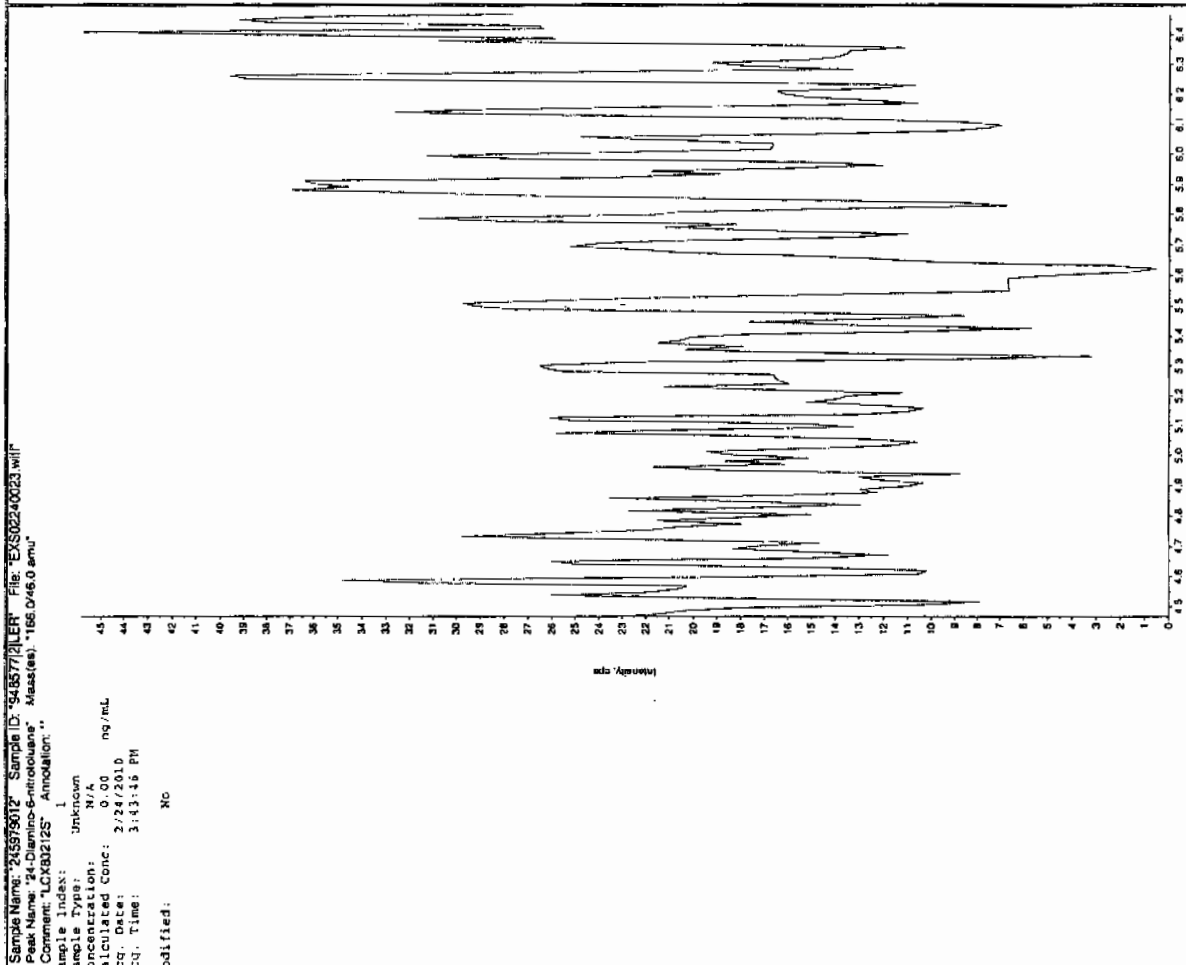
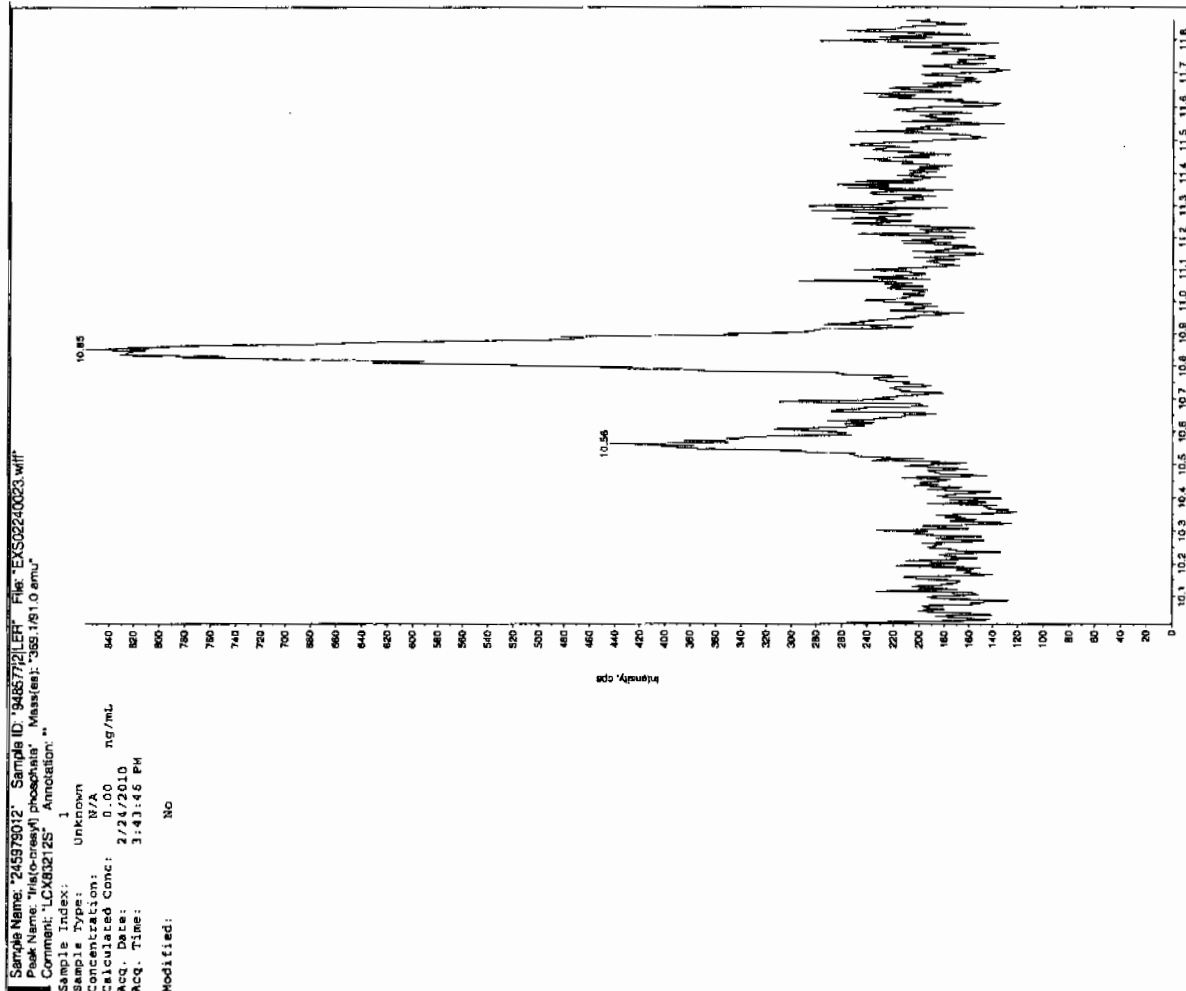
Sample Name: "245978012" Sample ID: "848577212L1" File: "EX502240023.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 332. ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 3:43:46 PM
 Modified: No

Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 8.38 min
 Peak Height: 2.21e+006 counts
 Peak Area: 665484.497 cps
 Start Time: 8.24 min
 End Time: 8.72 min





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8061

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979013

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301065a

Date Analyzed: 02-MAR-10 23:08

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Printed: Thu Mar 04 16:59:44 2010, Page 1 of 3

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Method: C:\MASSLYNX\New_Exp\PRO\MethDB\030110expa.mdb, Time: Tue Mar 02 09:26:02 2010
Calibration: C:\MASSLYNX\New_Exp\PRO\CurveDB\030110expa.cdb, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0301065a

Date: 02-Mar-2010

Time: 23:08:14

ID: 245979013

Vial: 2:7,E

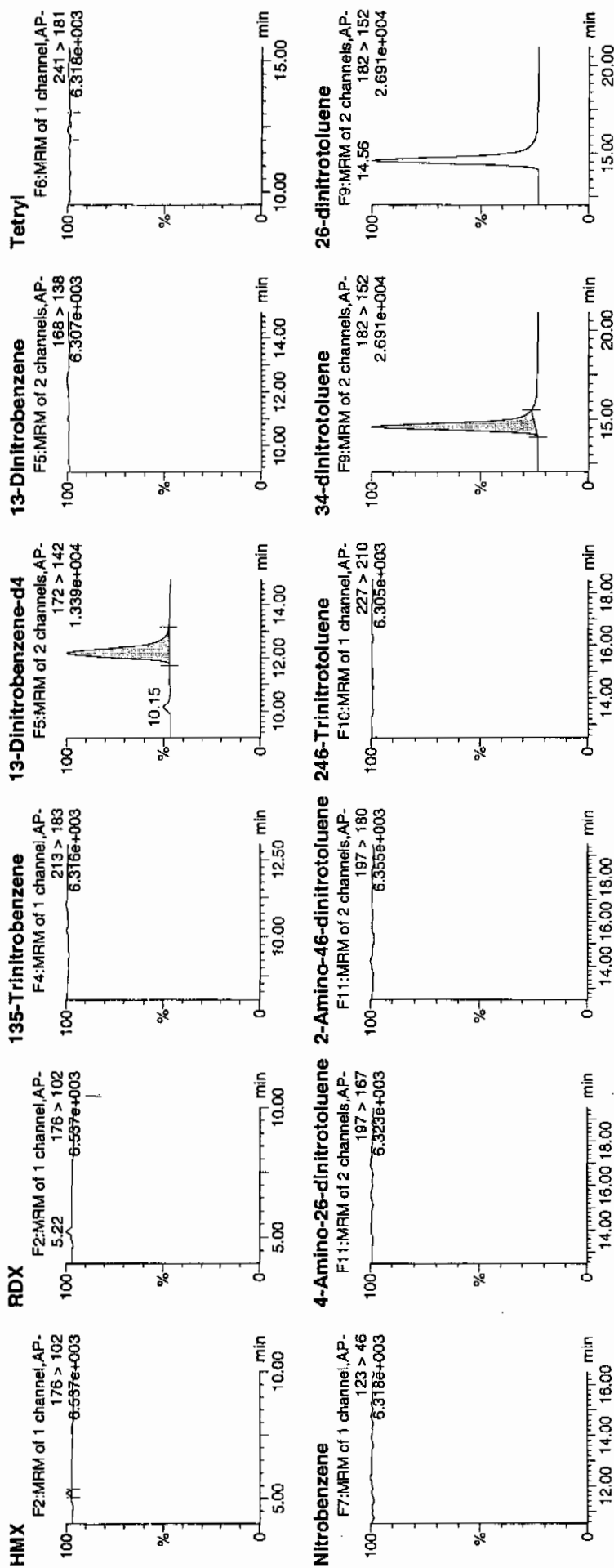
12/17
3/4/10

WAL 948577 / 26

RA - CAYMAN POSSIBLE

Removal - XQ. EXP0301084a

HMX < NDL

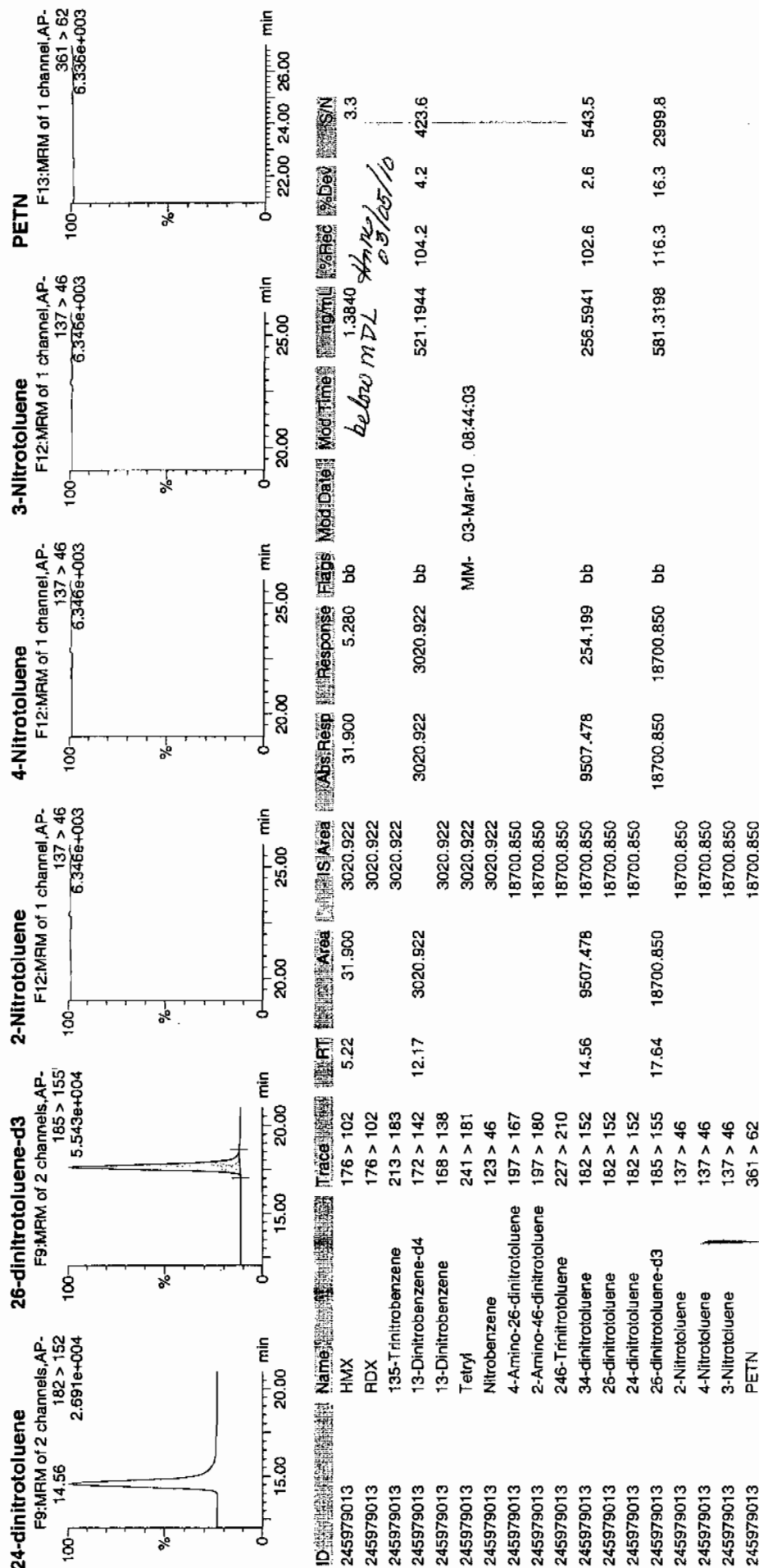


03-04-10

Printed: Thu Mar 04 16:59:44 2010, Page 2 of 3

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8061

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979013

Sample Amount 2

Moisture: 14.7

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240027.wiff

Date Analyzed: 24-FEB-10 16:46

Units: ug/kg

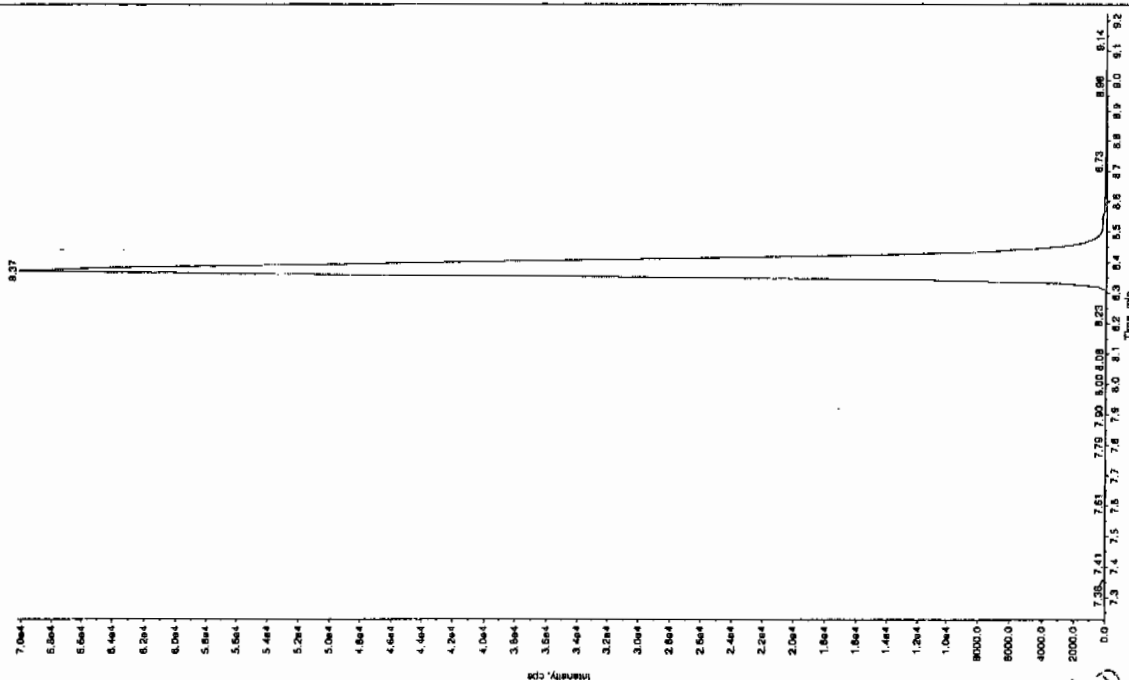
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

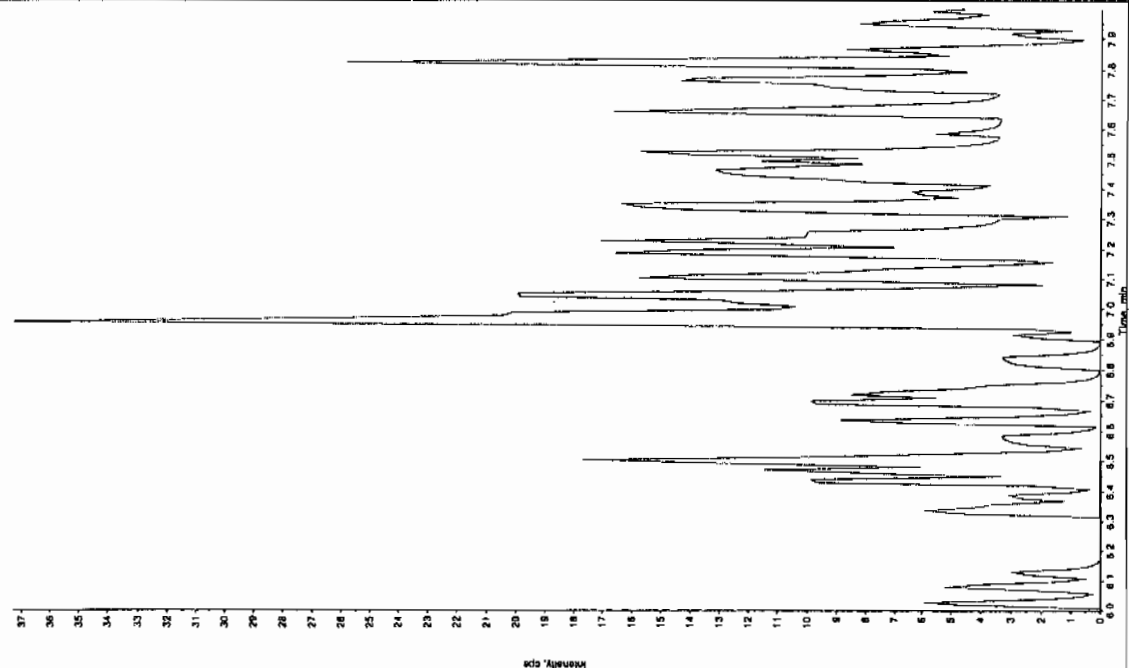
Sample Name: "245979013" Sample ID: "94857721.ER" File: "EX502240027.wif"
 Peak Name: "35-Dimethylsilane" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 4:46:45 PM
 Modified: No



Sample Name: "245979013" Sample ID: "94857721.ER" File: "EX502240027.wif"
 Peak Name: "35-Dimethylsilane" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "1"

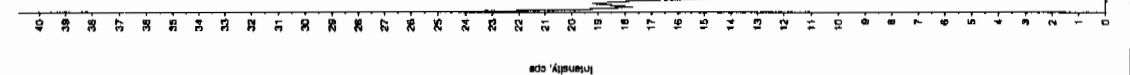
Sample Index: 3
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 4:46:45 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245979013" Sample ID: "94857701ER" File: "EX502240027.wif"
 Peak Name: "28-Dianth-4-nitroloquene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

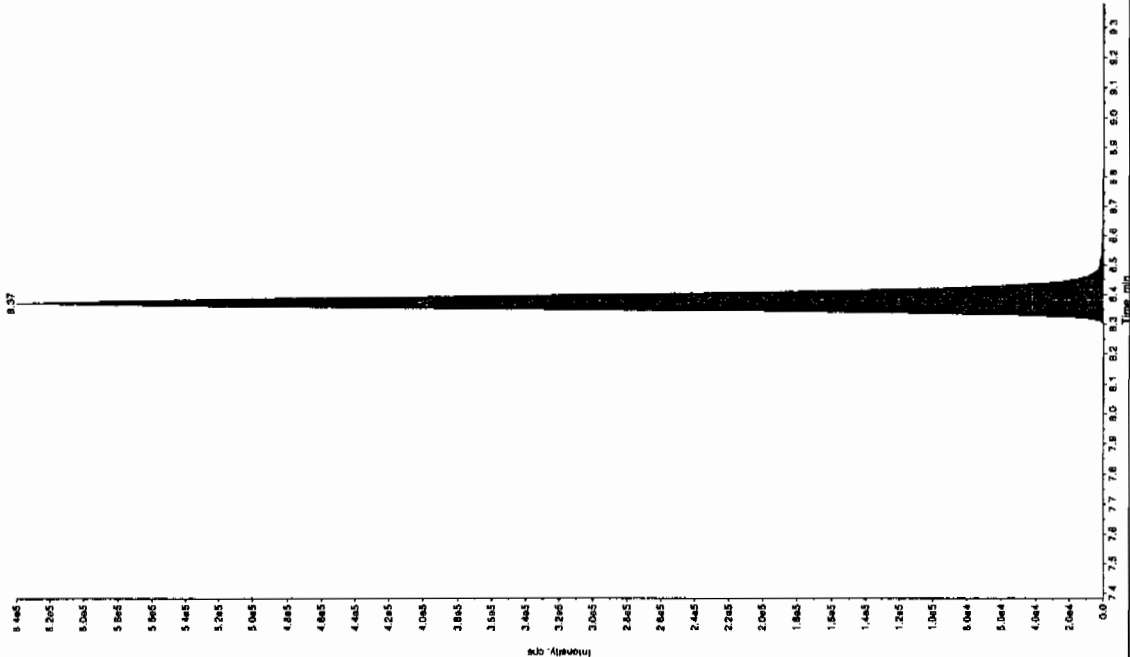
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 4:46:45 PM
 Modified: No



Sample Name: "245979013" Sample ID: "94857701ER" File: "EX502240027.wif"
 Peak Name: "34-Dinitroloquene" Mass(es): "182.1751.3 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 324.010 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 4:46:45 PM
 Modified: No

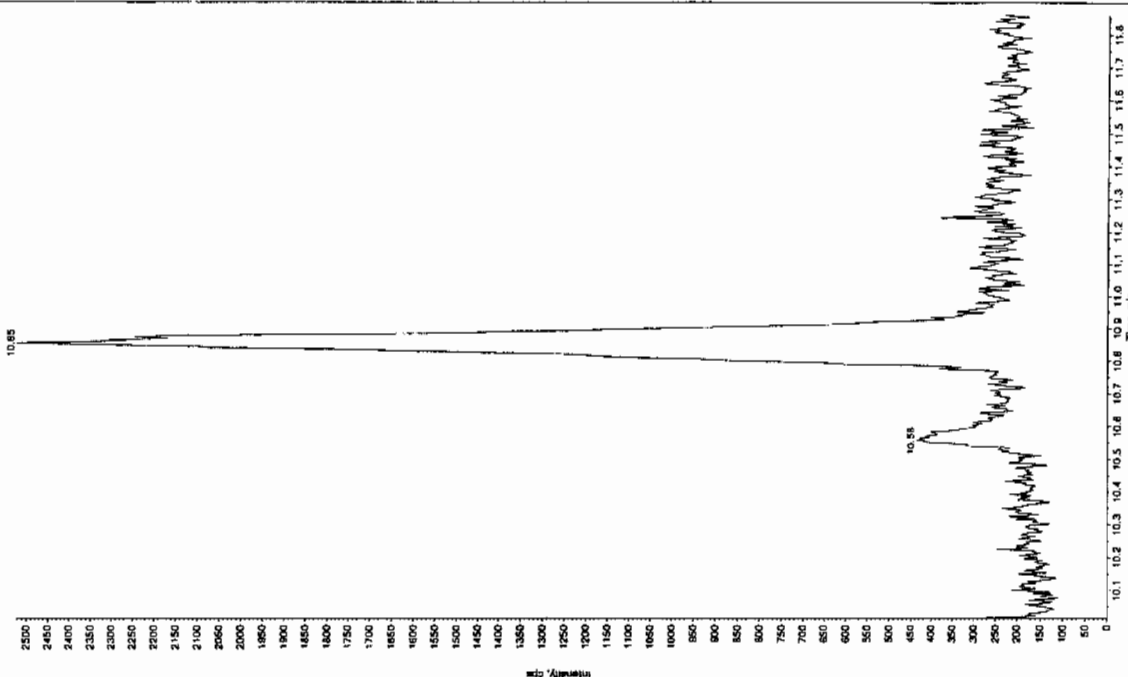
Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1660.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 2.16e+006 counts
 Height: 640328.735 cps
 Start Time: 8.28 min
 End Time: 8.72 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

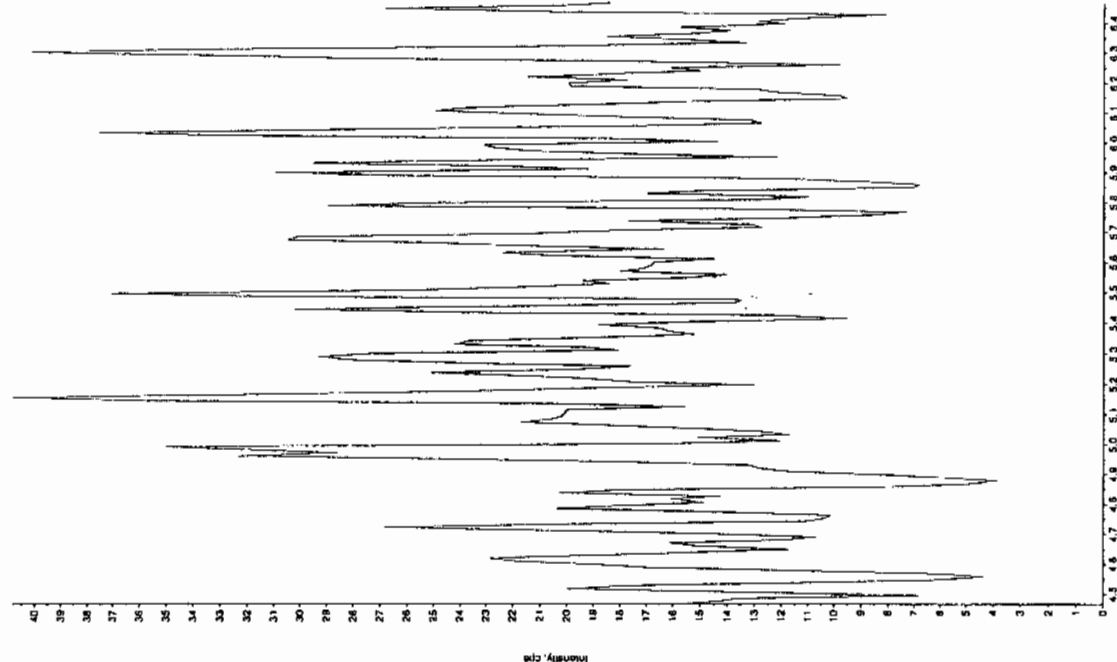
Sample Name: "245979013" Sample ID: "948577121ER" File: "EXS02240027.will"
 Peak Name: "tri(Octadecyl) phosphite" Mass(es): "389.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 4:48:45 PM
 Modified: No



Sample Name: "245979013" Sample ID: "948577121ER" File: "EXS02240027.will"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "186.045.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 4:46:45 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8063

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979014

Sample Amount 2

Moisture: 18.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301066a

Date Analyzed: 02-MAR-10 23:37

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny
 Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010
 Printed: Wed Mar 03 09:10:52 2010, Page 67 of 103

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301066a

Date: 02-Mar-2010

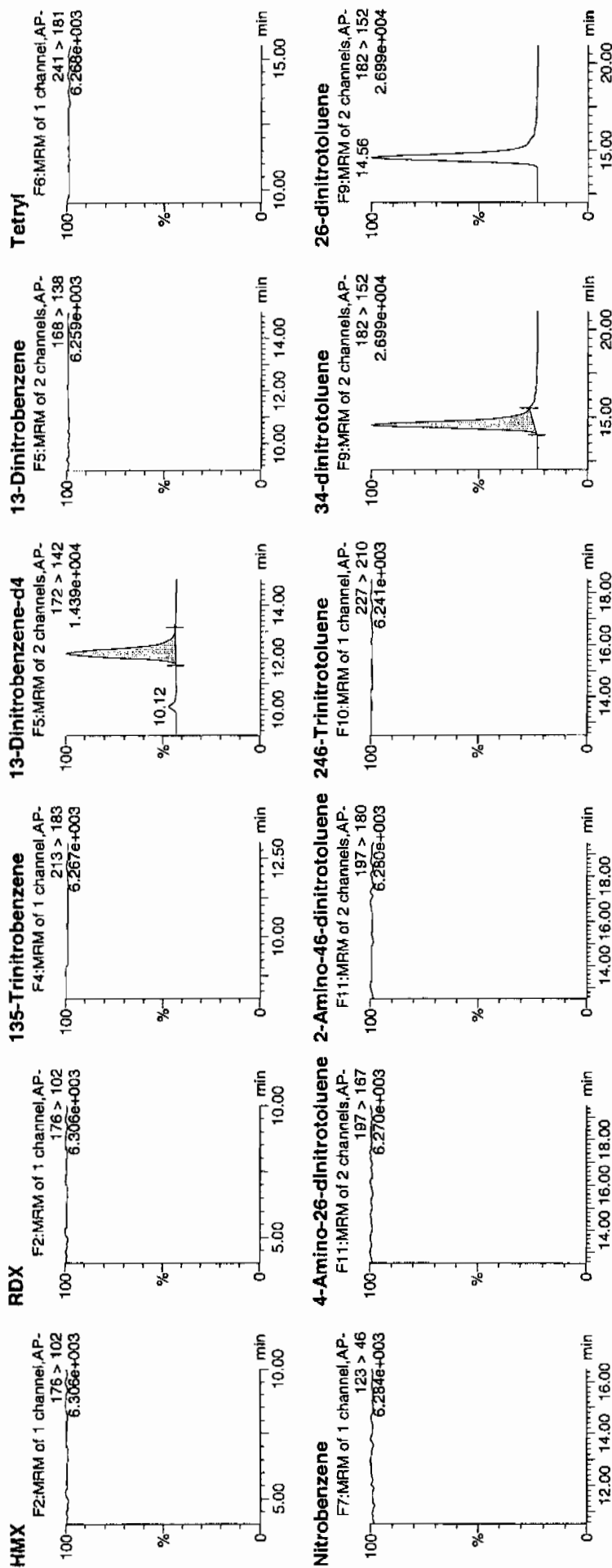
Time: 23:37:44

ID: 245979014

Vial: 2:7,F

11/11
 3/3/10

WAVE 948577 | 8025 | 21



ATTN 03/04/10

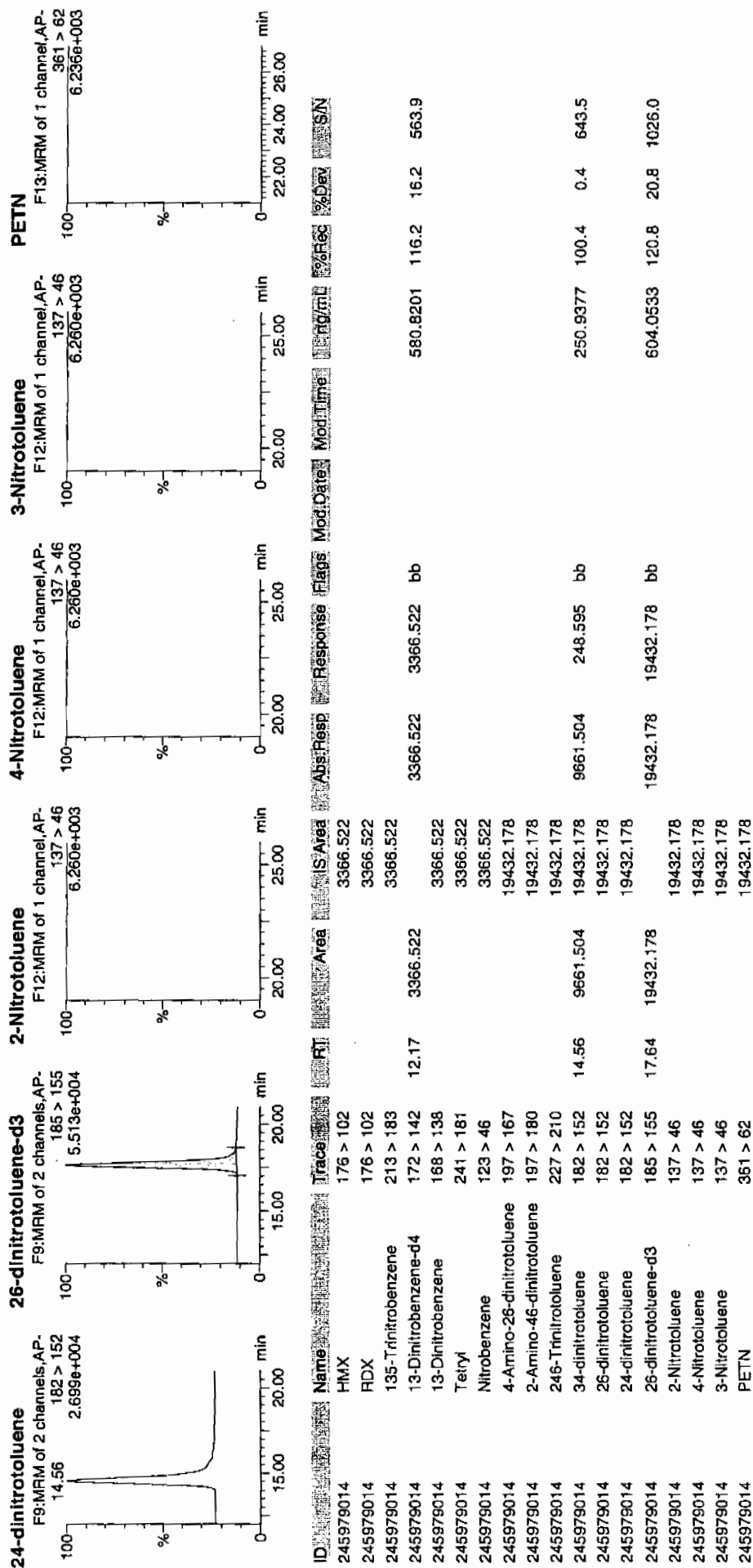
Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 68 of 103

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

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GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8063

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979014

Sample Amount 2

Moisture: 18.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240028.wiff

Date Analyzed: 24-FEB-10 17:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

212510

Sample Name: "245979014" Sample ID: "948577121" File: "EXS02240028.wit"

Peak Name: "35-Dinitrobenzidine" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Calculated Conc: 2/24/2010

Acq. Date: 5:02:35 PM

Acq. Time: 5:02:35 PM

Modified: No

Sample Name: "245979014" Sample ID: "948577121" File: "EXS02240028.wit"

Peak Name: "1ATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

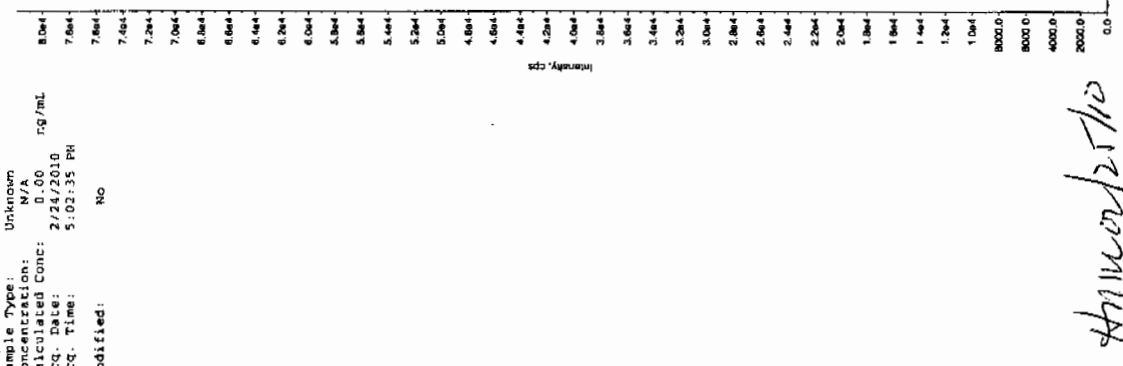
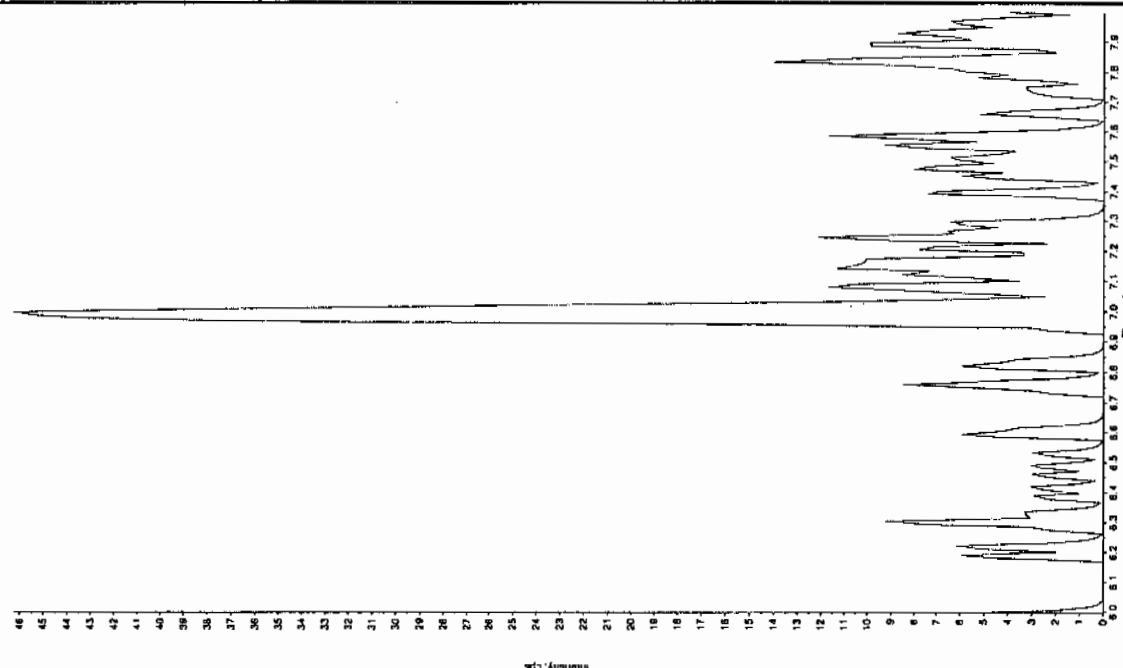
Concentration: 0.00 ng/mL

Calculated Conc: 2/24/2010

Acq. Date: 5:02:35 PM

Acq. Time: 5:02:35 PM

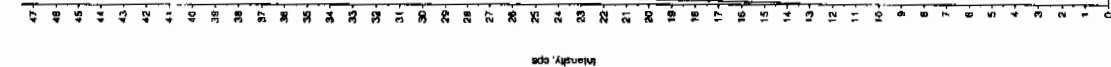
Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

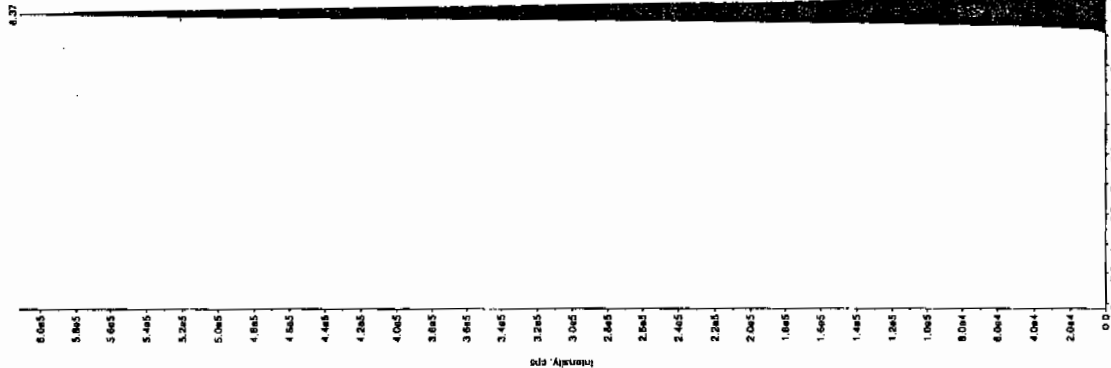
Sample Name: "245979014" Sample ID: "948577121ER" File: "EXS02240028.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "186.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:02:35 PM
 Modified: No



Sample Name: "245979014" Sample ID: "948577121ER" File: "EXS02240028.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.151.9 amu"
 Comment: "LCX83212S" Annotation: ""

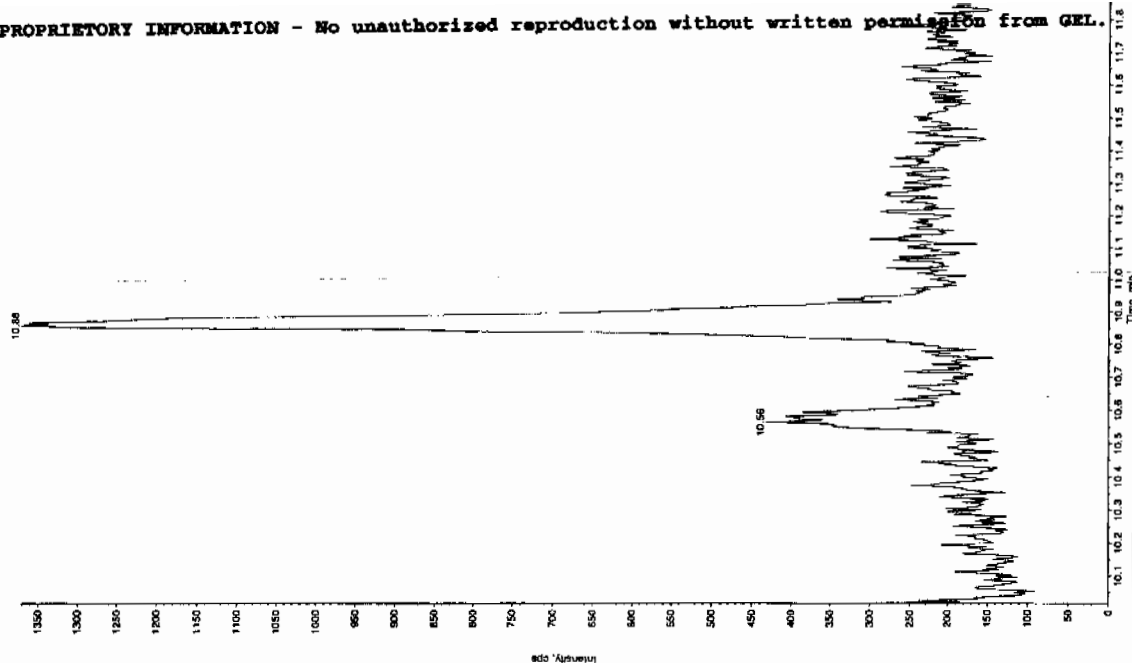
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2.11e-006 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:02:35 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1440.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 2.11e-006 counts
 Height: 612684.807 cps
 Start Time: 8.25 min
 End Time: 8.70 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

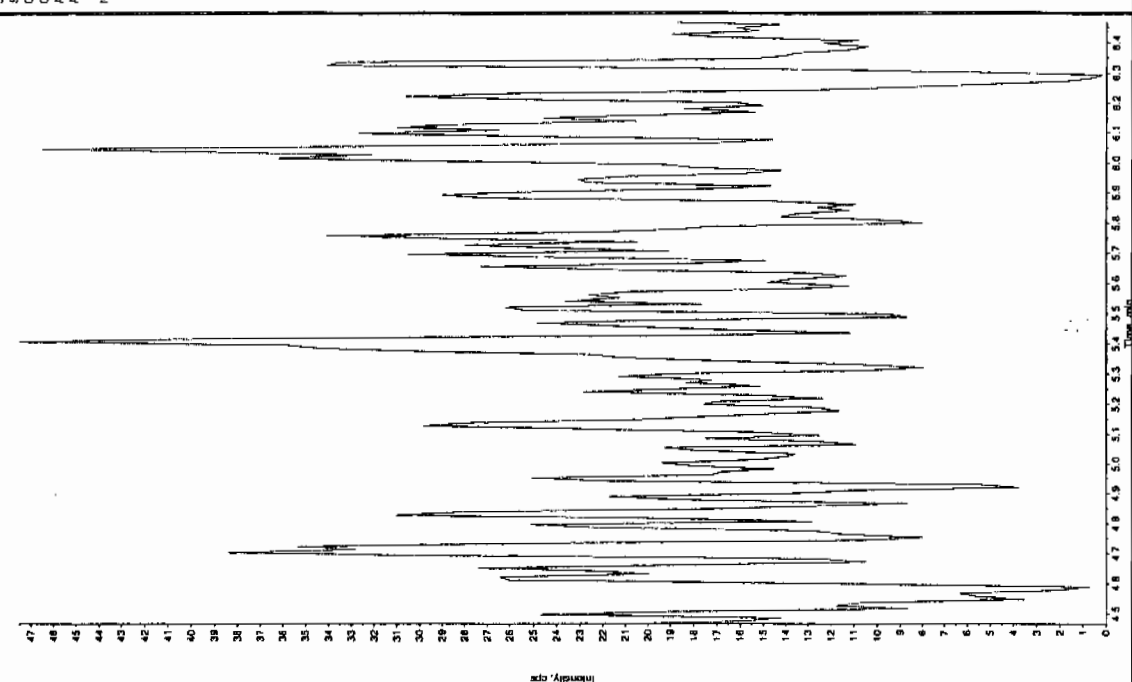
Sample Name: "245979014" Sample ID: "94857721ER" File: "EXS02240028.wil"
 Peak Name: "1st(Crasy) phosphate" Mass(es): "365.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:02:35 PM
 Modified: No



Sample Name: "245979014" Sample ID: "94857721ER" File: "EXS02240028.wil"
 Peak Name: "24-Diamino-6-nitrothiouracil" Mass(es): "186.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:02:35 PM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8062

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979015

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301099a

Date Analyzed: 03-MAR-10 15:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	217	J
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	2270	
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301099a

Date: 03-Mar-2010

Time: 15:52:19

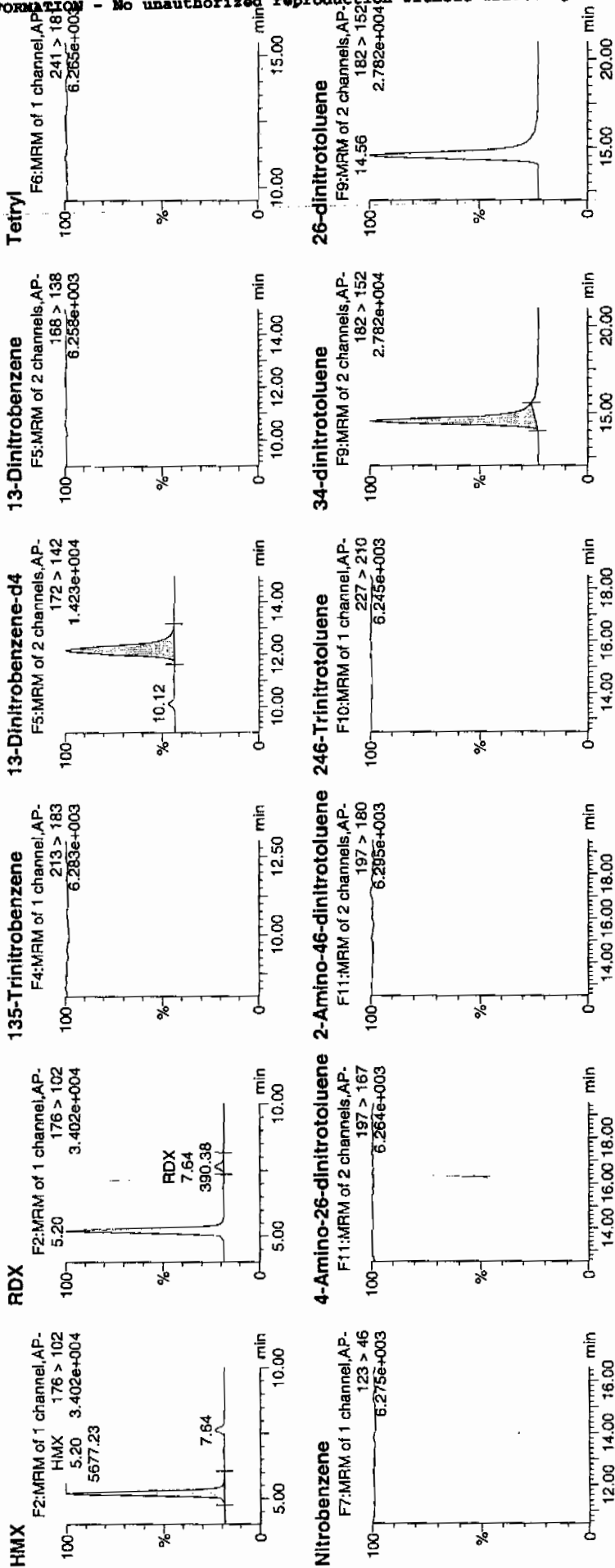
ID: 245979015

Vial: 2:8,A

1077
3/4/10

1948577 / 803 / 21

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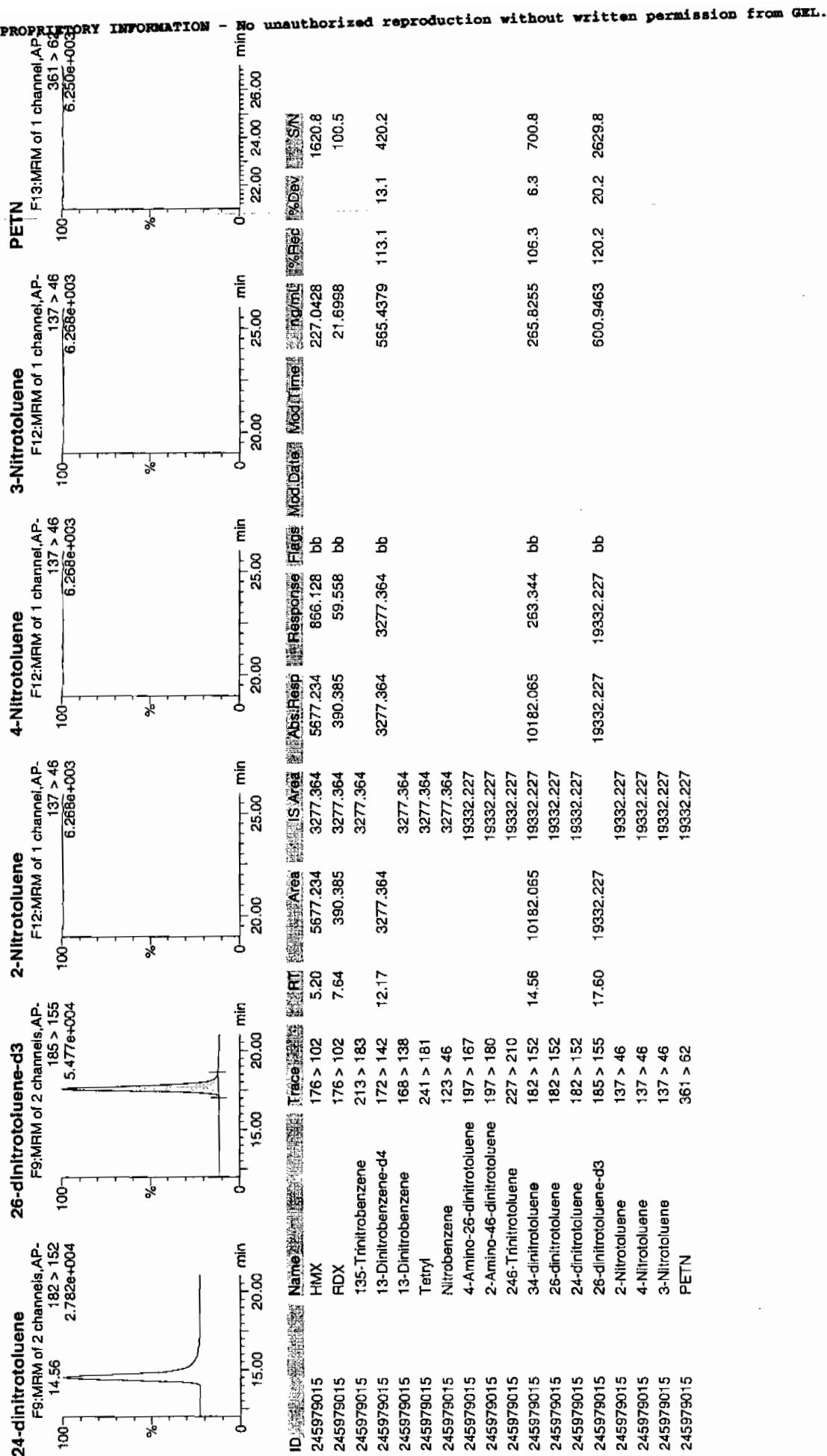
14.56
03/04/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Mar 04 09:56:46 2010, Page 32 of 81

Dataset: C:\MASSLYNX\New_Exp\PRO030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8062

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 245979015

Sample Amount 2

Moisture: 9.5

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02240029.wiff

Date Analyzed: 24-FEB-10 17:18

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

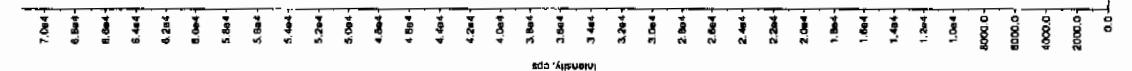
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Jan 21/21.0

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Sample Name: 245978015 Sample ID: 94857121.1ER File: EXS02240029.wif
Peak Name: 35-Dinitroaniline Mass(es): 1182.046.0 amu
Comment: LCX832125 Annotation: "

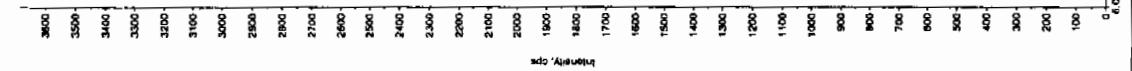
Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Conc. Unit: ng/mL
Acq. Date: 2/24/2010
Acq. Time: 5:18:18 PM
Modified: No



Sample Name: 245978015 Sample ID: 94857121.1ER File: EXS02240029.wif
Peak Name: 35-Dinitroaniline Mass(es): 252.2204.9 amu
Comment: LCX832125 Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: 25.4 ng/mL
Conc. Unit: ng/mL
Acq. Date: 2/24/2010
Acq. Time: 5:18:18 PM
Modified: No

Proc. Algorithm: Intelliguance - IOA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoother Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No



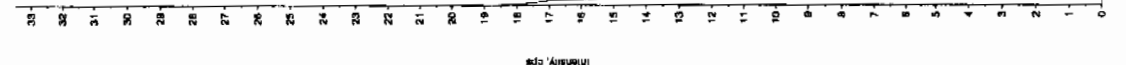
Int. Type: Valley
Retention Time: 7.00 min
Area: 1.33e+004 counts
Height: 3680.635 cps
Start Time: 6.55 min
End Time: 7.15 min

4/11/2012/21.0

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

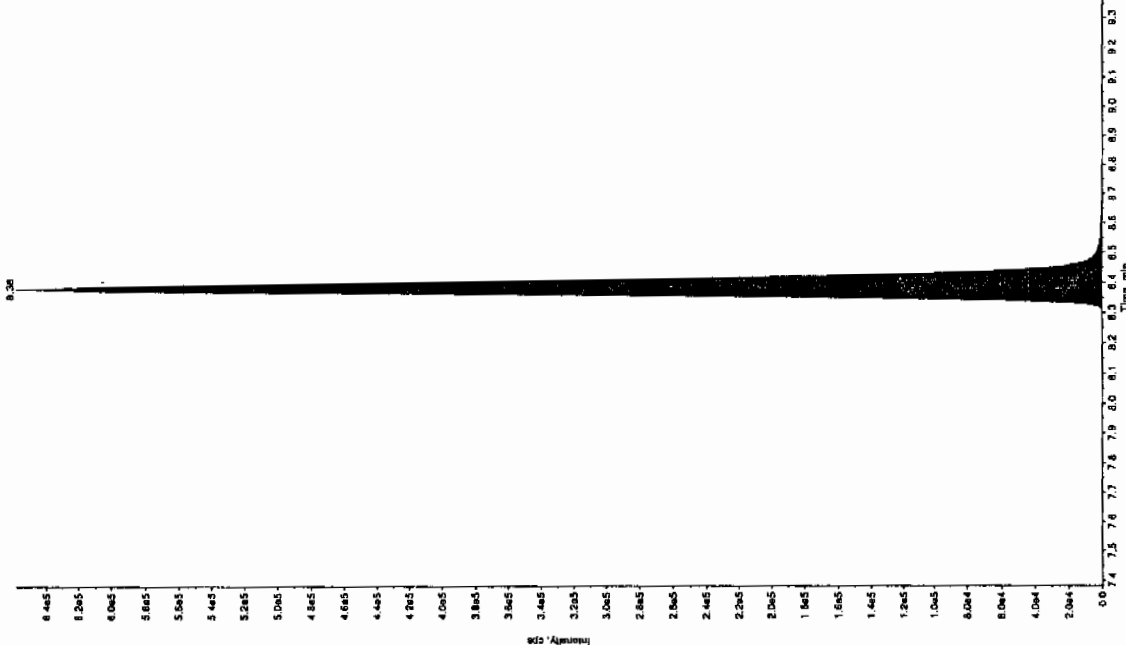
Sample Name: '245973015' Sample ID: '94857721ER' File: 'EX502240029.wif'
 Peak Name: '26-Diamino-4-nitrofluorene' Mass(es): '166.046.0 amu'
 Comment: 'LCX83212S' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:18:18 PM
 Modified: No



Sample Name: '245973015' Sample ID: '94857721ER' File: 'EX502240029.wif'
 Peak Name: '26-Diamino-4-nitrofluorene' Mass(es): '182.1715.9 amu'
 Comment: 'LCX83212S' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: 338. ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 5:18:18 PM
 Acq. Time: 5:18:18 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IGA
 Min. Peak Height: 1160.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.33 min
 Area: 2.23e+006 counts
 Height: 659186.462 cps
 Start Time: 8.29 min
 End Time: 8.40 min

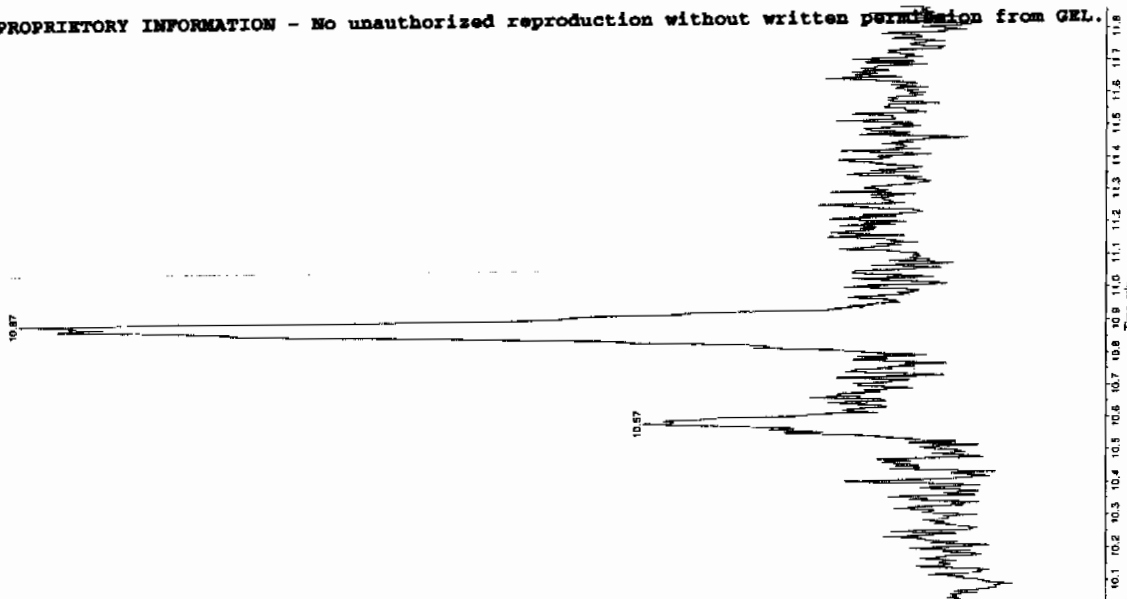


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245979015" Sample ID: "948577121" File: "EXS02240029.wif"
 Peak Name: "tris(cresyl) phosphate" Mass(es): "389.1/91.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:18:18 PM
 Modified: No

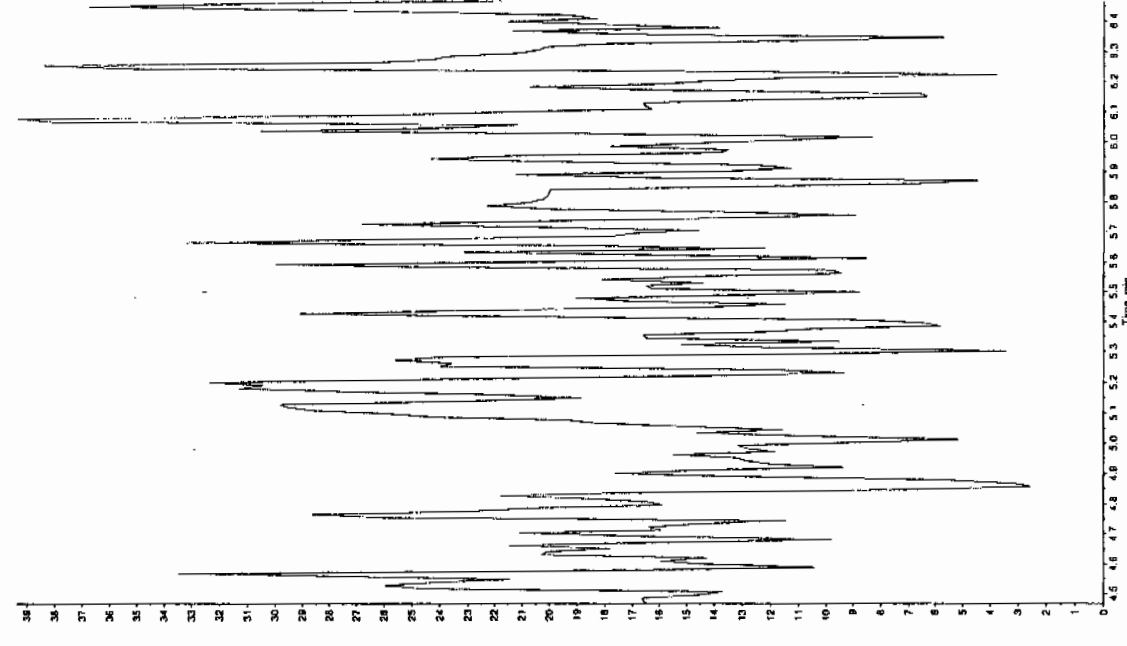
Intensity, cps



Sample Name: "245979015" Sample ID: "948577121" File: "EXS02240029.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.0/46.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:18:18 PM
 Modified: No

Intensity, cps



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

STANDARDS DATA

**SW846 8321A Modified-Explosives
Calibration Standard Concentration Levels**

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
Primary Analytes								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	an	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
Secondary Analytes								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1514

Lab Code: GEL

Run Date: 01-MAR-10 22-FEB-10 24-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Paramname	1	2	3	4	5	6	Ave RF	RSD	Q
Calibration Level:	EXP0301003a	EXP0301004a	EXP0301005a	EXP0301006a	EXP0301007a	EXP0301008a			
Data File:									
1,3,5-Trinitrobenzene	3.94	3.776	3.064	3.285	3.334	3.259	3.443	9.828	
1,3-Dinitrobenzene-d4	5.612	5.852	6.175	5.983	5.62	5.535	5.796	4.328	
2,4,6-Trinitrotoluene	.267	.261	.328	.334	.377	.324	0.315	13.943	
2,4-Dinitrotoluene	.208	.246	.25	.254	.288	.263	0.252	10.426	
2,6-Dinitrotoluene	1.209	1.096	1.096	1.117	1.133	1.119	1.128	3.735	
2,6-Dinitrotoluene-d3	33.172	35.403	31.893	32.922	29.123	30.505	32.170	6.832	
2-Amino-4,6-dinitrotoluene	.315	.372	.358	.403	.402	.411	0.377	9.673	
3,4-Dinitrotoluene	.839	1.005	1.146	.983	1.067	.904	0.991	11.122	
4-Amino-2,6-dinitrotoluene	.235	.284	.272	.293	.32	.29	0.282	10.019	
HMX	3.849	3.259	3.73	4.343	4.56	3.148	3.815	14.813	
Nitrobenzene	.876	.868	1.079	.879	.84	.791	0.889	11.103	
RDX	2.412	2.499	2.592	3.205	3.222	2.537	2.745	13.408	
m-Dinitrobenzene	1.471	1.362	1.238	1.234	1.361	1.205	1.312	7.875	
m-Nitrotoluene	.123	.1	.094	.091	.094	.087	0.098	13.106	
o-Nitrotoluene	.16	.185	.191	.153	.156	.151	0.166	10.588	
p-Nitrotoluene	.067	.081	.106	.072	.076	.073	0.079	17.87	

Q column used to flag RSD values outside of Limit (>20%)

* Values outside of QC Limit

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1514

Lab Code: GEL

Run Date: 01-MAR-10 22-FEB-10 24-FEB-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0301003a	EXP0301004a	EXP0301005a	EXP0301006a	EXP0301007a	EXP0301008a					
Paruname:											
PETN	2325.51	4729.22	15138.1	24668.9	39677.2	43783.1	2.313	-.00087	17.184	.9959	
Tetryl	191.472	392.536	1477.14	2445.29	4498.25	4869.09	1.206	-.0003128	3.667	.9968	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

Quantify Calibration Report

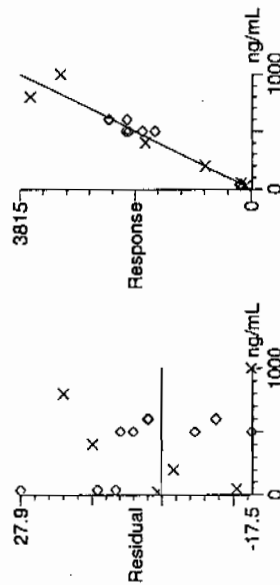
GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 1 of 9

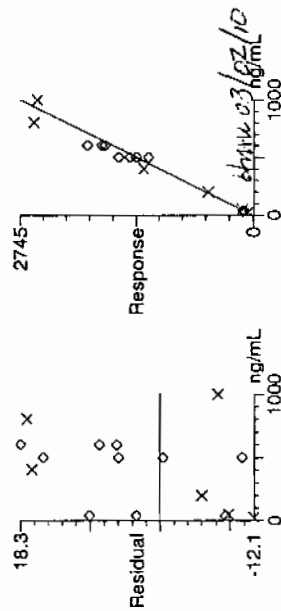
Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\030110expa.mdb, Time: Tue Mar 02 09:26:02 2010
Calibration: Untitled, Time: Tue Mar 02 09:59:16 2010

Compound name: HMX
Response Factor: 3.81482
RRF SD: 0.565071, % Relative SD: 14.8125
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: RDX
Response Factor: 2.74462
RRF SD: 0.368004, % Relative SD: 13.4082
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF

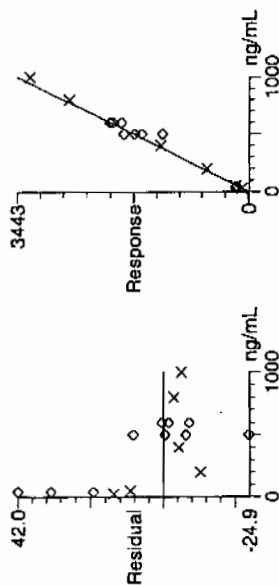


Quantify Calibration Report

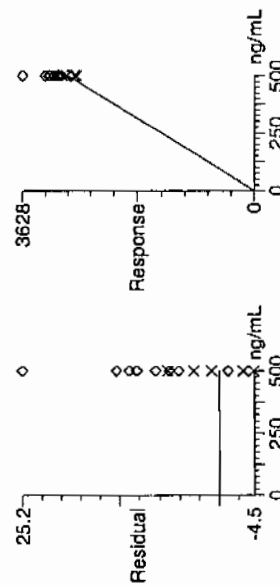
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Compound name: 135-Trinitrobenzene
 Response Factor: 3.44305
 RRF SD: 0.338375, % Relative SD: 9.82776
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: 13-Dinitrobenzene-d4
 Response Factor: 5.79615
 RRF SD: 0.25088, % Relative SD: 4.32839
 Response type: External Std, Area
 Curve type: RF



Quantify Calibration Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

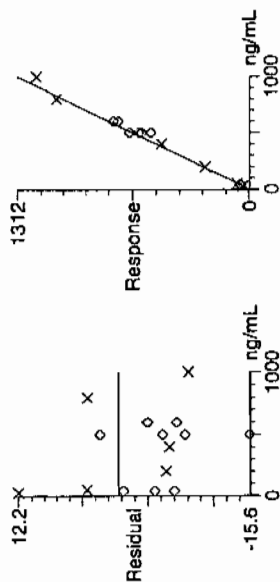
Compound name: 13-Dinitrobenzene

Response Factor: 1.31187

RRF SD: 0.103314, % Relative SD: 7.87531

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

Curve type: RF



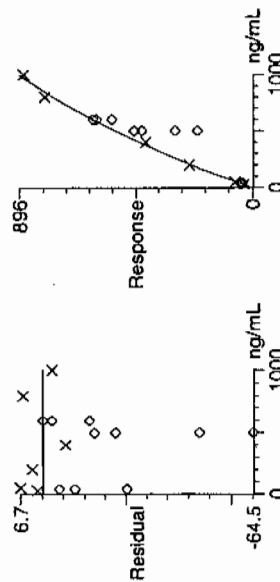
Compound name: Tetraol

Coefficient of Determination: 0.996770

Calibration curve: $-0.000312791 \cdot x^2 + 1.20554 \cdot x + 3.66734$

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

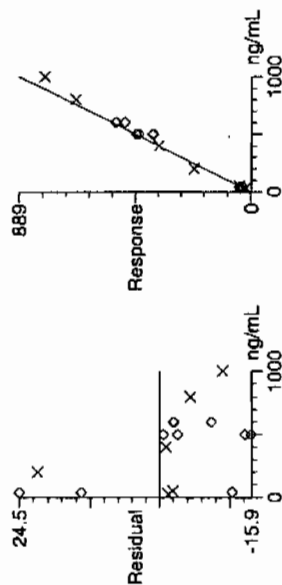
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



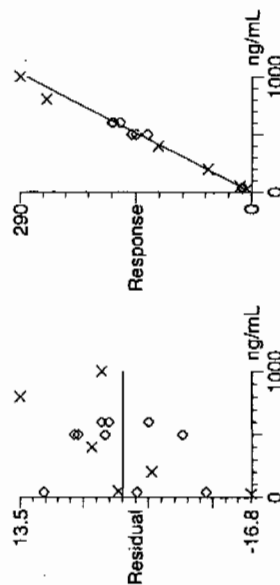
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Compound name: Nitrobenzene
 Response Factor: 0.888932
 RRF SD: 0.0986941, % Relative SD: 11.1025
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



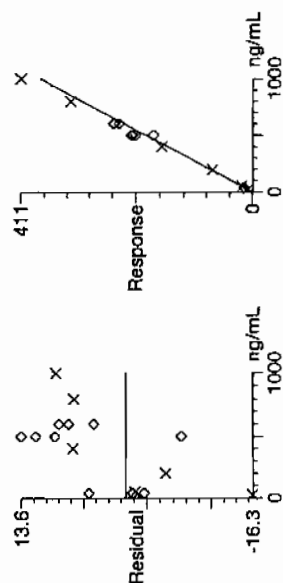
Compound name: 4-Amino-26-dinitrotoluene
 Response Factor: 0.282269
 RRF SD: 0.0282816, % Relative SD: 10.0194
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



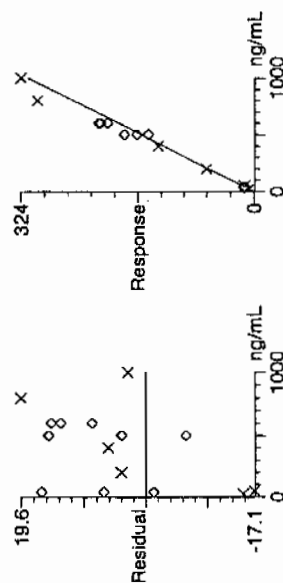
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp\PRO1030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.377019
RRF SD: 0.0364675, % Relative SD: 9.67257
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



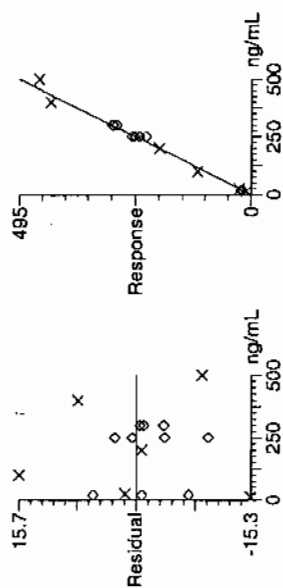
Compound name: 246-Trinitrotoluene
Response Factor: 0.31518
RRF SD: 0.0439443, % Relative SD: 13.9426
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



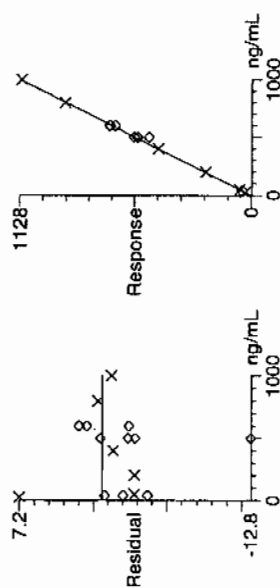
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qtd, Time: Tue Mar 02 09:59:16 2010

Compound name: 34-dinitrotoluene
Response Factor: 0.990666
RRF SD: 0.110182, % Relative SD: 11.122
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



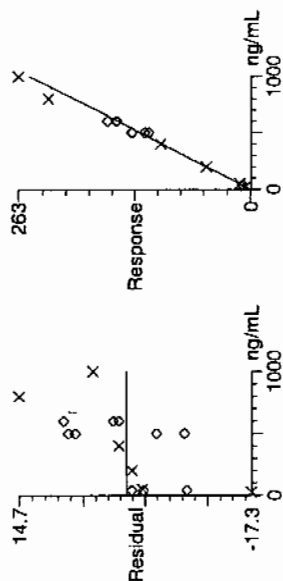
Compound name: 26-dinitrotoluene
Response Factor: 1.12824
RRF SD: 0.0421371, % Relative SD: 3.73478
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



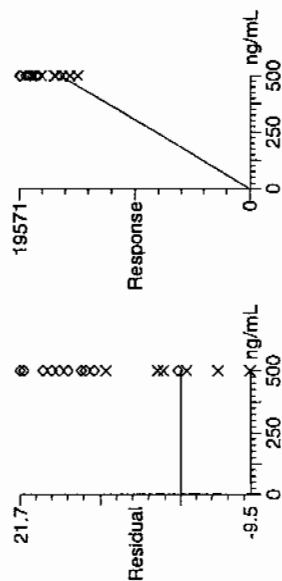
Quantity Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Compound name: 24-dinitrotoluene
Response Factor: 0.251541
RRF SD: 0.0262257, % Relative SD: 10.426
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



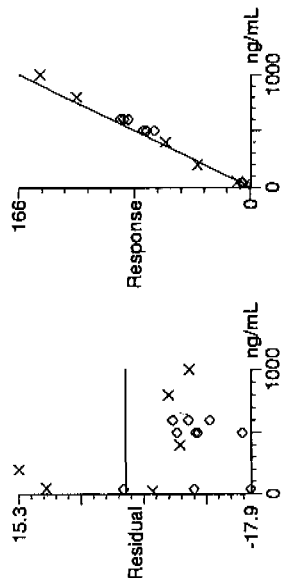
Compound name: 26-dinitrotoluene-d3
Response Factor: 32.1696
RRF SD: 2.19789, % Relative SD: 6.83218
Response type: External Std, Area
Curve type: RF



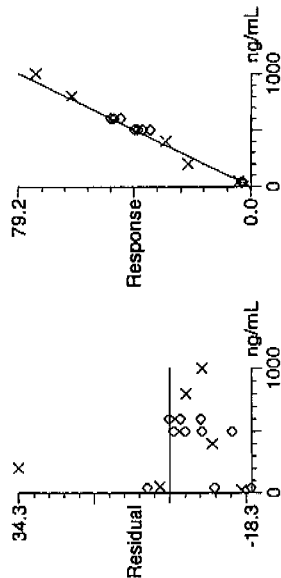
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Compound name: 2-Nitrotoluene
Response Factor: 0.165882
RRF SD: 0.0175634, % Relative SD: 10.5879
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 4-Nitrotoluene
Response Factor: 0.0792496
RRF SD: 0.014162, % Relative SD: 17.8701
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF

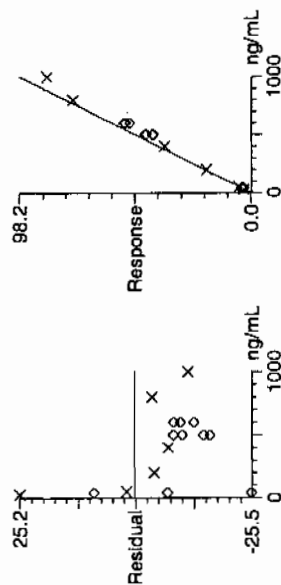


Quantify Calibration Report

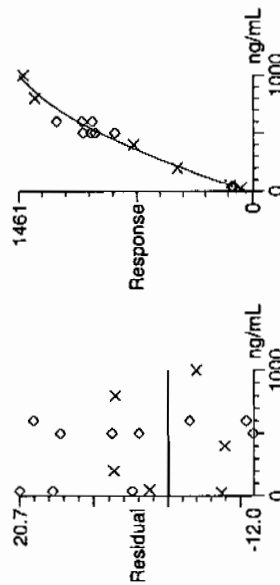
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Compound name: 3-Nitrotoluene
 Response Factor: 0.0982133
 RRF SD: 0.0128718, % Relative SD: 13.106
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: PETN
 Coefficient of Determination: 0.995946
 Calibration curve: $-0.00086973 \cdot x^2 + 2.31341 \cdot x + 17.1838$
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0301010a

Analysis Date: 01-MAR-10 19:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	600	644.551	107	
3,4-Dinitrotoluene	300	296.974	99	
4-Amino-2,6-dinitrotoluene	600	579.777	97	
HMX	600	536.335	89	
Nitrobenzene	600	585.727	98	
PETN	600	533.297	89	
RDX	600	709.645	118	
Tetryl	600	514.366	86	
m-Dinitrobenzene	600	559.17	93	
m-Nitrotoluene	600	522.296	87	
o-Nitrotoluene	600	546.617	91	
p-Nitrotoluene	600	600.673	100	
1,3,5-Trinitrobenzene	600	553.636	92	
1,3-Dinitrobenzene-d4	500	552.255	110	
2,4,6-Trinitrotoluene	600	650.963	108	
2,4-Dinitrotoluene	600	610.999	102	
2,6-Dinitrotoluene	600	612.154	102	
2,6-Dinitrotoluene-d3	500	563.698	113	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 19 of 65

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0301010a

Date: 01-Mar-2010

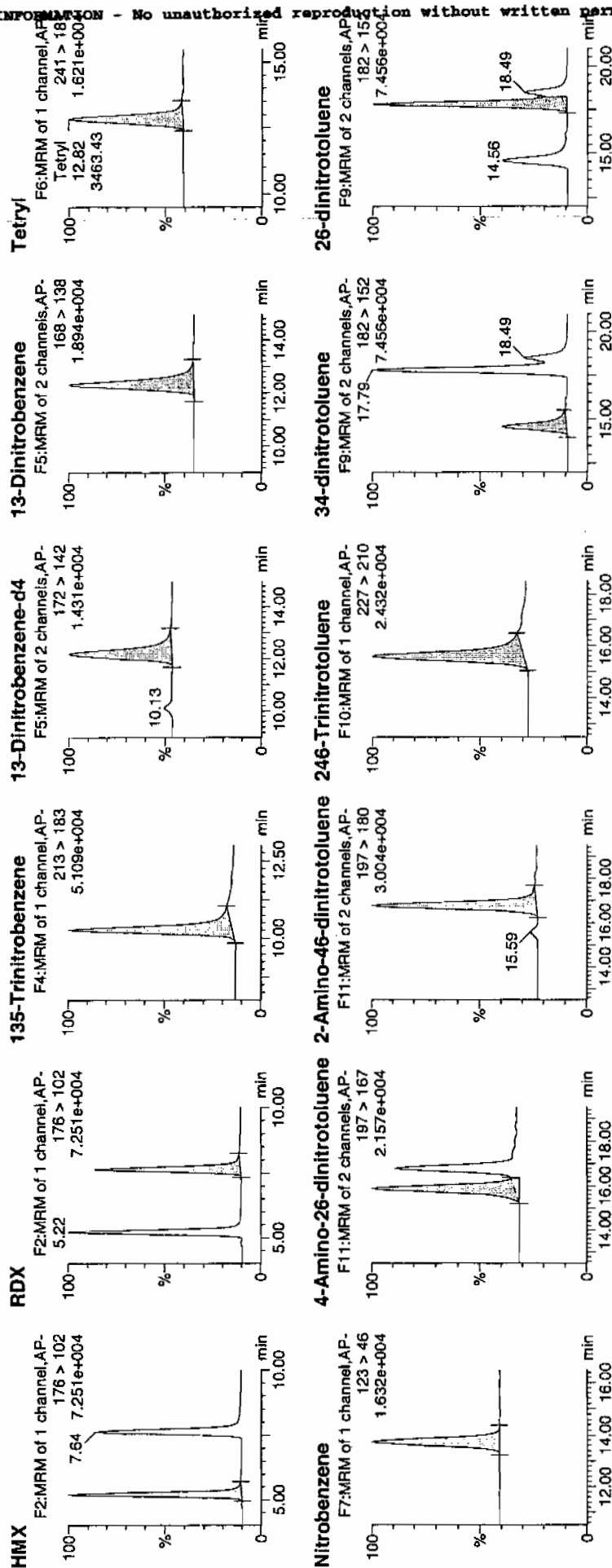
Time: 19:58:29

ID: WXX100301-071CV

Vial: 1:1, B

1.1/1.0
3/12/10

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1.1/1.0
3/12/10

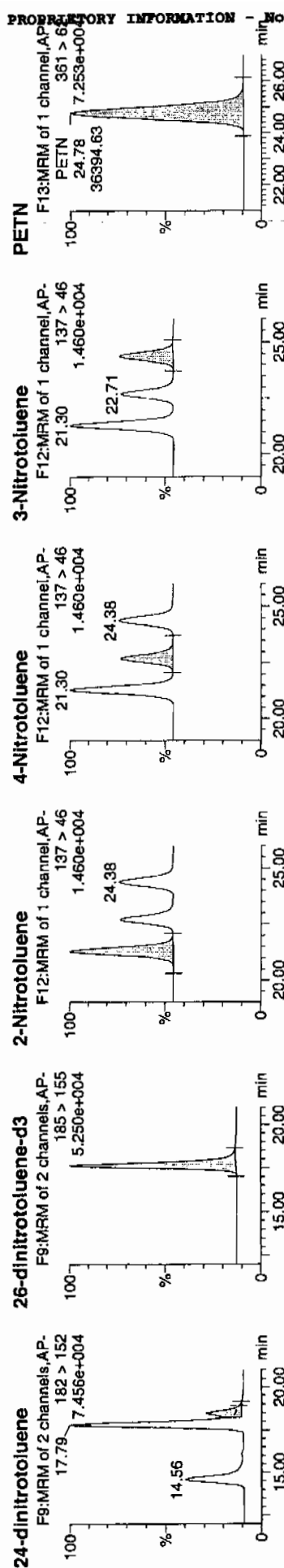
GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 20 of 65

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



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ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc	% Rec	% Dev	SN
WXX100301-07ICV	HMX	176 > 102	5.22	13098.474	3200.957	13098.474	2046.025	bb			536.3354	89.4	-10.6	1184.6
WXX100301-07ICV	RDX	176 > 102	7.64	12469.034	3200.957	12469.034	1947.704	bb			709.6451	118.3	18.3	994.7
WXX100301-07ICV	135-Trinitrobenzene	213 > 183	10.27	12203.332	3200.957	12203.332	1906.201	bb			553.6364	92.3	-7.7	963.4
WXX100301-07ICV	13-Dinitrobenzene-d4	172 > 142	12.17	3200.957	3200.957	3200.957	3200.957	bb			552.2555	110.5	10.5	294.2
WXX100301-07ICV	13-Dinitrobenzene	168 > 138	12.31	4696.164	3200.957	4696.164	733.556	bb			559.1698	93.2	-6.8	388.3
WXX100301-07ICV	Tetryl	241 > 181	12.82	3463.432	3200.957	3463.432	540.999	bb			514.3662	85.7	-14.3	378.0
WXX100301-07ICV	Nitrobenzene	123 > 46	13.72	3333.296	3200.957	3333.296	520.672	bb			585.7272	97.6	-2.4	362.0
WXX100301-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.89	5935.360	18133.975	5935.360	163.653	MM	02-Mar-10	09:46:04	579.7767	96.6	-3.4	265.0
WXX100301-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.79	8813.408	18133.975	8813.408	243.008	bb			644.5509	107.4	7.4	424.6
WXX100301-07ICV	246-Trinitrotoluene	227 > 210	15.58	7441.112	18133.975	7441.112	205.170	bb			650.9626	108.5	8.5	640.1
WXX100301-07ICV	34-dinitrotoluene	182 > 152	14.56	10670.113	18133.975	10670.113	294.202	bb			296.9742	99.0	-1.0	440.7
WXX100301-07ICV	26-dinitrotoluene	182 > 152	17.79	25048.648	18133.975	25048.648	690.655	MM	02-Mar-10	09:37:31	612.1544	102.0	2.0	1325.9
WXX100301-07ICV	24-dinitrotoluene	182 > 152	18.49	5574.063	18133.975	5574.063	153.691	MM	02-Mar-10	09:28:46	610.9991	101.8	1.8	275.6
WXX100301-07ICV	26-dinitrotoluene-d3	185 > 155	17.64	18133.975	18133.975	18133.975	18133.975	bb			563.6984	112.7	12.7	1372.6
WXX100301-07ICV	2-Nitrotoluene	137 > 46	21.30	3288.563	18133.975	3288.563	90.674	bb			546.6170	91.1	-8.9	801.1
WXX100301-07ICV	4-Nitrotoluene	137 > 46	22.71	1726.468	18133.975	1726.468	47.603	bb			600.6731	100.1	0.1	401.9
WXX100301-07ICV	3-Nitrotoluene	137 > 46	24.38	1860.416	18133.975	1860.416	51.296	bb			522.2960	87.0	-13.0	411.6
WXX100301-07ICV	PETN	361 > 62	24.78	36394.633	18133.975	36394.633	1003.493	bb			533.2968	88.9	-11.1	2990.6

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/01/10
 Time of Injection: 1958
 Standard Number: WXX100301-07ICV
 Data File: EXP0301010a

HMX	89.4
RDX	118.3
135-TNB	92.3
13-DNB	93.2
Tetryl	85.7
Nitrobenzene	97.6
4A-26-DNT	96.6
2A-46-DNT	107.4
246-TNT	108.5
34-DNT(surr)	99.0
26-DNT	102.0
24-DNT	101.8
2-NT	91.1
4-NT	100.1
3-NT	87.0
PETN	88.9

*MTT
3/2/10*

Total 1558.9

Average 97.4

HTMC 03/02/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1514

Lab Code: GEL

Run Date: 01-MAR-10.22-FEB-10.24-FEB-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS02220003.wif	EXS02220004.wif	EXS02220005.wif	EXS02220006.wif	EXS02220007.wif	EXS02220008.wif	EXS02220009.wif					
Parname:												
3,4-Dinitrotoluene	349000	660000	1640000	3130000	4800000	6040000	11400000	-9720	14000	-2.69	.9977	
3,5-Dinitroaniline	385000	817000	1720000	3510000	5180000	7210000	12200000	-71000	7870	-865	.9993	
TATB	100000	195000	464000	973000	1450000	1810000	3550000	4110	1940	-0.085	.9997	
tris(o-cresyl) phosphate	1130000	2200000	5170000	9780000	14700000	18100000	29900000	43000	21500	-3.29	.9999	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLCGEL Job No: 10-1514Lab Code: GELRun Date: 01-MAR-10.22-FEB-10.24-FEB-10LCMSMS Instrument ID: LCMSMS4Method: 8321A ModifiedHPLC Column: YMC J-Sphere ODS-H80Calibration Type: Average RF

Calibration Level:	19	20	21	22	23	24	25	Ave RF	RSD	Q
Data File:	EXS02220003.w	EXS02220004.w	EXS02220005.w	EXS02220006.w	EXS02220007.w	EXS02220008.w	EXS02220009.w			
Parname										
2,6-Diamino-4-nitrotoluene	1550	1760	1990	1780	2210	1890	2120	1900.000	12	

Q column used to flag RSD values outside of Limit (>20%)

* Values outside of QC Limit

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1514

Lab Code: GEL

Run Date: 01-MAR-10 22-FEB-10 24-FEB-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8Q

Calibration Type: Linear

Calibration Level:	19	20	21	22	23	24	25	Slope	Intercept	COD	Q
Data File:	EXS02220003.W	EXS02220004.W	EXS02220005.W	EXS02220006.W	EXS02220007.W	EXS02220008.W	EXS02220009.W				
Paraname											
2,4-Diamino-6-nitrotoluene	50600	96100	236000	641000	956000	1340000	2550000	1300	-27000	.999	

Linear fit: $Y=mx+nb$
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

* Values outside of QC Limit

022210ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	weighting	None	Iterate No
a0	4.11e+003			
a1	1.94e+003			
a2	-0.0847			
Correlation coefficient 0.9997				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	weighting	None	Iterate No
a0	-7.1e+004			
a1	7.87e+003			
a2	-0.865			
Correlation coefficient 0.9993				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	weighting	None	Iterate No
a0	-9.72e+003			
a1	1.4e+004			
a2	-2.69			
Correlation coefficient 0.9977				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Mean Response Factor	weighting	None	Iterate No
Factor	1.9e+003			
Standard deviation	228			
%RSD	12			
Use Area				

Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Page 1

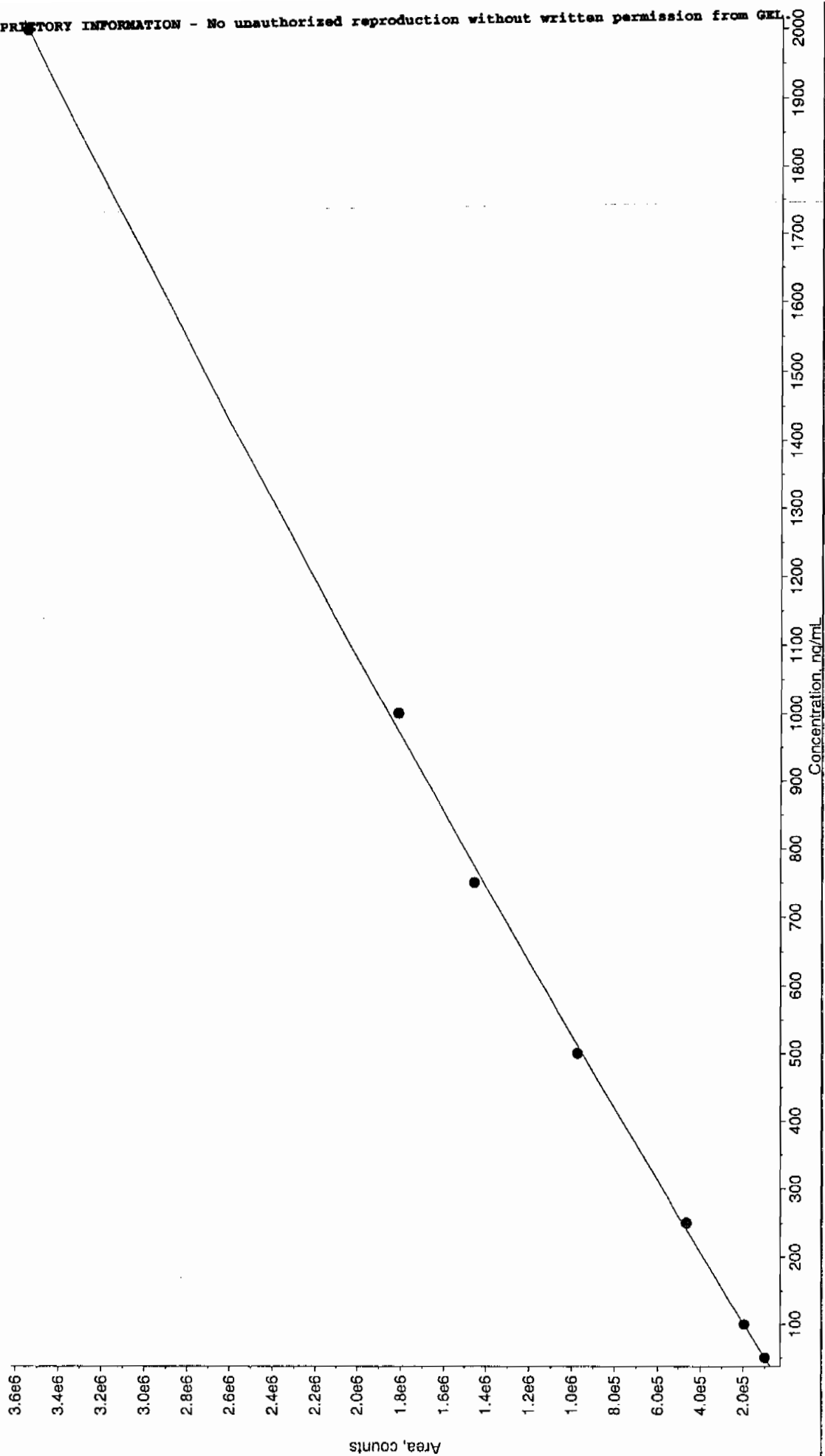
022210ICAL
Iterate No

Fit Linear Weighting None
Intercept -2.7e+004
Slope 1.3e+003
Correlation coefficient 0.9990
Use Area

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

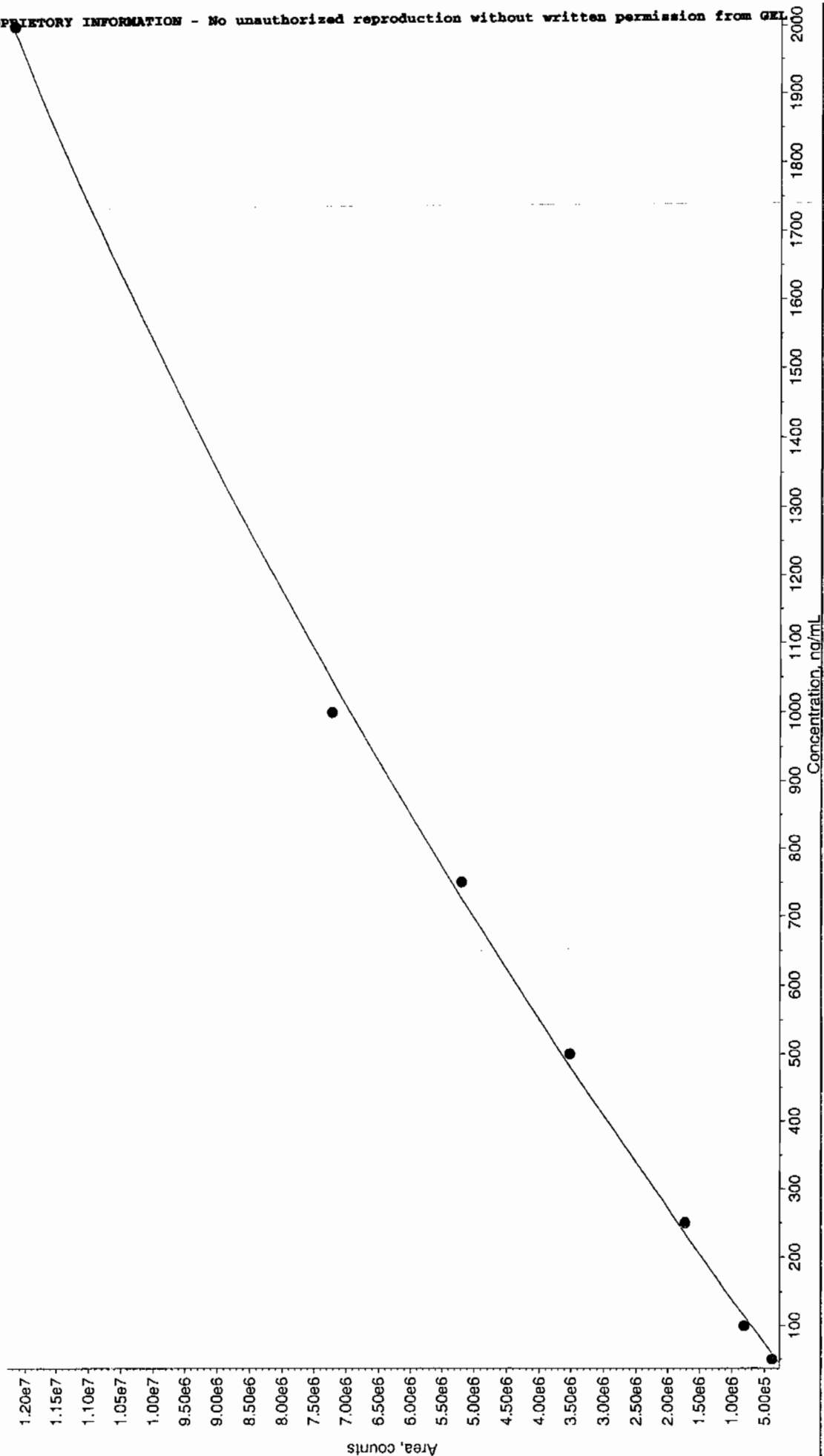
Fit Quadratic Weighting None Iterate No
a0 4.3e+004
a1 2.15e+004
a2 -3.29
Correlation coefficient 0.9999
Use Area

022210.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.0847 x^2 + 1.94e+003 x + 4.11e+003$ ($r = 0.9997$)



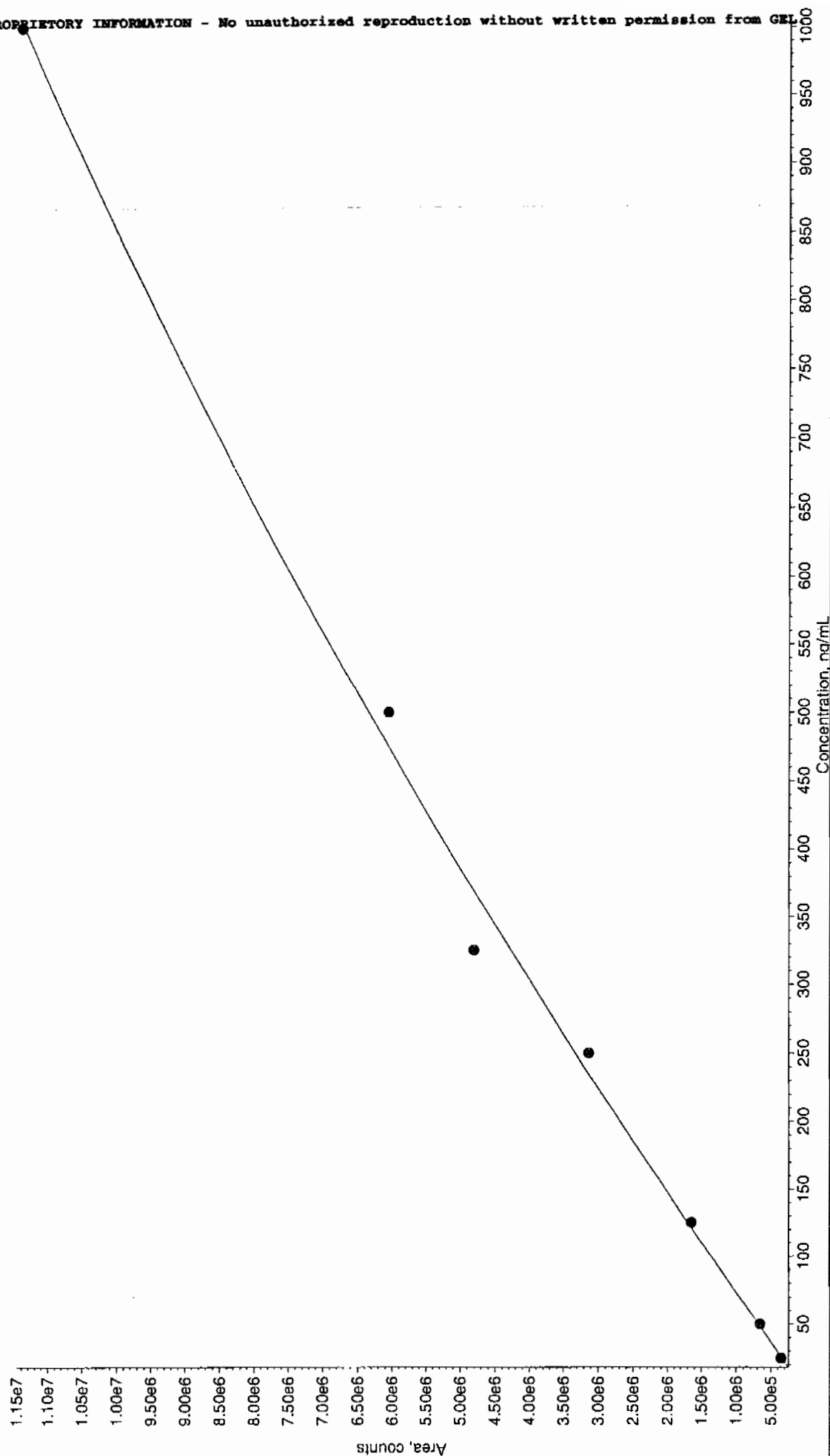
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022210.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -0.865 x^2 + 7.87e+003 x + -7.1e+004$ ($r = 0.9993$)



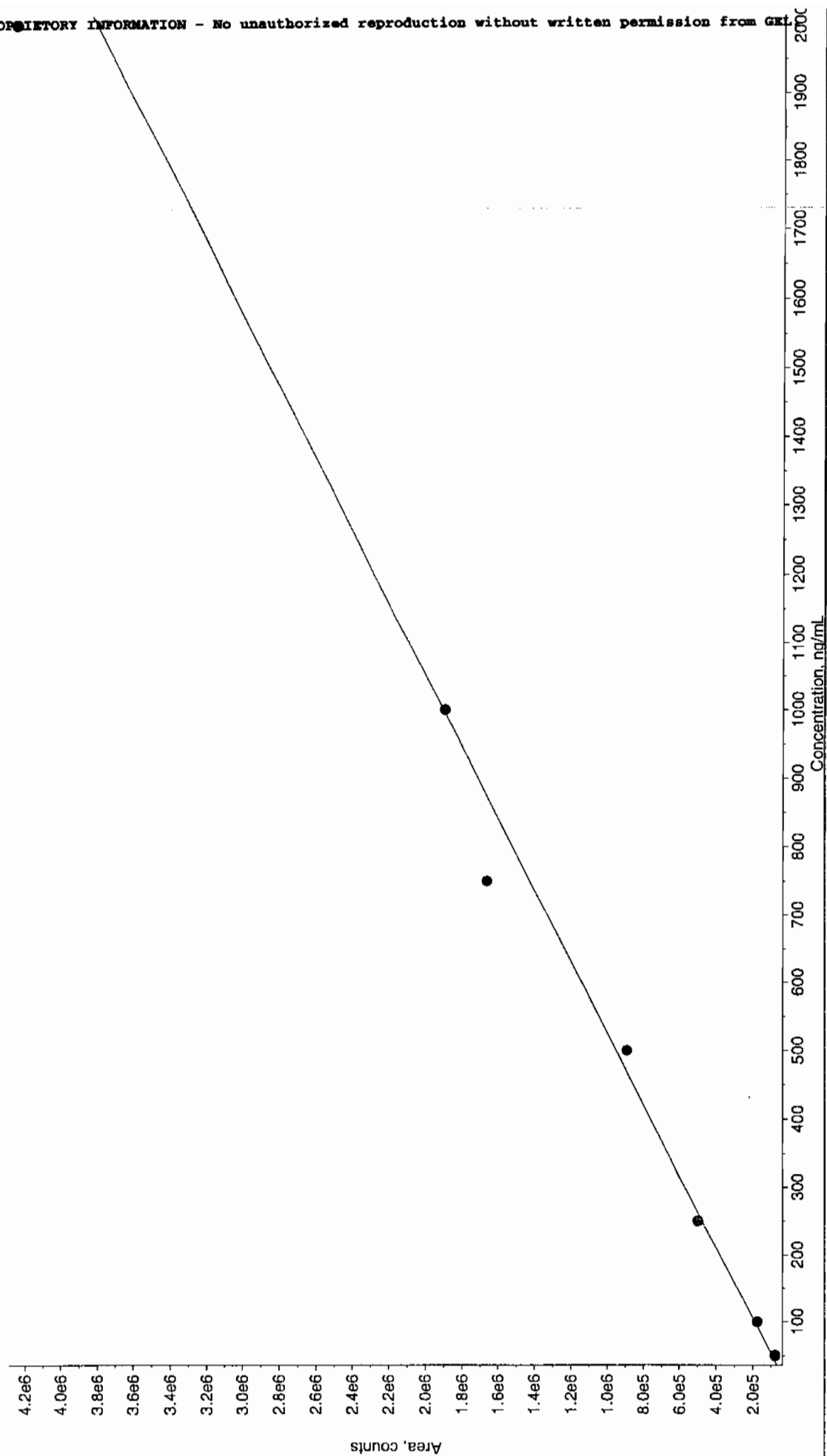
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022210.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -2.69 x^2 + 1.4e+004 x + -9.72e+003$ ($r = 0.9977$)



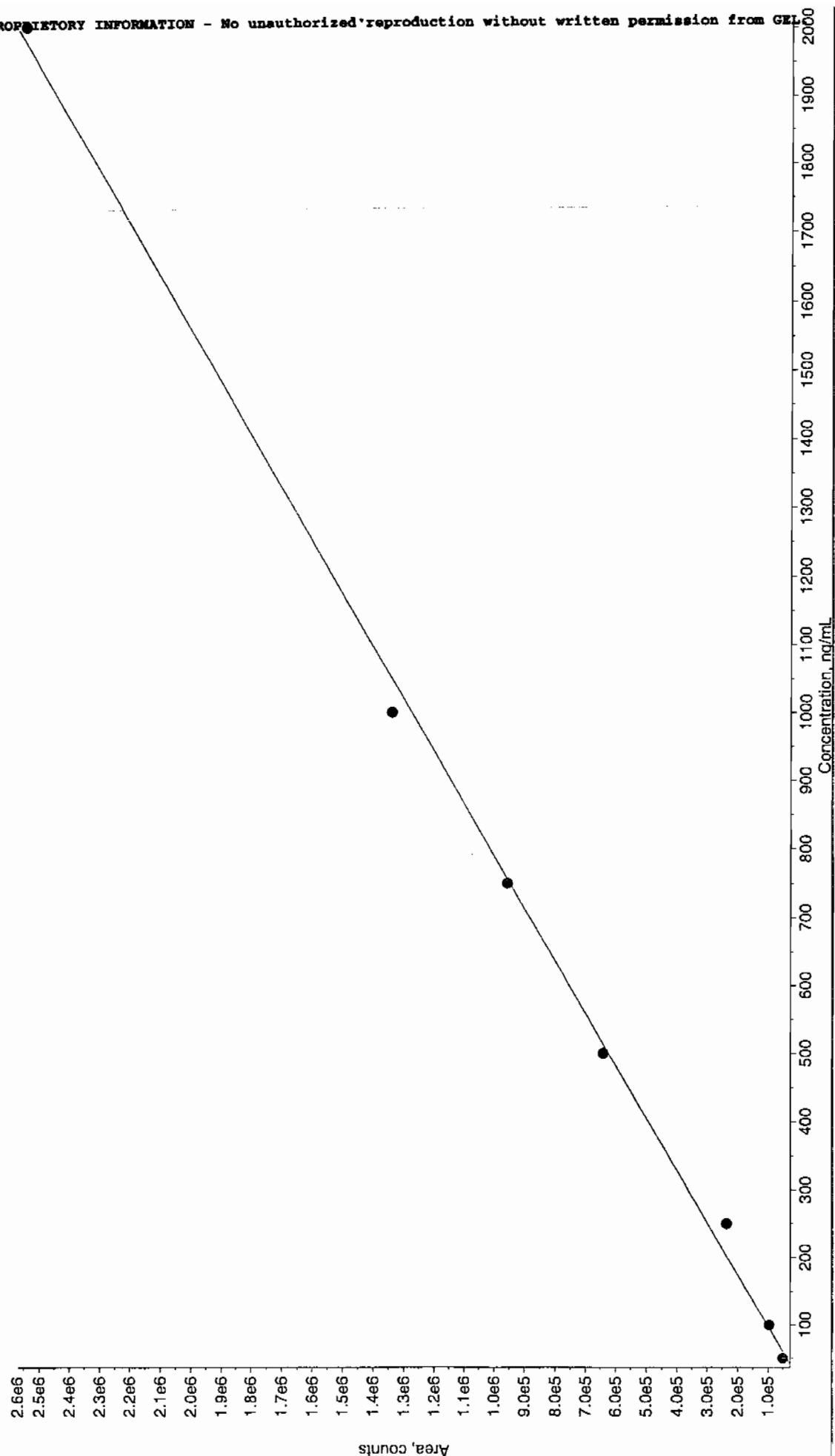
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022210.rdb (26-Diamino-4-nitrotoluene): "Mean Response Factor" Regression ("No" weighting): $y = 1.9e+003 \times (\text{std. dev.} = 228)$



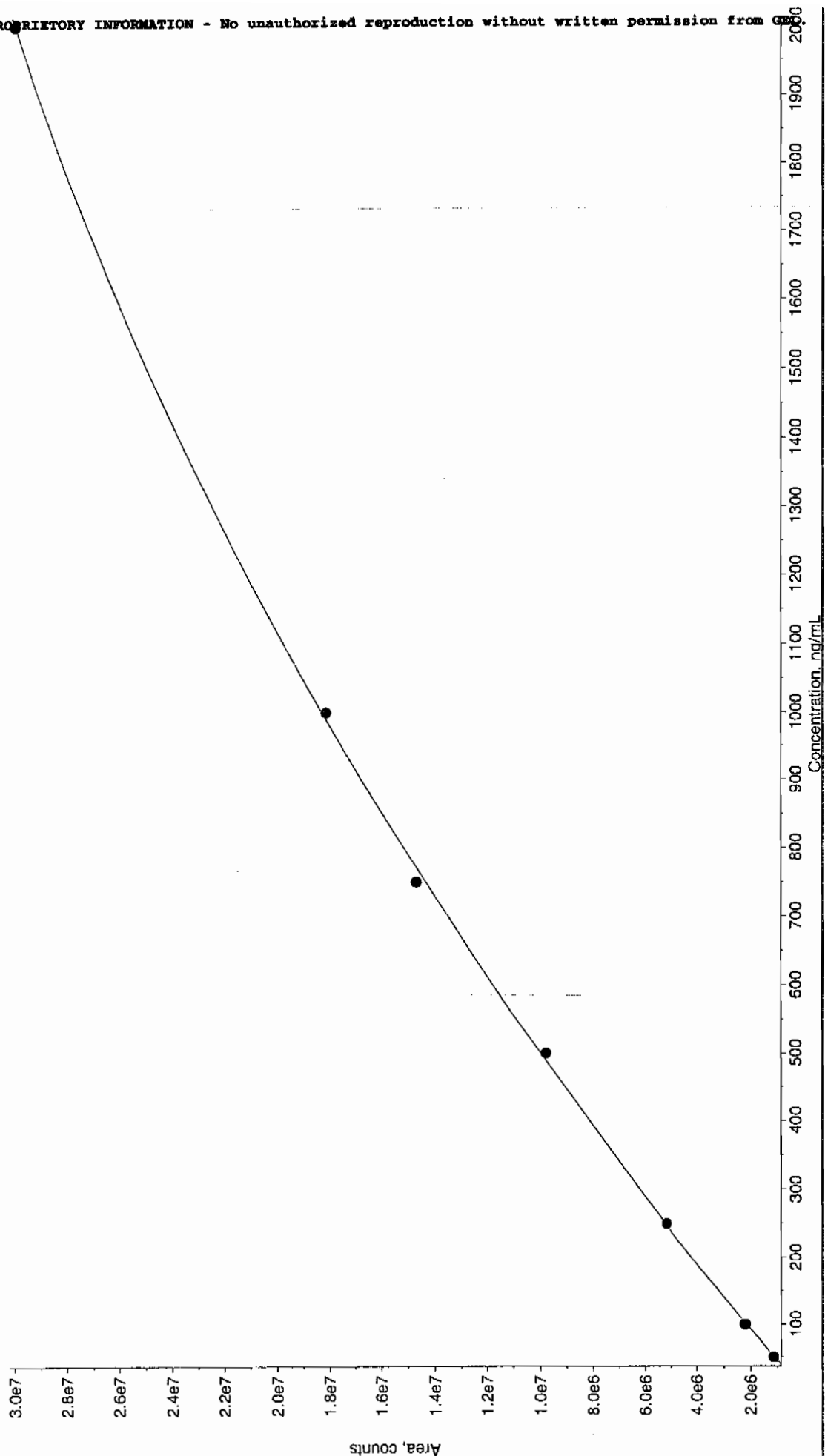
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022210.rdb (24-Diamino-6-nitrotoluene): "Linear" Regression ("No" weighting): $y = 1.3e+003 x + -2.7e+004$ ($r = 0.9990$)



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022210.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -3.29 x^2 + 2.15e+004 x + 4.3e+004$ ($r = 0.9999$)



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02220011.wiff

Analysis Date: 22-FEB-10 19:38

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	562	112	
2,6-Diamino-4-nitrotoluene	500	578	116	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	469	94	
TATB	500	461	92	
tris(o-cresyl) phosphate	500	492	98	

Recovery Limits:

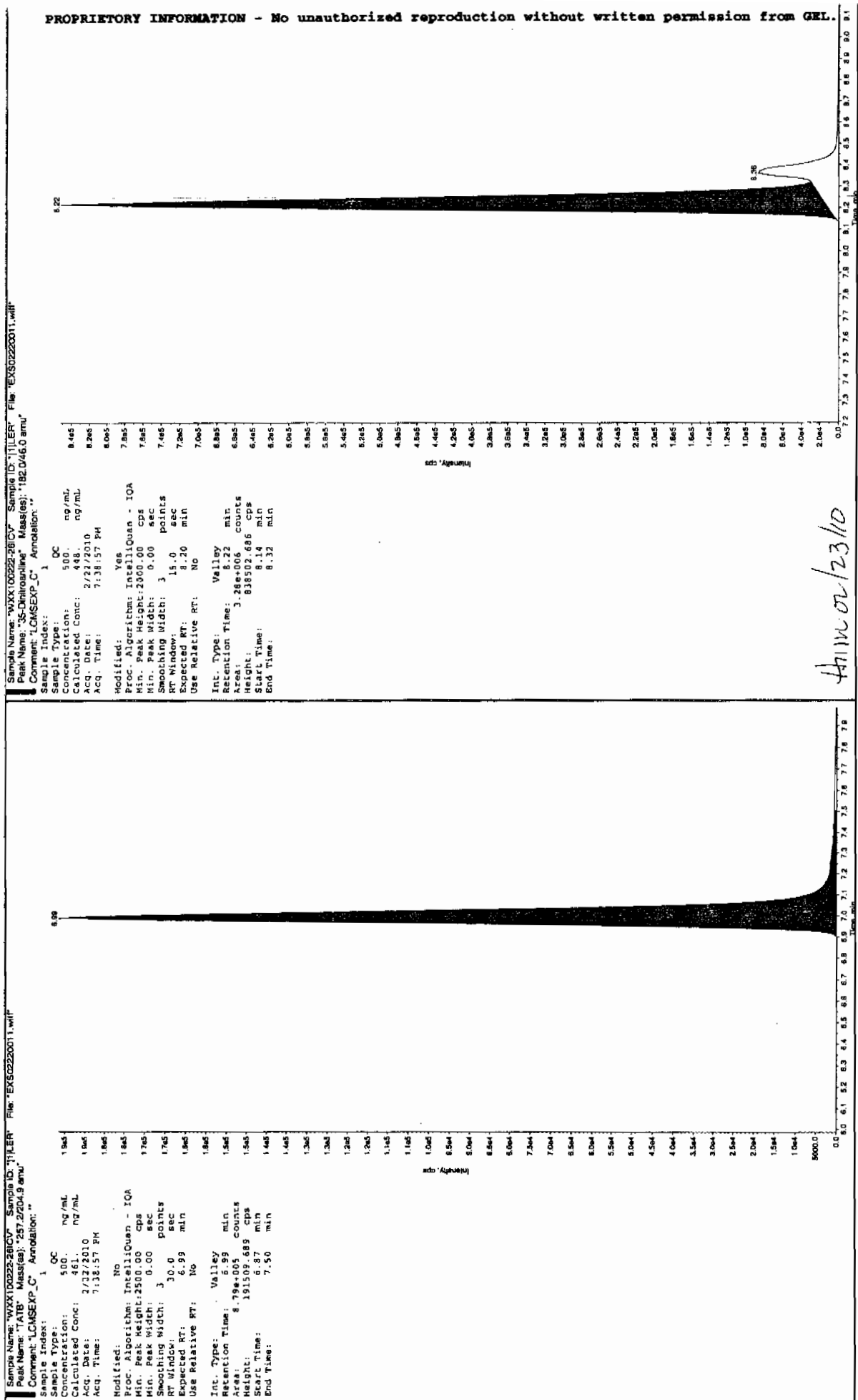
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

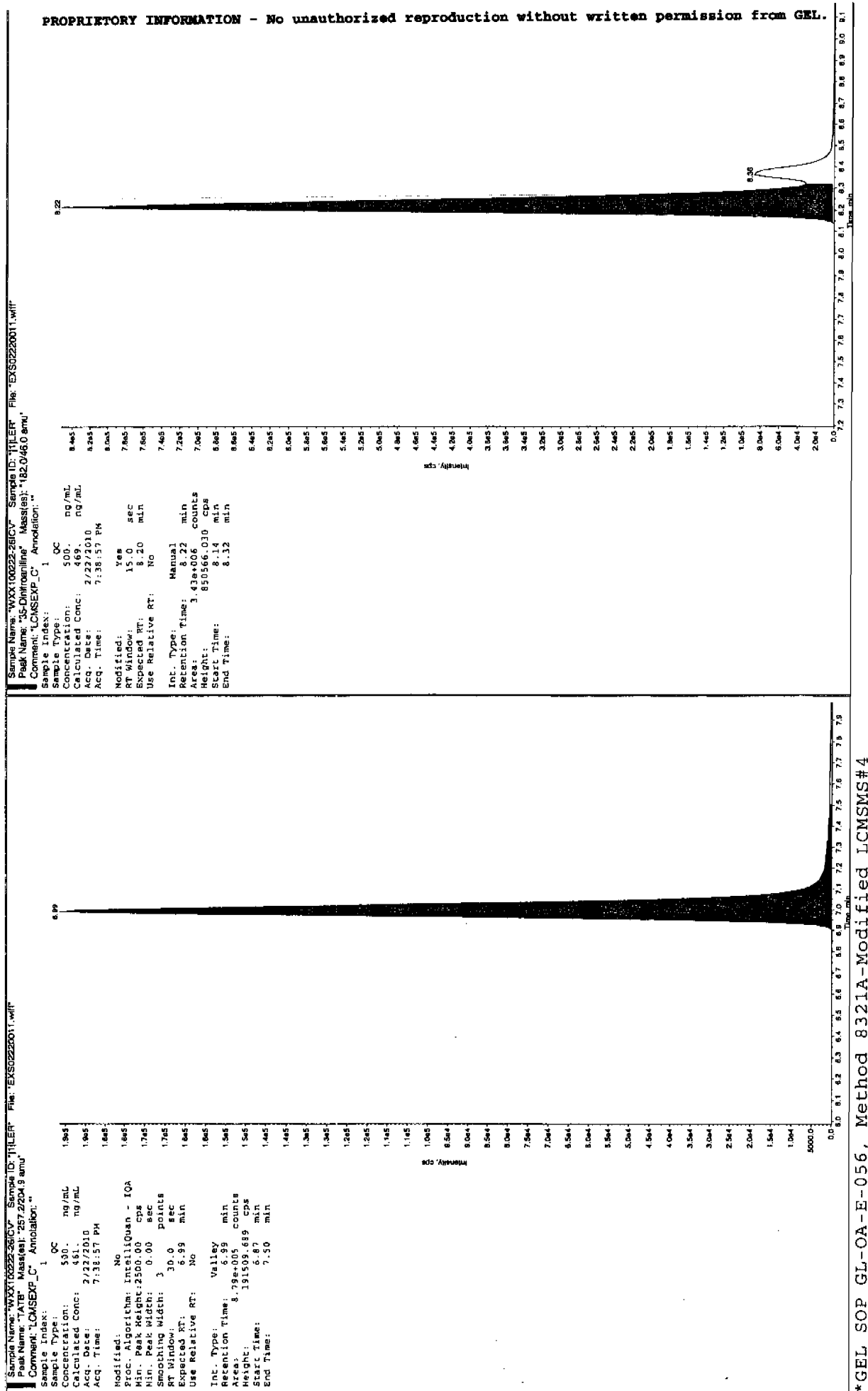
Before Jan 23/10



After Jan 23/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Dec 21/3/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

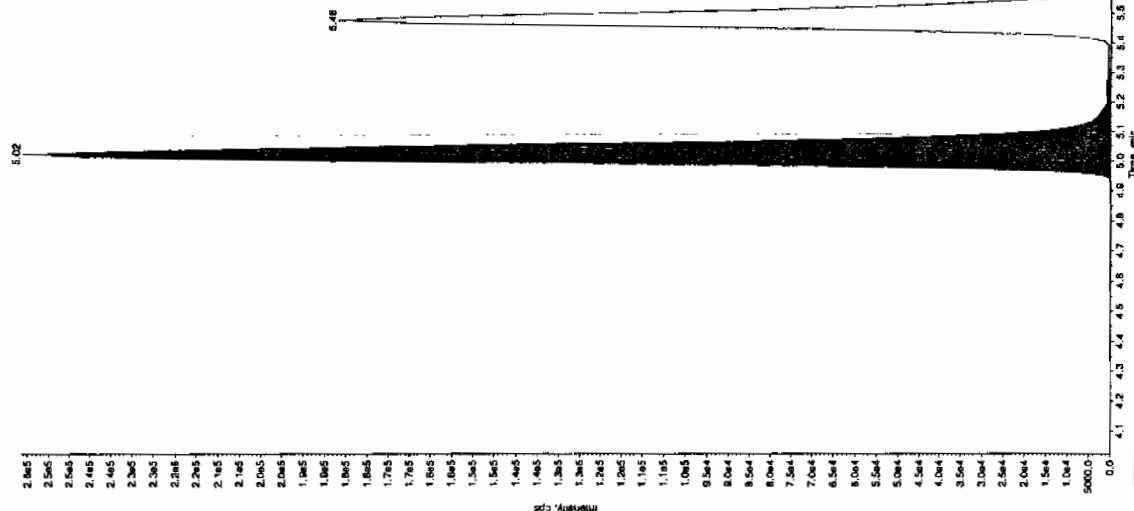
Sample Name: "WXX100222-261CV" Sample ID: "111ER" File: "EX02220011.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.0460 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1

Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 578. ng/mL
 Acq. Date: 7/22/2010
 Acq. Time: 7:38:57 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Ret. Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 5.02 min
 Area: 1.10e+006 counts
 Height: 256377.838 cps
 Start Time: 4.91 min
 End Time: 5.31 min



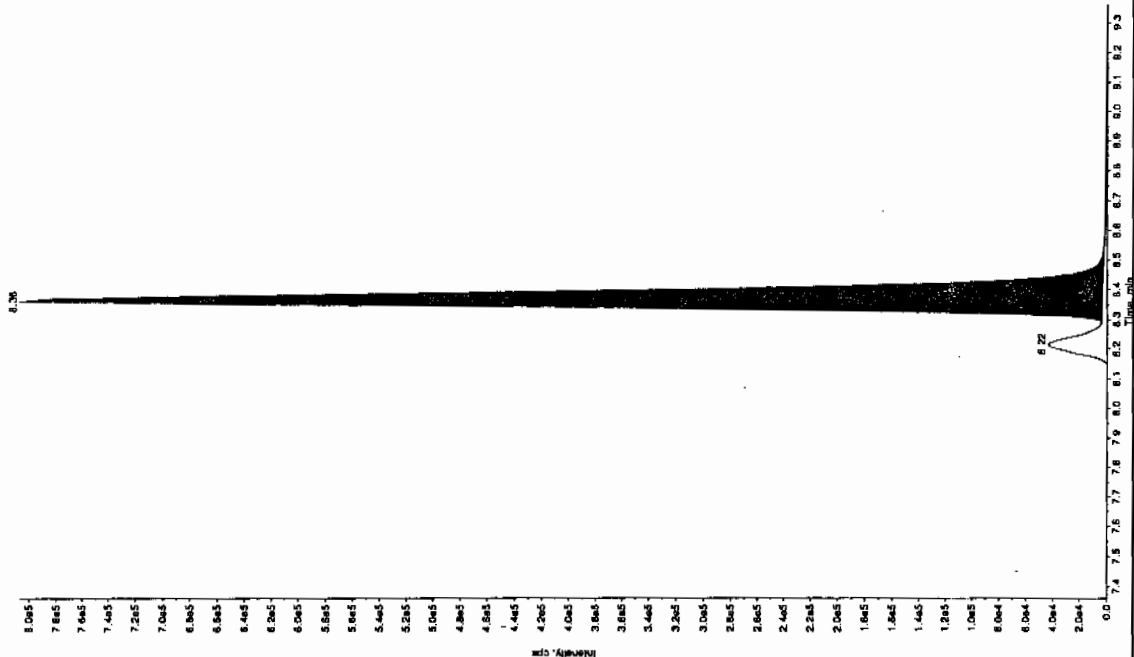
Sample Name: "WXX100222-261CV" Sample ID: "111ER" File: "EX02220011.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.11519 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1

Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 228. ng/mL
 Acq. Date: 7/22/2010
 Acq. Time: 7:38:57 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 Ret. Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No

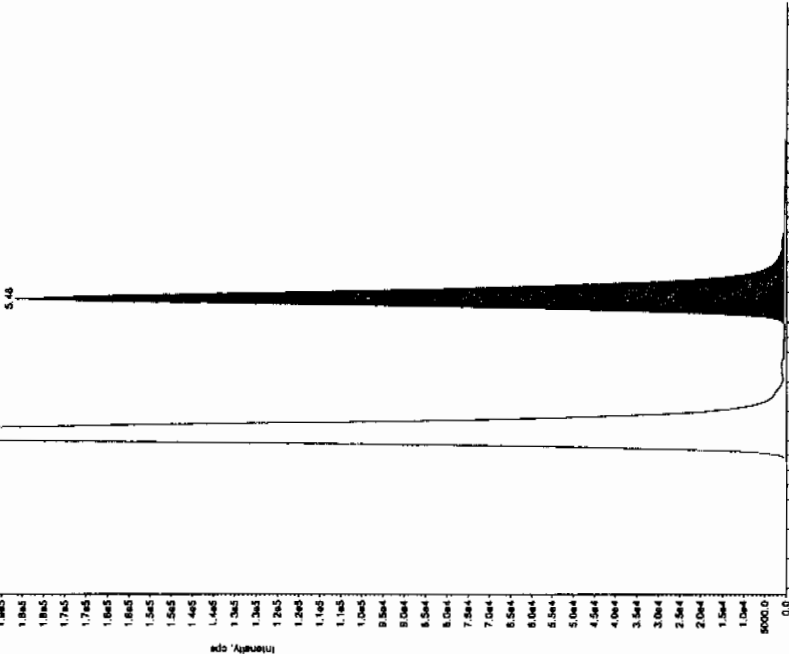
Int. Type: Valley
 Retention Time: 8.36 min
 Area: 3.05e+006 counts
 Height: 803488.770 cps
 Start Time: 8.29 min
 End Time: 8.64 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

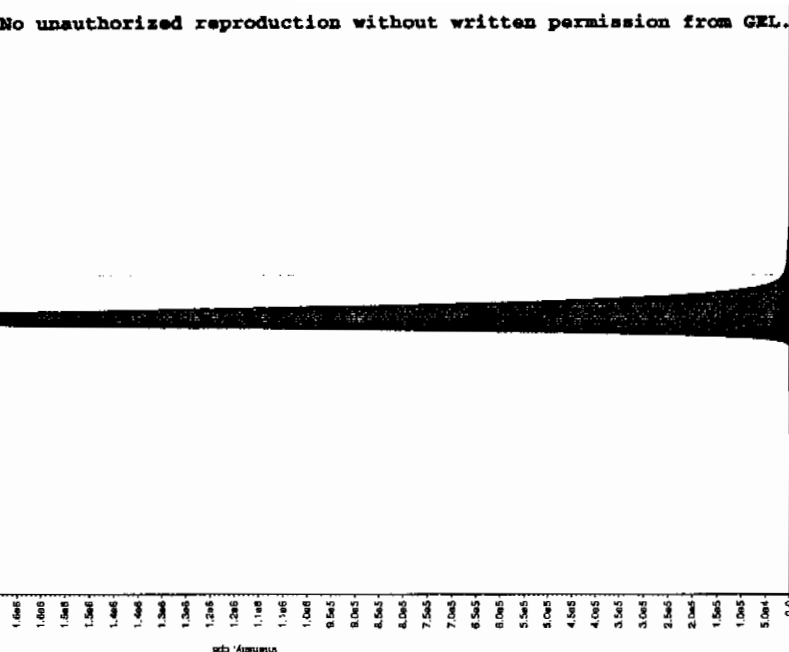
Sample Name: WXX100222-26.CV Sample ID: TILER File: EXS0220011.wif
 Peak Name: 24-Diamino-6-nitrofluorene Mass(es): 166.046.0 amu
 Comment: LCMSEXP_C Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 500 ng/mL
 Calculated Conc: 2/22/2010
 Acq. Date: 7/18/17 PM
 Acq. Time: 2:45
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.48 min
 Area: 7.04e+005 counts
 Height: 18130688 cps
 Start Time: 5.33 min
 End Time: 5.72 min



Sample Name: WXX100222-26.CV Sample ID: TILER File: EXS0220011.wif
 Peak Name: 1,10-Diisopropyl phosphazene Mass(es): 359.191.0 amu
 Comment: LCMSEXP_C Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 500 ng/mL
 Calculated Conc: 2/22/2010
 Acq. Date: 7/18/17 PM
 Acq. Time: 2:46
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 9.83e+006 counts
 Height: 2255017334 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1514

Lab Code: GEL

Run Date: 01-MAR-10.22-FEB-10.24-FEB-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC.J-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS02240003.wiff	EXS02240004.wiff	EXS02240005.wiff	EXS02240006.wiff	EXS02240007.wiff	EXS02240008.wiff	EXS02240009.wiff					
Parname:												
2,4-Diamino-6-nitrotoluene	48700	81500	230000	427000	622000	846000	1560000	1100	886	-.053	.9998	
2,6-Diamino-4-nitrotoluene	70000	111000	300000	612000	773000	1370000	2850000	5920	1080	.172	.9972	
3,4-Dinitrotoluene	171000	348000	795000	1580000	2450000	3100000	6100000	-3340	6950	-.861	.9977	
3,5-Dinitroaniline	250000	536000	1210000	2460000	3640000	4540000	8050000	-2250	5180	-.581	.9999	
TATB	48000	97900	246000	487000	756000	1070000	2090000	-13300	1050	.003	.9996	
tris(o-cresyl) phosphate	664000	1330000	3100000	6040000	8760000	11500000	20000000	27800	12800	-1.38	1	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

022410ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.33e+004			
a1	1.05e+003			
a2	0.00295			
Correlation coefficient 0.9996				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.25e+003			
a1	5.18e+003			
a2	-0.581			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.34e+003			
a1	6.95e+003			
a2	-0.861			
Correlation coefficient 0.9977				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	5.92e+003			
a1	1.08e+003			
a2	0.172			
Correlation coefficient 0.9972				
Use Area				

8/20/10

dtm/ps/10

022410ICAL

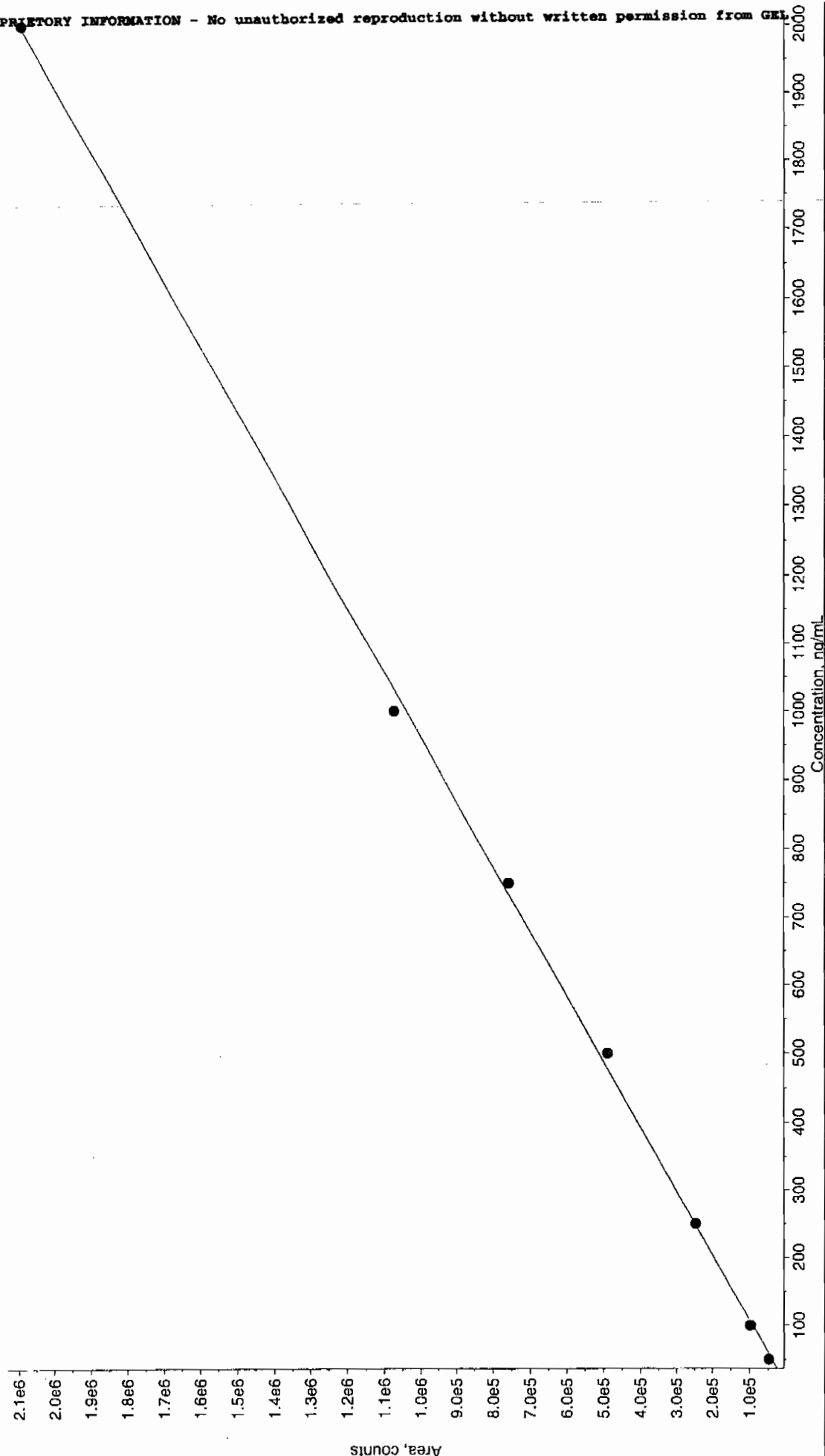
Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	1.1e+003			
a1	886			
a2	-0.0533			
Correlation coefficient 0.9998				
Use Area				

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

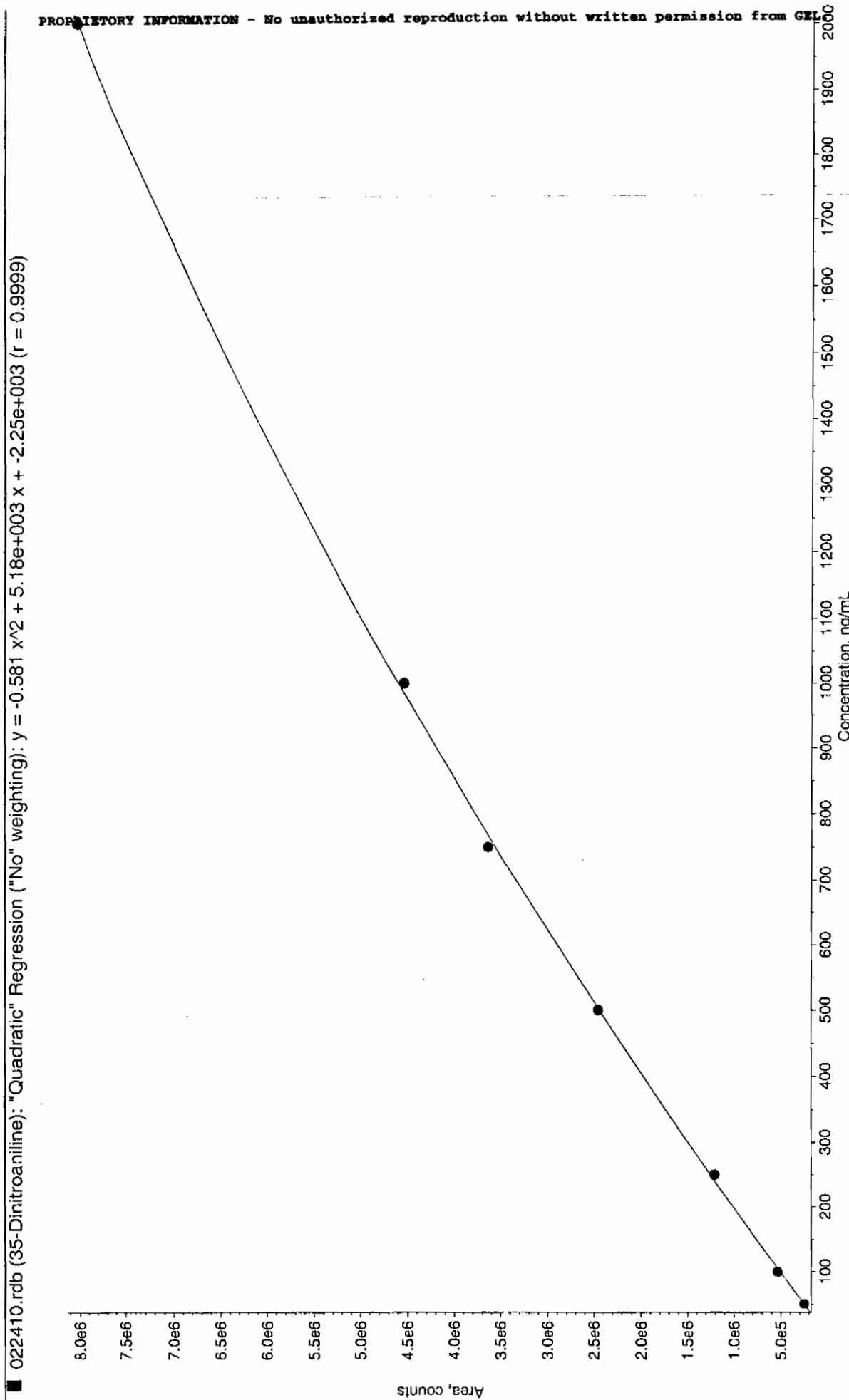
Fit	Quadratic	Weighting	None	Iterate No
a0	2.78e+004			
a1	1.28e+004			
a2	-1.38			
Correlation coefficient 1.0000				
Use Area				

022410.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = 0.00295x^2 + 1.05e+003x + -1.33e+004$ ($r = 0.9996$)



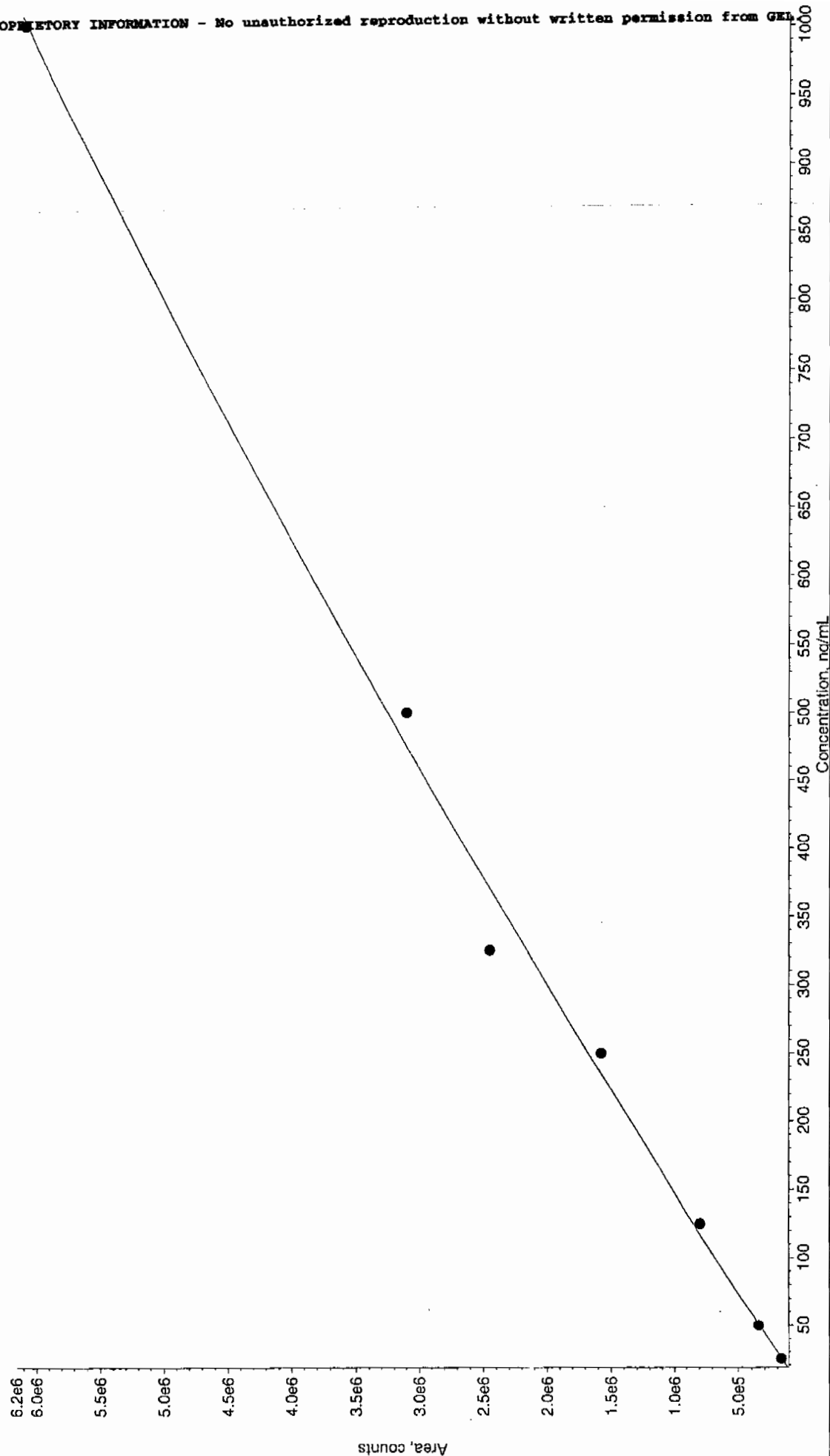
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022410.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -0.581 x^2 + 5.18e+003 x + -2.25e+003$ ($r = 0.9999$)



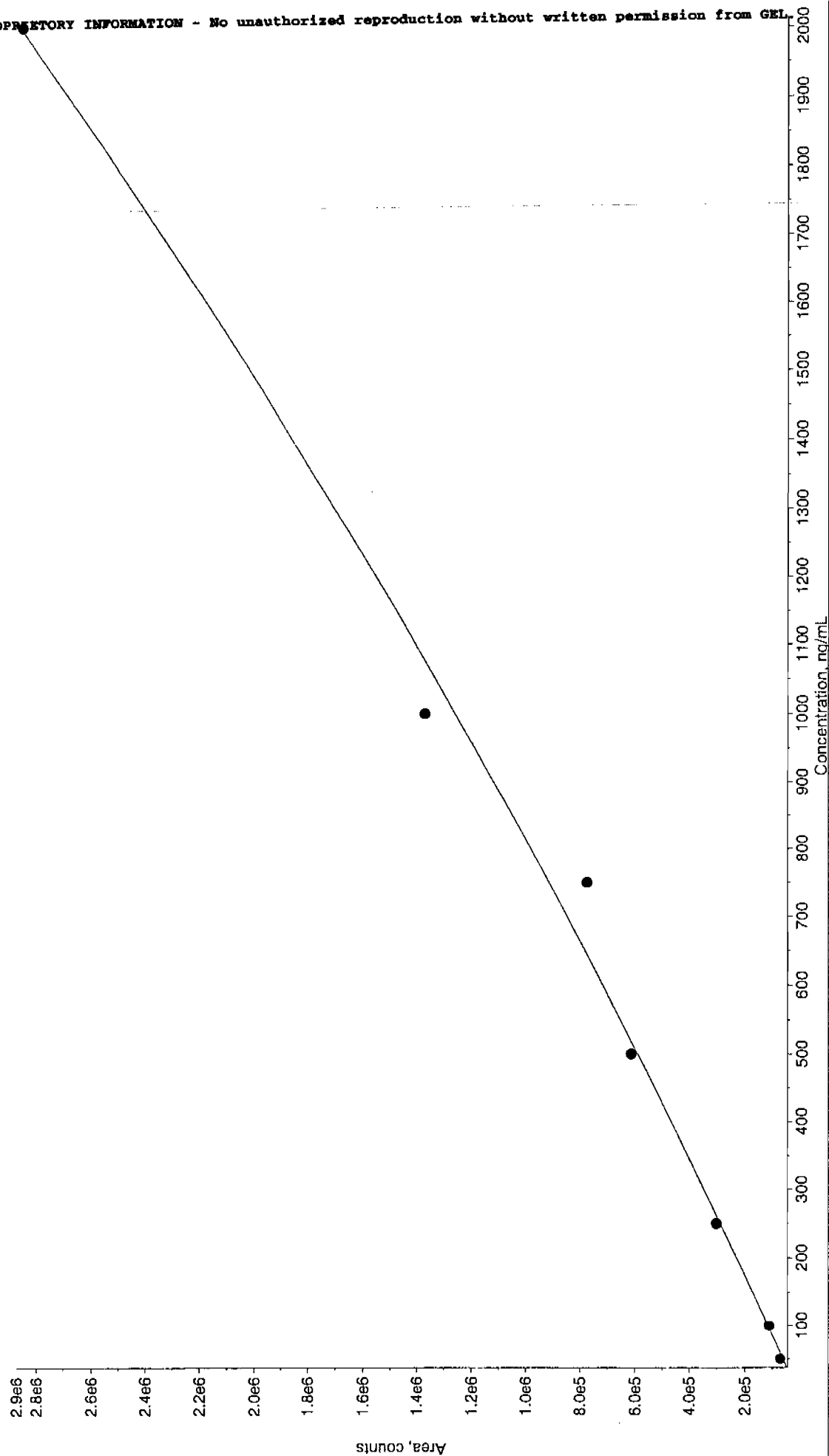
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022410.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.861 x^2 + 6.95e+003 x + -3.34e+003$ ($r = 0.9977$)



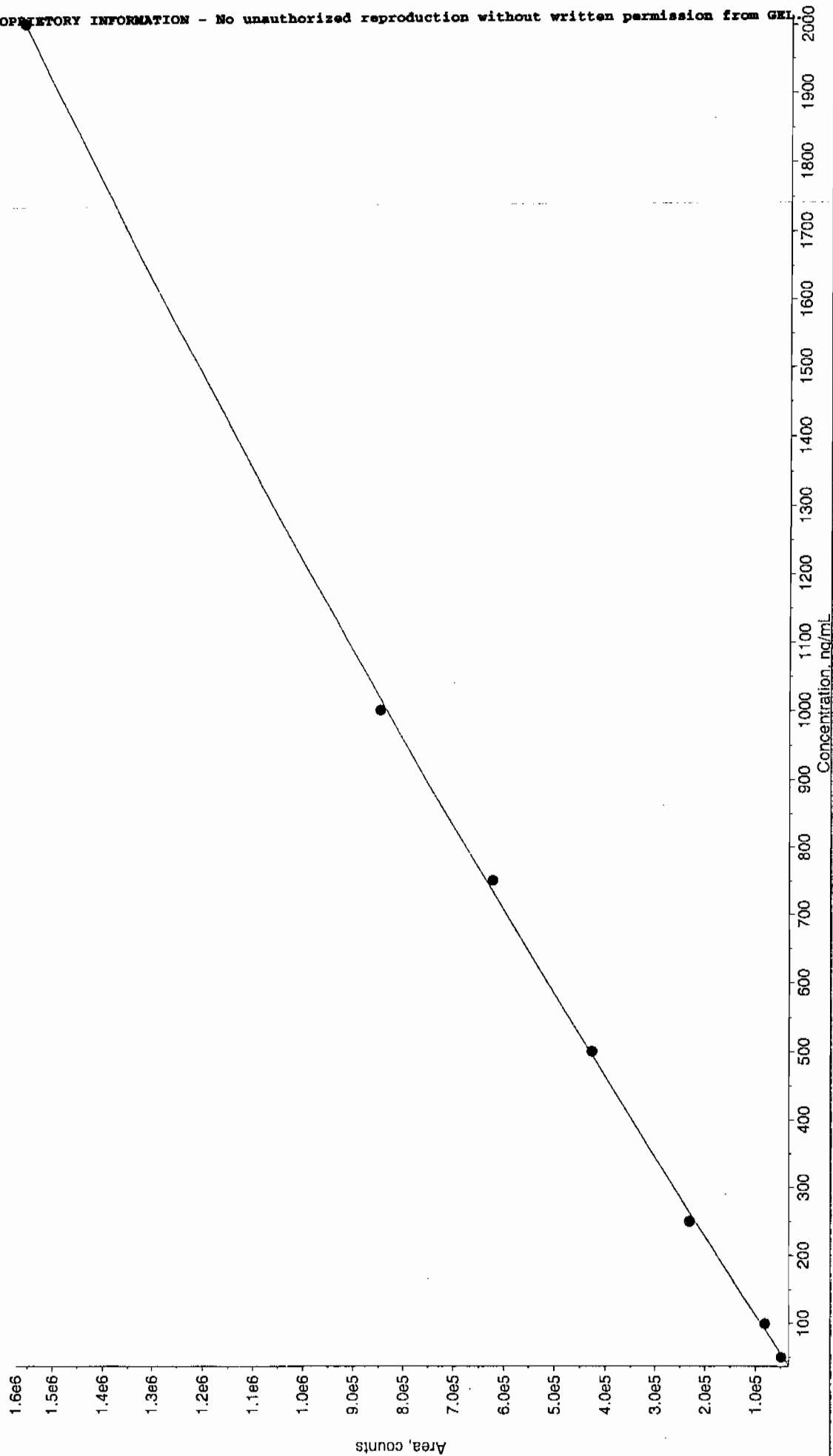
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022410.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = 0.172 x^2 + 1.08e+003 x + 5.92e+003$ ($r = 0.9972$)



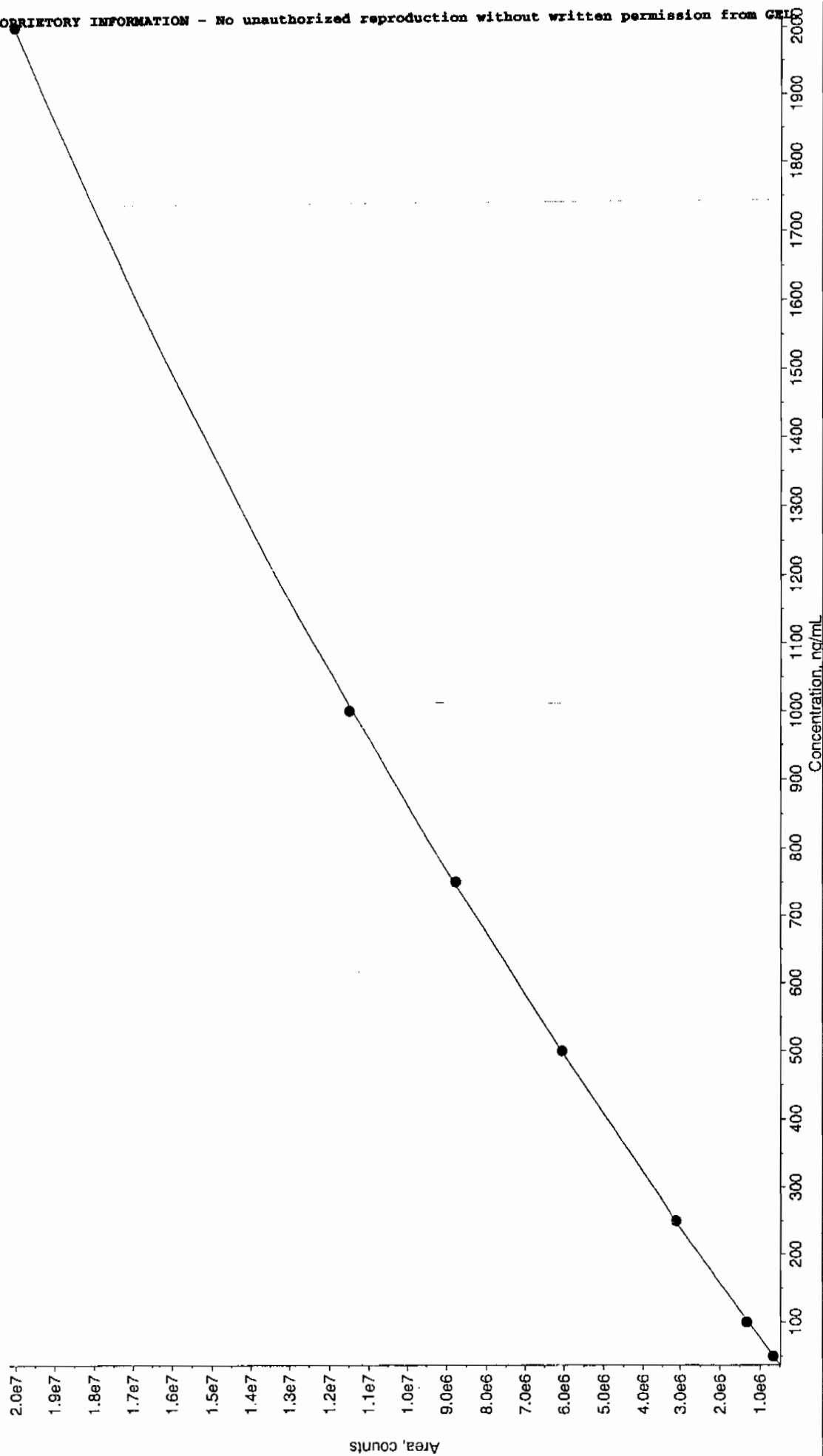
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022410.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.0533 x^2 + 886 x + 1.1e+003$ ($r = 0.9998$)



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

022410.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -1.38 x^2 + 1.28e+004 x + 2.78e+004$ ($r = 1.0000$)



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS02240011.wiff

Analysis Date: 24-FEB-10 12:35

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	497	99	
2,6-Diamino-4-nitrotoluene	500	544	109	
3,4-Dinitrotoluene	250	223	89	
3,5-Dinitroaniline	500	458	92	
TATB	500	481	96	
tris(o-cresyl) phosphate	500	493	99	

Recovery Limits:

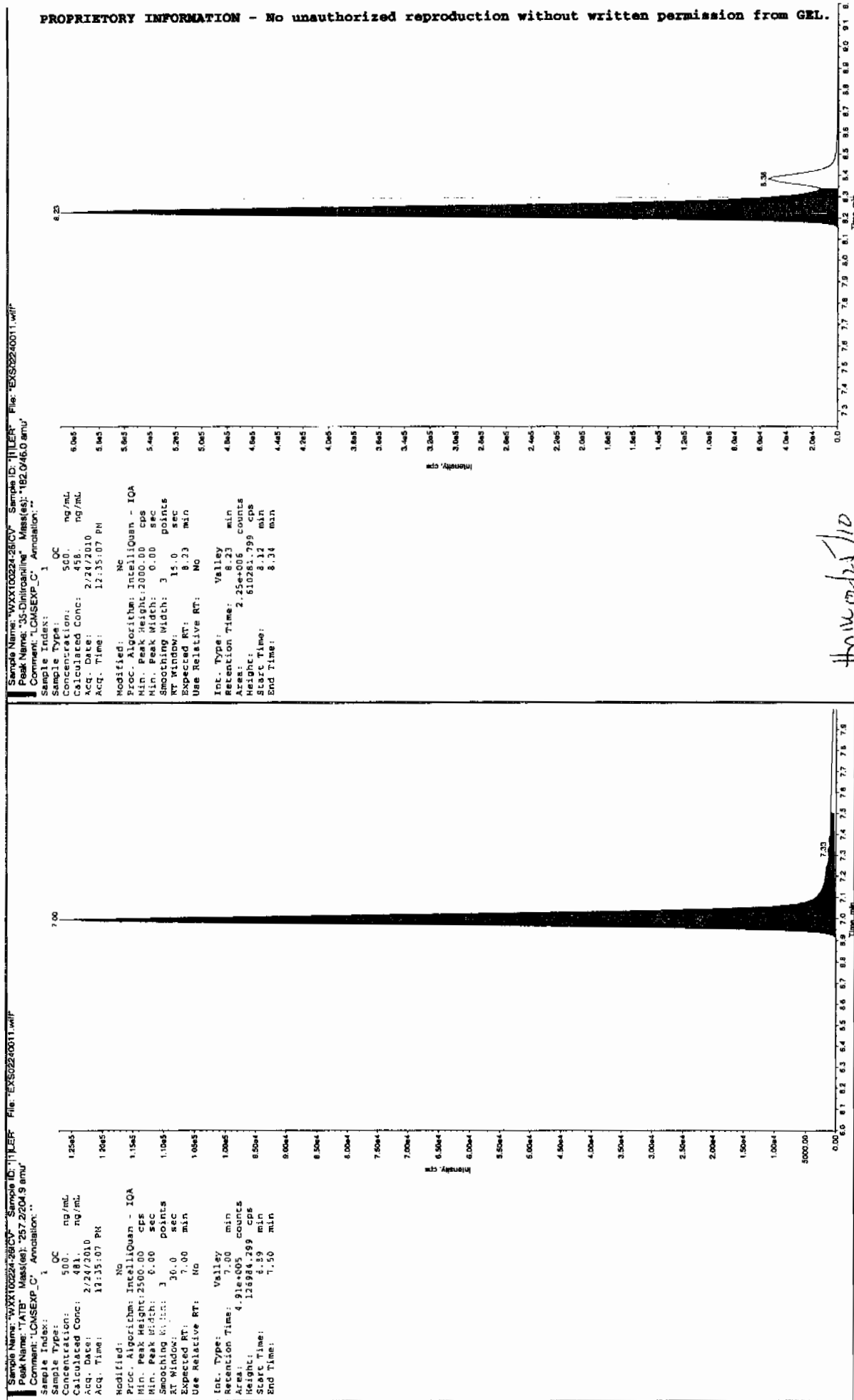
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

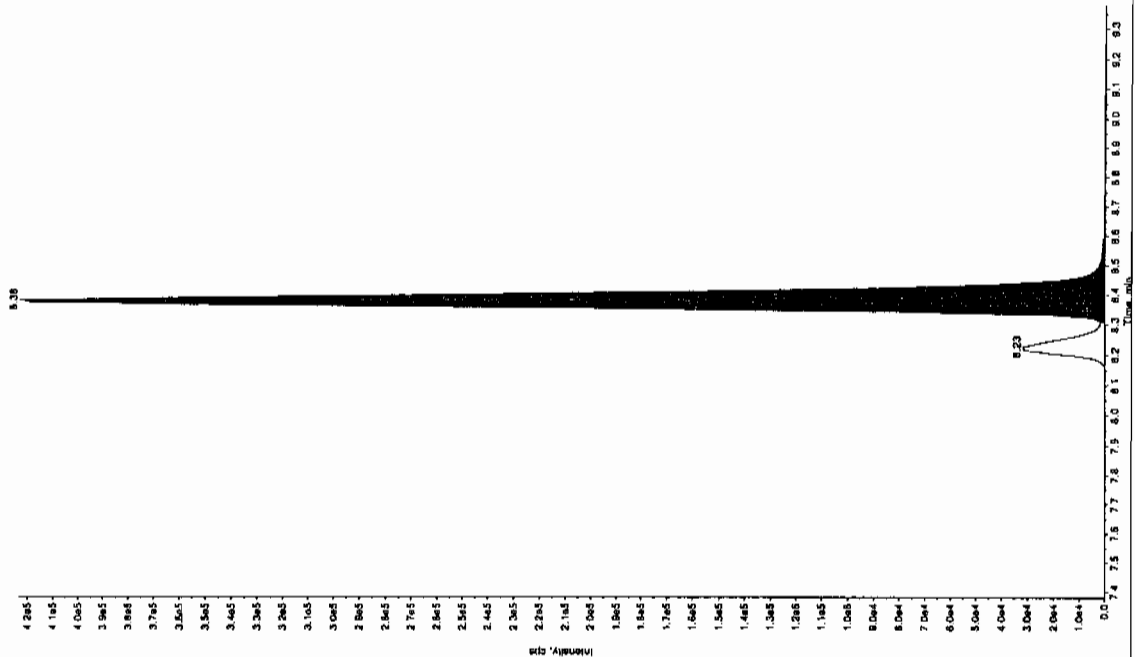
Jan 21 25/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

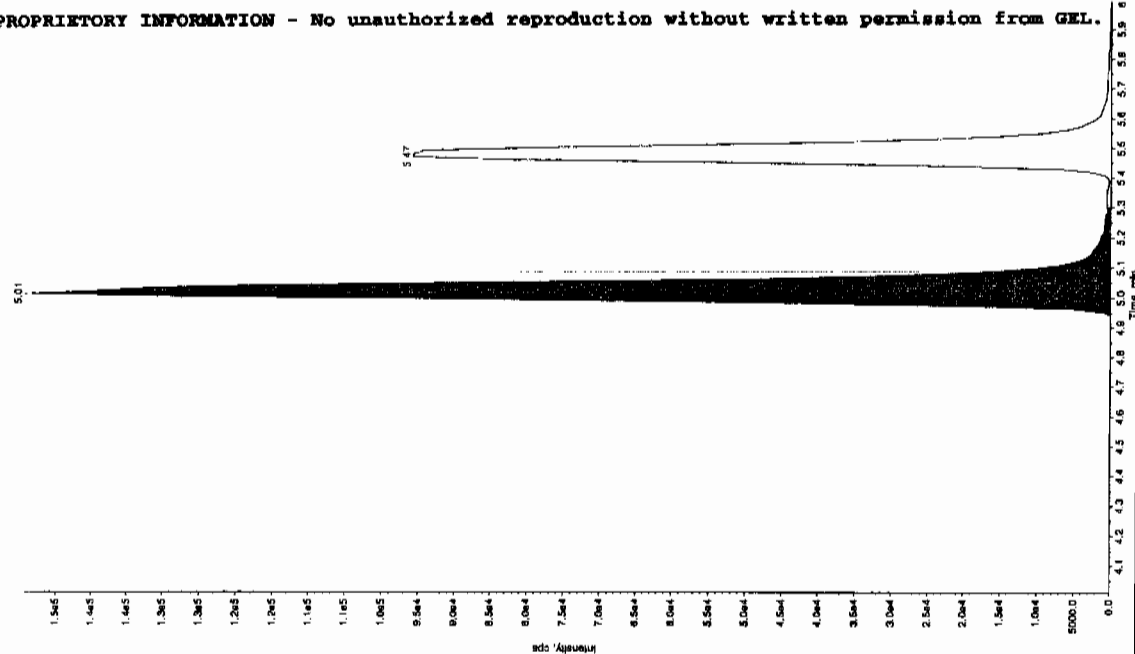
Sample Name: WYX100224-261V Sample ID: 111ER File: EXS02240011.wif
 Peak Name: 34-Dinitrofluorene Mass(es): 182.17519 amu
 Comment: LCMSEXP_C Annotation: *

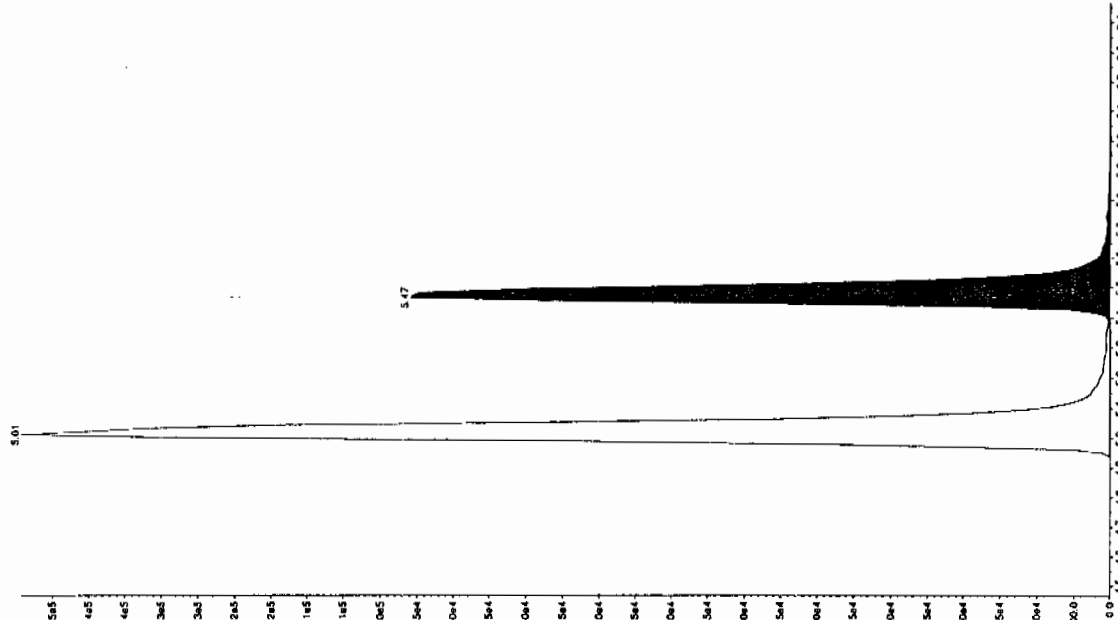
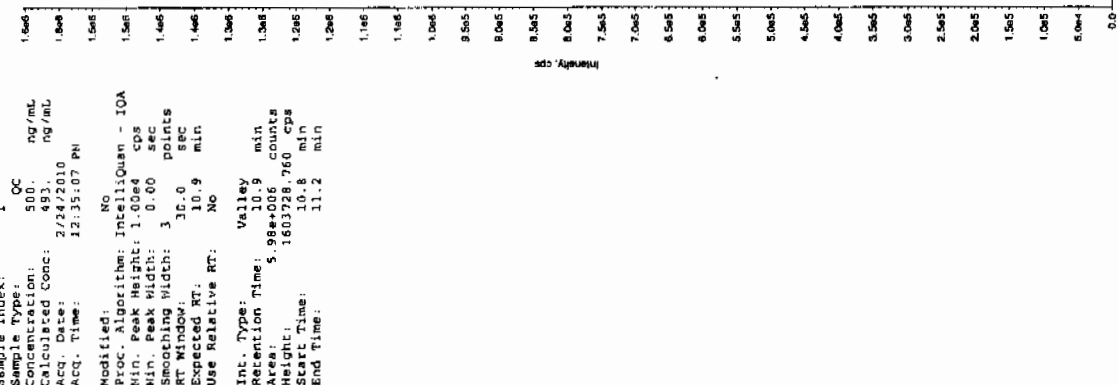
Sample Index: 1
 Sample Type: QC
 Concentration: 350. ng/mL
 Calculated Conc: 2/24/2010 ng/mL
 Acq. Date: 12/31/07 PM
 Acq. Time: 12:35:07 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.38 min
 Peak Height: 1.50e+006 counts
 Peak Area: 422965.179 cps
 Start Time: 8.31 min
 End Time: 8.70 min



Sample Name: WYX100224-261V Sample ID: 111ER File: EXS02240011.wif
 Peak Name: 26-Dinitro-4-nitrofluorene Mass(es): 186.0460 amu
 Comment: LCMSEXP_C Annotation: *

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 2/24/2010 ng/mL
 Acq. Date: 12/31/07 PM
 Acq. Time: 12:35:07 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.01 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.01 min
 Peak Height: 6.48e+005 counts
 Peak Area: 149321.402 cps
 Start Time: 4.92 min
 End Time: 5.30 min





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0301012a

Analysis Date: 01-MAR-10 20:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.081	120	
1,3-Dinitrobenzene-d4	500	625.96	125	
2,4,6-Trinitrotoluene	40	39.523	99	
2,4-Dinitrotoluene	40	39.691	99	
2,6-Dinitrotoluene	40	39.923	100	
2,6-Dinitrotoluene-d3	500	592.475	118	
2-Amino-4,6-dinitrotoluene	40	39.044	98	
3,4-Dinitrotoluene	20	21.135	106	
4-Amino-2,6-dinitrotoluene	40	44.136	110	
HMX	40	43.681	109	
Nitrobenzene	40	34.954	87	
PETN	40	42.016	105	
RDX	40	36.598	91	
Tetryl	40	29.639	74	
m-Dinitrobenzene	40	37.394	93	
m-Nitrotoluene	40	29.818	75	
o-Nitrotoluene	40	36.123	90	
p-Nitrotoluene	40	42.037	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301012a

Date: 01-Mar-2010

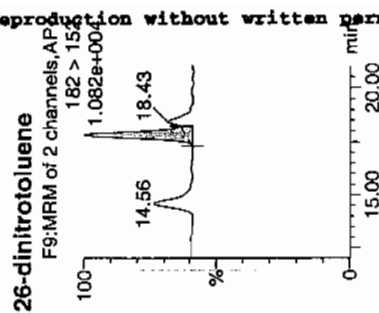
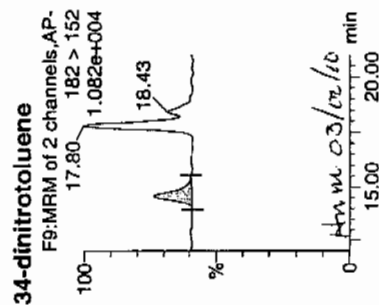
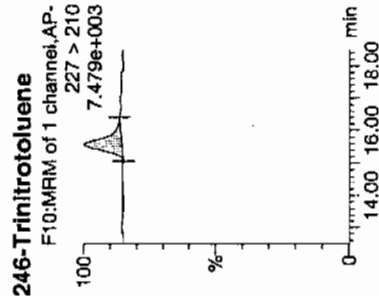
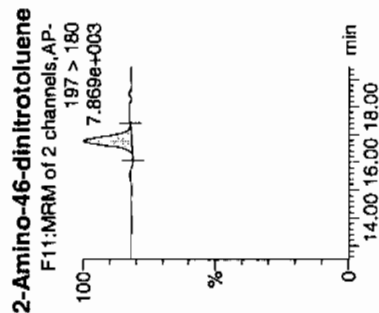
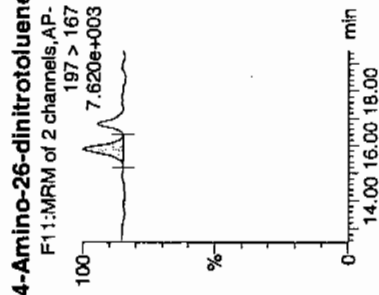
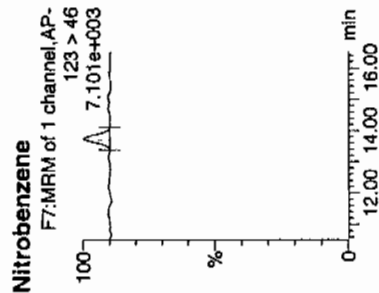
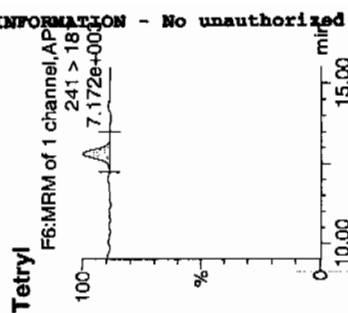
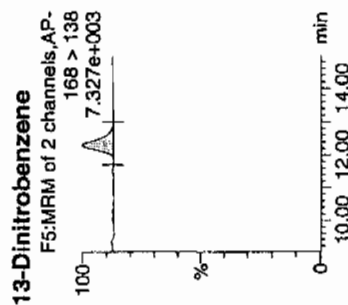
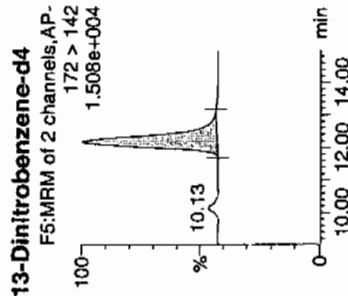
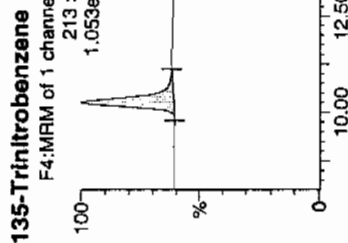
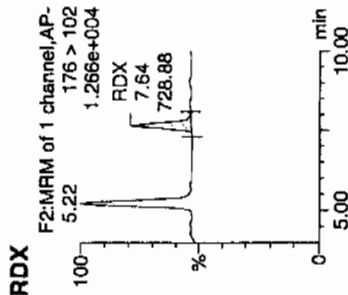
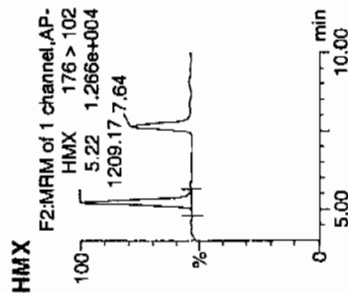
Time: 20:57:26

ID: WXX100301-08CRI

Vial: 1:1,C

3/2/10
M.A.P.

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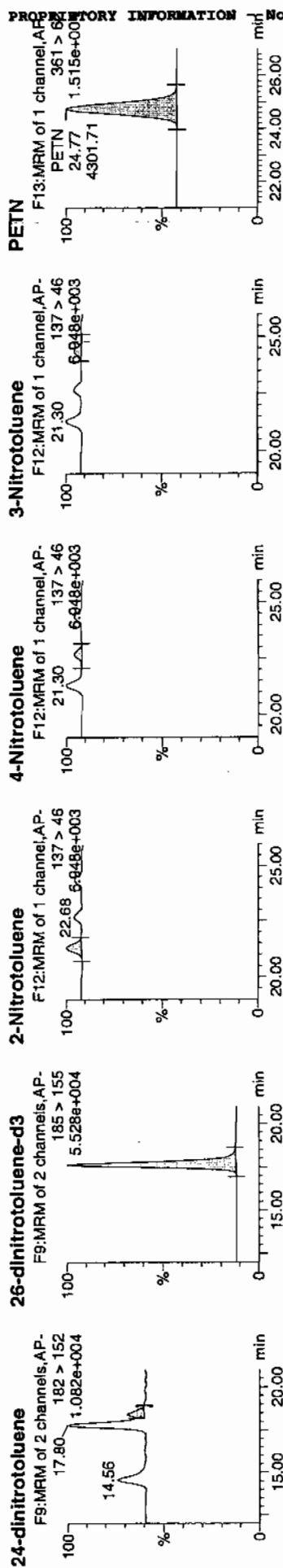


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 24 of 65

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Conc (ng/ml)	% Rec	% Dev	S/N
WXX100301-08CRI	HMZ	176 > 102	5.22	1209.170	3628.160	1209.170	166.637	bb			43.6814	109.2	9.2	113.9
WXX100301-08CRI	RDX	176 > 102	7.64	728.884	3628.160	728.884	100.448	bb			36.5982	91.5	-8.5	63.0
WXX100301-08CRI	135-Trinitrobenzene	213 > 183	10.27	1201.239	3628.160	1201.239	165.544	bb			48.0805	120.2	20.2	248.5
WXX100301-08CRI	13-Dinitrobenzene-d4	172 > 142	12.17	3628.160		3628.160	3628.160	bb			625.9601	125.2	25.2	268.9
WXX100301-08CRI	13-Dinitrobenzene	168 > 138	12.31	355.969	3628.160	355.969	49.056	bb			37.3944	93.5	-6.5	37.6
WXX100301-08CRI	Tetryl	241 > 181	12.82	283.892	3628.160	283.892	39.123	bb			29.6389	74.1	-25.9	28.1
WXX100301-08CRI	Nitrobenzene	123 > 46	13.72	225.469	3628.160	225.469	31.072	bb			34.9544	87.4	-12.6	14.1
WXX100301-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.86	474.895	19059.697	474.895	12.458	MM	02-Mar-10	09:46:12	44.1355	110.3	10.3	26.7
WXX100301-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.79	561.125	19059.697	561.125	14.720	bb			39.0436	97.6	-2.4	75.2
WXX100301-08CRI	246-Trinitrotoluene	227 > 210	15.58	474.848	19059.697	474.848	12.457	bb			39.5230	98.8	-1.2	43.7
WXX100301-08CRI	34-dinitrotoluene	182 > 152	14.56	798.141	19059.697	798.141	20.938	bb			21.1352	105.7	5.7	67.8
WXX100301-08CRI	26-dinitrotoluene	182 > 152	17.80	1717.012	19059.697	1717.012	45.043	MM	02-Mar-10	09:37:38	39.9234	99.8	-0.2	189.9
WXX100301-08CRI	24-dinitrotoluene	182 > 152	18.43	380.581	19059.697	380.581	9.984	MM	02-Mar-10	09:28:55	39.6911	99.2	-0.8	41.9
WXX100301-08CRI	26-dinitrotoluene-d3	185 > 155	17.62	19059.697		19059.697	19059.697	bb			592.4746	118.5	18.5	2157.9
WXX100301-08CRI	2-Nitrotoluene	137 > 46	21.30	228.420	19059.697	228.420	5.992	bb			36.1234	90.3	-9.7	52.1
WXX100301-08CRI	4-Nitrotoluene	137 > 46	22.68	126.991	19059.697	126.991	3.331	bb			42.0368	105.1	5.1	27.3
WXX100301-08CRI	3-Nitrotoluene	137 > 46	24.38	111.634	19059.697	111.634	2.929	MM	02-Mar-10	09:27:09	29.8181	74.5	-25.5	24.7
WXX100301-08CRI	PETN	361 > 82	24.77	4301.707	19059.697	4301.707	112.848	bb			42.0160	105.0	5.0	1201.0

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

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GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/01/10
 Time of Injection 2057
 Standard Number WXX100301-08CRI
 Data File EXP0301012a

HMX	109.2
RDX	91.5
135-TNB	120.2
13-DNB	93.5
Tetryl	74.1
Nitrobenzene	87.4
4A-26-DNT	110.3
2A-46-DNT	97.6
246-TNT	98.8
34-DNT(surr)	105.7
26-DNT	99.8
24-DNT	99.2
2-NT	90.3
4-NT	105.1
3-NT	74.5
PETN	105.0

*Met
3/2/10*

Total 1562.2

Average 97.6

Hand 03/02/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0301017a

Analysis Date: 01-MAR-10 23:24

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	590.293	98	
1,3-Dinitrobenzene-d4	500	531.866	106	
2,4,6-Trinitrotoluene	600	689.425	115	
2,4-Dinitrotoluene	600	651.929	109	
2,6-Dinitrotoluene	600	585.717	98	
2,6-Dinitrotoluene-d3	500	566.557	113	
2-Amino-4,6-dinitrotoluene	600	624.405	104	
3,4-Dinitrotoluene	300	298.589	100	
4-Amino-2,6-dinitrotoluene	600	616.104	103	
HMX	600	617.233	103	
Nitrobenzene	600	584.33	97	
PETN	600	581.43	97	
RDX	600	647.393	108	
Tetryl	600	583.501	97	
m-Dinitrobenzene	600	579.417	97	
m-Nitrotoluene	600	540.344	90	
o-Nitrotoluene	600	527.736	88	
p-Nitrotoluene	600	558.211	93	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 33 of 65

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Date: 01-Mar-2010

Time: 23:24:52

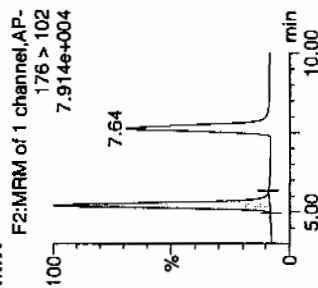
ID: WXX100301-07CCV

Vial: 1:1,B

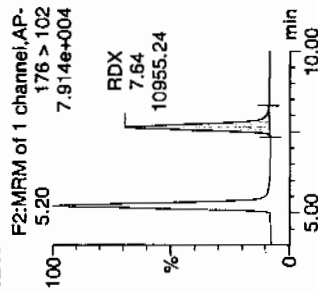
WAT
3/2/10

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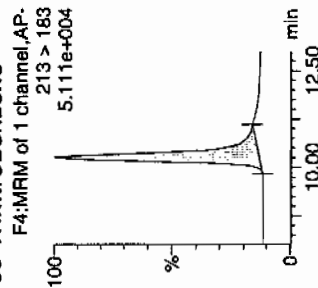
HMX



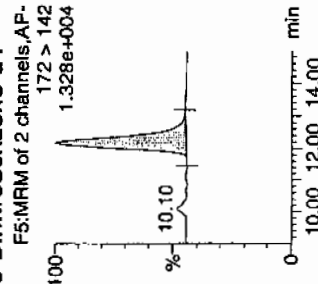
RDX



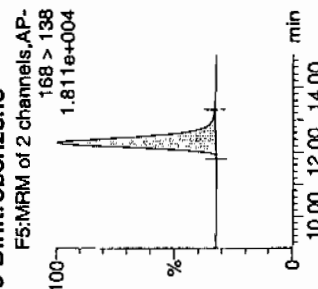
135-Trinitrobenzene



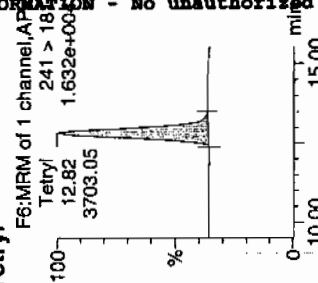
13-Dinitrobenzene-d4



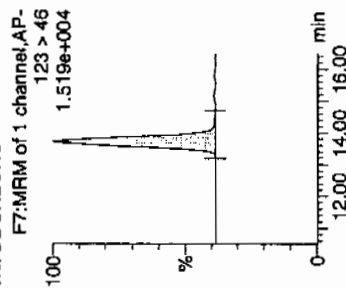
13-Dinitrobenzene



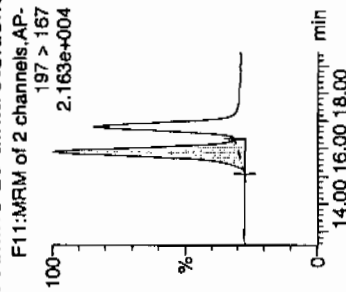
Tetryl



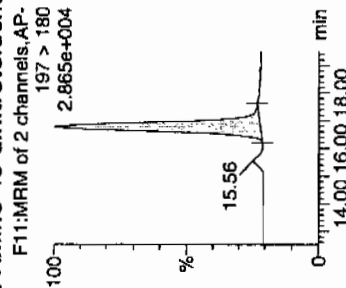
Nitrobenzene



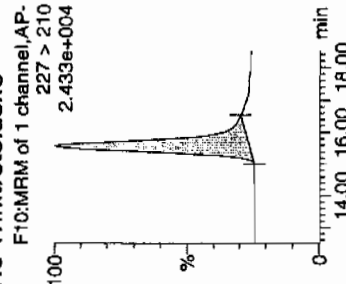
4-Amino-26-dinitrotoluene



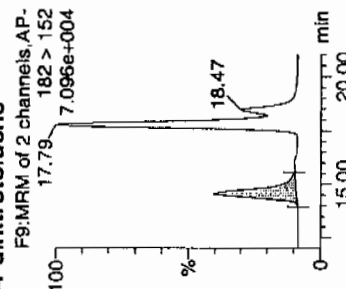
2-Amino-46-dinitrotoluene



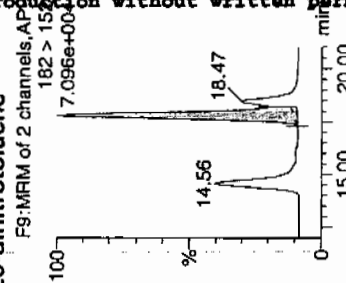
246-Trinitrotoluene



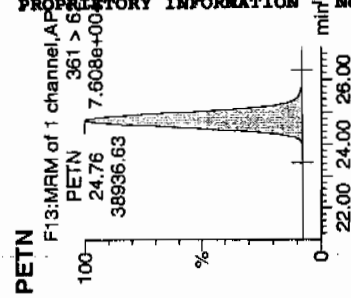
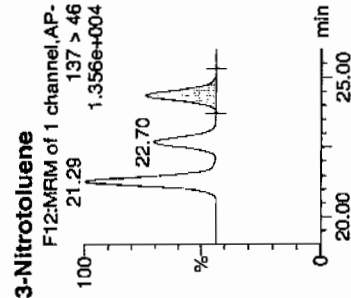
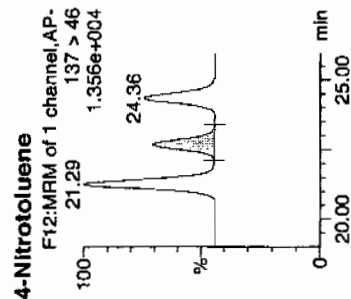
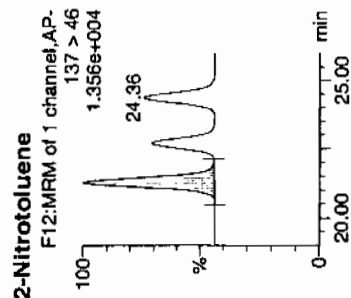
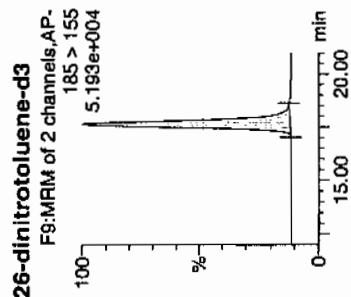
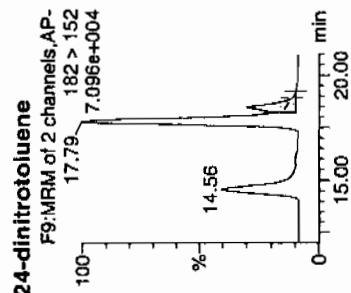
34-dinitrotoluene



26-dinitrotoluene

HMX
03/02/10

Dataset: C:\MASSLYN\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



ID	Name	Trace	RT	Area	S Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Integr.	%Rec	%Conv	SN
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WXX100301-07CCV	RDX	176 > 102	7.64	10955.236	3082.776	10955.236	1776.846	bb			647.3930	107.9	7.9	676.8
WXX100301-07CCV	135-Trinitrobenzene	213 > 183	10.27	12530.938	3082.776	12530.938	2032.411	bb			590.2931	98.4	-1.6	1341.1
WXX100301-07CCV	13-Dinitrobenzene-d4	172 > 142	12.17	3082.776		3082.776	3082.776	bb			531.8659	106.4	6.4	261.7
WXX100301-07CCV	13-Dinitrobenzene	168 > 138	12.31	4686.547	3082.776	4686.547	760.118	bb			579.4171	96.6	-3.4	272.4
WXX100301-07CCV	Tetryl	241 > 181	12.82	3703.050	3082.776	3703.050	600.603	bb			583.5012	97.3	-2.7	411.1
WXX100301-07CCV	Nitrobenzene	123 > 46	13.72	3202.571	3082.776	3202.571	519.430	bb			584.3299	97.4	-2.6	338.7
WXX100301-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.86	6339.237	18225.936	6339.237	173.907	MM	02-Mar-10	09:46:40	616.1038	102.7	2.7	695.4
WXX100301-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.76	8581.235	18225.936	8581.235	235.413	bb			624.4049	104.1	4.1	418.3
WXX100301-07CCV	246-Trinitrotoluene	227 > 210	15.58	7920.737	18225.936	7920.737	217.293	bb			689.4249	114.9	14.9	367.3
WXX100301-07CCV	34-dinitrotoluene	182 > 152	14.56	10782.521	18225.936	10782.521	295.802	bb			298.5886	99.5	-0.5	148.0
WXX100301-07CCV	26-dinitrotoluene	182 > 152	17.79	24088.418	18225.936	24088.418	660.828	MM	02-Mar-10	09:37:53	585.7174	97.6	-2.4	423.9
WXX100301-07CCV	24-dinitrotoluene	182 > 152	18.47	5977.618	18225.936	5977.618	163.987	MM	02-Mar-10	09:28:15	651.9286	108.7	8.7	95.7
WXX100301-07CCV	26-dinitrotoluene-d3	185 > 155	17.62	18225.936		18225.936	18225.936	bb			566.5570	113.3	13.3	1002.3
WXX100301-07CCV	2-Nitrotoluene	137 > 46	21.29	3191.069	18225.936	3191.069	87.542	bb			527.7355	88.0	-12.0	216.6
WXX100301-07CCV	4-Nitrotoluene	137 > 46	22.70	1612.560	18225.936	1612.560	44.238	bb			558.2114	93.0	-7.0	104.1
WXX100301-07CCV	3-Nitrotoluene	137 > 46	24.36	1934.462	18225.936	1934.462	53.069	bb			540.3436	90.1	-9.9	118.2
WXX100301-07CCV	PETN	361 > 62	24.76	38936.629	18225.936	38936.629	1068.165	bb			581.4295	96.9	-3.1	5222.5

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/01/10
 Time of Injection: 2324
 Standard Number: WXX100301-07CCV
 Data File: EXP0301017a

HMX	102.9
RDX	107.9
135-TNB	98.4
13-DNB	96.6
Tetryl	97.3
Nitrobenzene	97.4
4A-26-DNT	102.7
2A-46-DNT	104.1
246-TNT	114.9
34-DNT(surr)	99.5
26-DNT	97.6
24-DNT	108.7
2-NT	88.0
4-NT	93.0
3-NT	90.1
PETN	96.9

*MTT
3/2/10*

Total 1596.0

Average 99.8

Ann- 03/02/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0301019a

Analysis Date: 02-MAR-10 00:23

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	20	19.858	99	
4-Amino-2,6-dinitrotoluene	40	39.257	98	
HMX	40	51.161	128	
Nitrobenzene	40	45.545	114	
PETN	40	48.277	121	
RDX	40	41.262	103	
Tetryl	40	37.992	95	
m-Dinitrobenzene	40	38.309	96	
m-Nitrotoluene	40	43.591	109	
o-Nitrotoluene	40	32.824	82	
p-Nitrotoluene	40	35.984	90	
1,3,5-Trinitrobenzene	40	52.926	132	*
1,3-Dinitrobenzene-d4	500	525.871	105	
2,4,6-Trinitrotoluene	40	42.691	107	
2,4-Dinitrotoluene	40	39.054	98	
2,6-Dinitrotoluene	40	39.257	98	
2,6-Dinitrotoluene-d3	500	558.185	112	
2-Amino-4,6-dinitrotoluene	40	39.63	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301019a

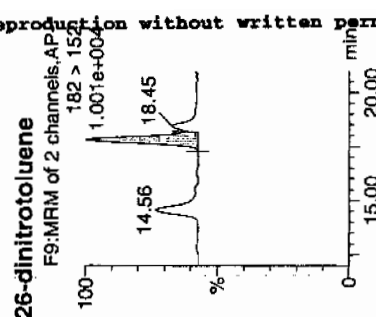
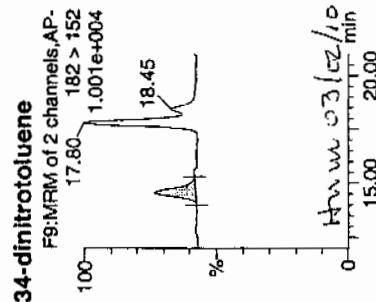
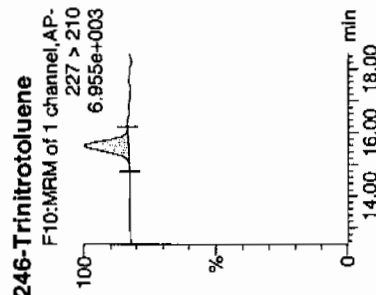
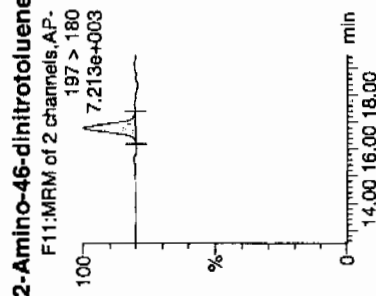
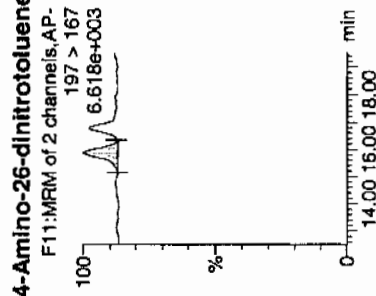
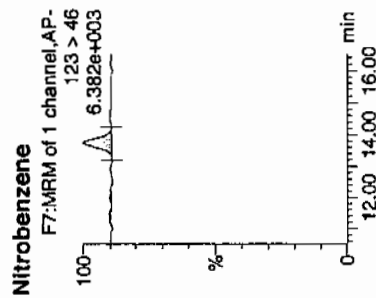
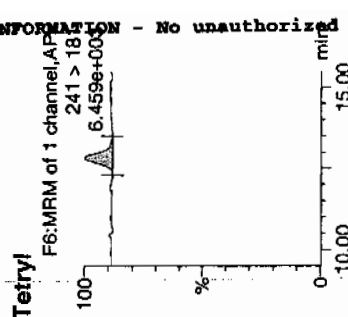
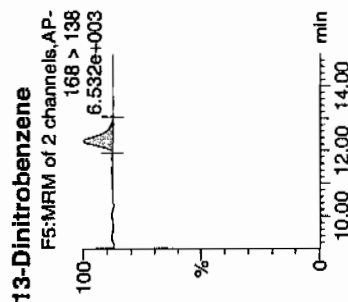
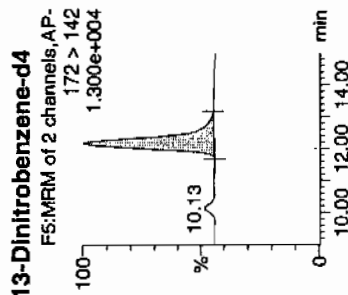
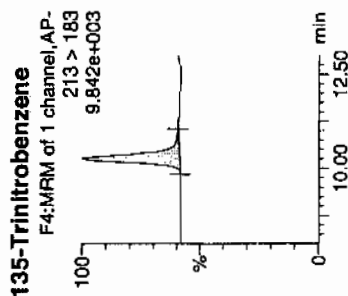
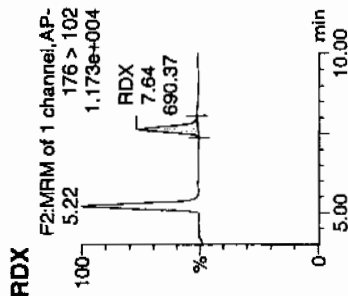
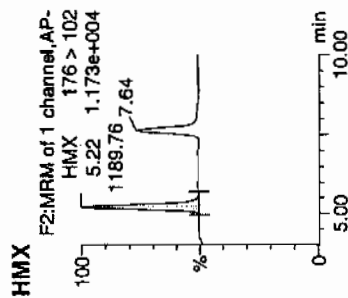
Date: 02-Mar-2010

Time: 00:23:49

ID: WXX100301-08CRI

Vial: 1:1,C

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GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/02/10
 Time of Injection 0023
 Standard Number WXX100301-08CRI
 Data File EXP0301019a

HMX	127.9
RDX	103.2
135-TNB	132.3
13-DNB	95.8
Tetryl	95.0
Nitrobenzene	113.9
4A-26-DNT	98.1
2A-46-DNT	99.1
246-TNT	106.7
34-DNT(surr)	99.3
26-DNT	98.1
24-DNT	97.6
2-NT	82.1
4-NT	90.0
3-NT	109.0
PETN	120.7

*WXX
3/2/10*

Total 1668.8

Average 104.3

from 03/02/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0301030a

Analysis Date: 02-MAR-10 05:48

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	602.258	100	
1,3-Dinitrobenzene-d4	500	494.372	99	
2,4,6-Trinitrotoluene	600	680.786	113	
2,4-Dinitrotoluene	600	606.313	101	
2,6-Dinitrotoluene	600	608.101	101	
2,6-Dinitrotoluene-d3	500	501.765	100	
2-Amino-4,6-dinitrotoluene	600	651.99	109	
3,4-Dinitrotoluene	300	289.207	96	
4-Amino-2,6-dinitrotoluene	600	610.451	102	
HMX	600	614.974	102	
Nitrobenzene	600	545.928	91	
PETN	600	712.654	119	
RDX	600	633.914	106	
Tetryl	600	599.969	100	
m-Dinitrobenzene	600	580.256	97	
m-Nitrotoluene	600	548.818	91	
o-Nitrotoluene	600	560.002	93	
p-Nitrotoluene	600	586.006	98	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301030a

Date: 02-Mar-2010

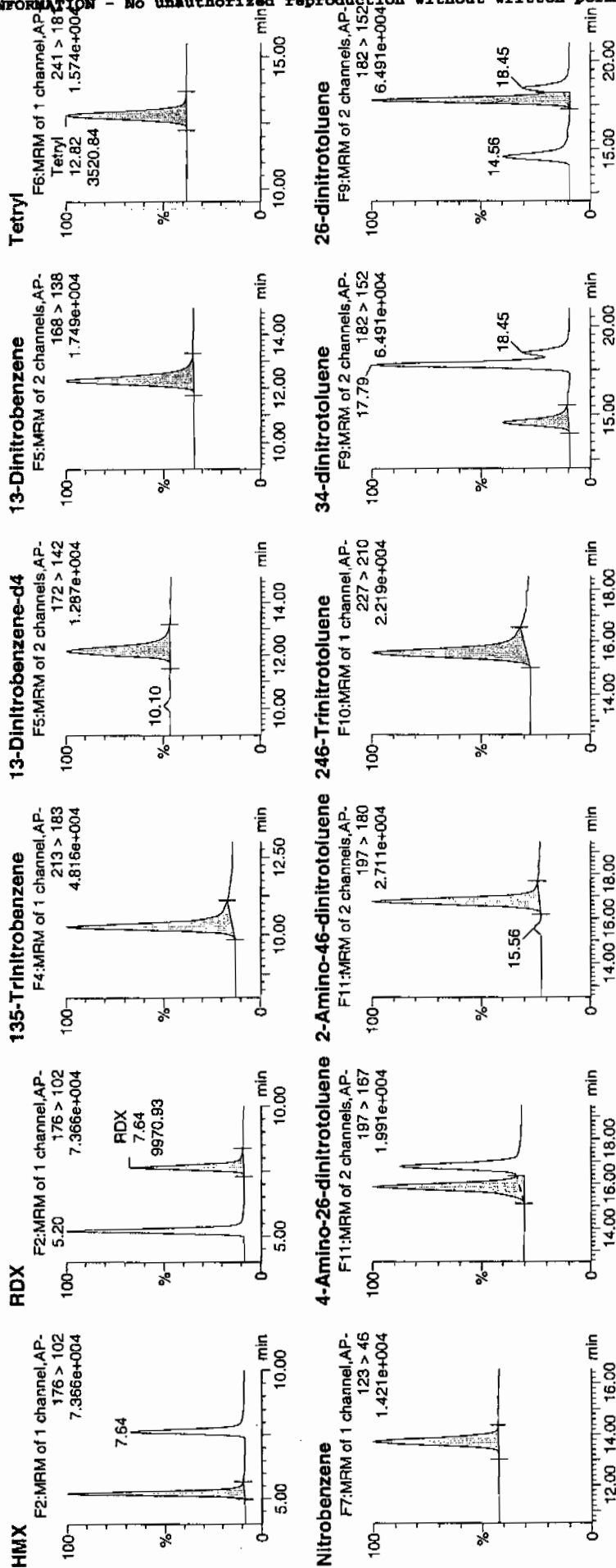
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ID: WXX100301-07CCV

Vial: 1:1,B

117
3/2/10

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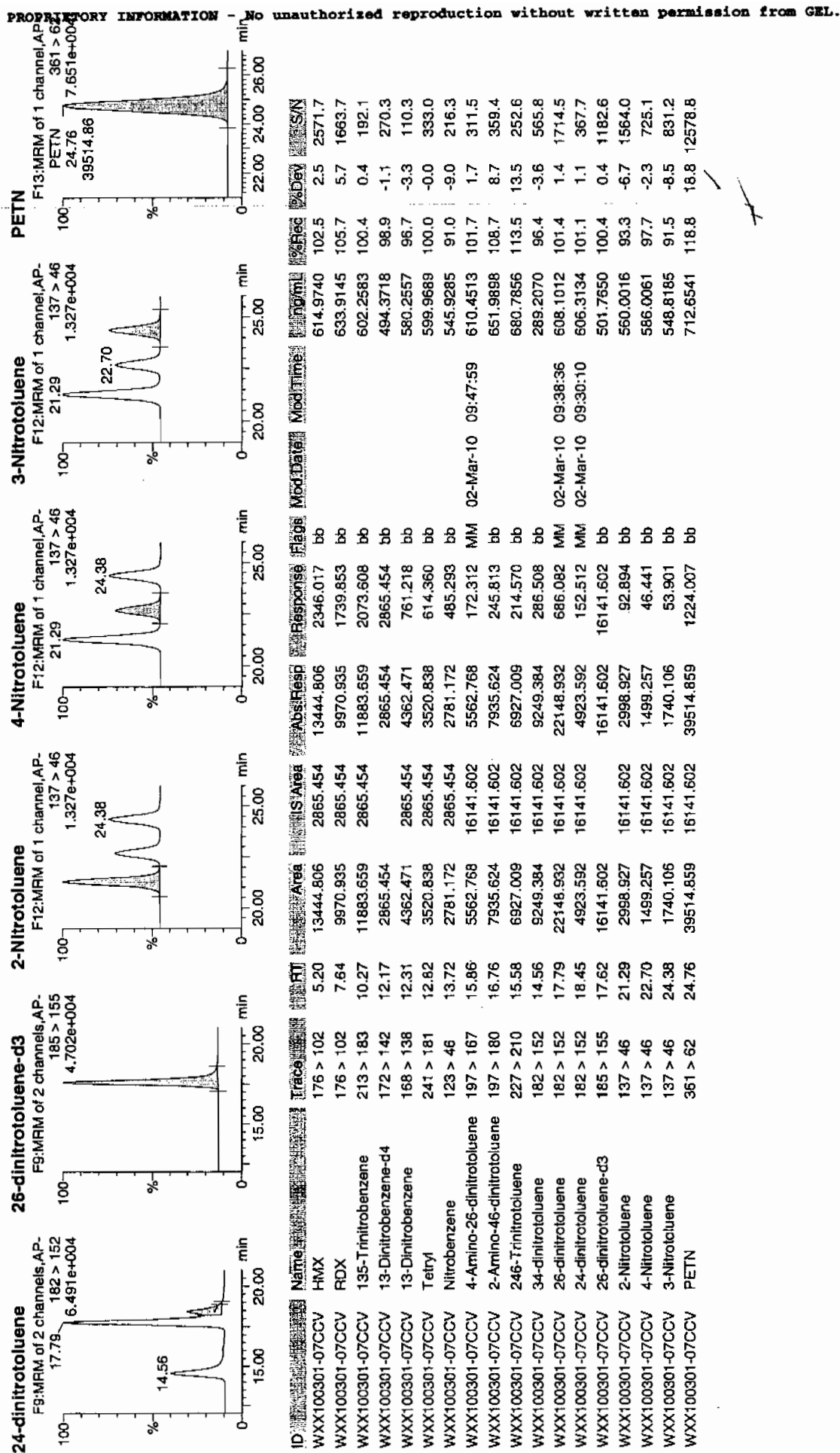
Hum 03/02/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 60 of 65

Dataset: C:\WASSLYN\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/02/10
 Time of Injection: 0548
 Standard Number: WXX100301-07CCV
 Data File: EXP0301030a

HMX	102.5
RDX	105.7
135-TNB	100.4
13-DNB	96.7
Tetryl	100.0
Nitrobenzene	91.0
4A-26-DNT	101.7
2A-46-DNT	108.7
246-TNT	113.5
34-DNT(surr)	96.4
26-DNT	101.4
24-DNT	101.1
2-NT	93.3
4-NT	97.7
3-NT	91.5
PETN	118.8

*mtf
3/2/10*

Total 1620.4

Average 101.3

Ann 03/02/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEI

GEL Sample ID: WXXCRI

GEL Data File EXP0301032a

Analysis Date: 02-MAR-10 06:47

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	56.807	142	*
1,3-Dinitrobenzene-d4	500	493.808	99	
2,4,6-Trinitrotoluene	40	46.587	116	
2,4-Dinitrotoluene	40	36.621	92	
2,6-Dinitrotoluene	40	38.39	96	
2,6-Dinitrotoluene-d3	500	575.349	115	
2-Amino-4,6-dinitrotoluene	40	41.902	105	
3,4-Dinitrotoluene	20	18.621	93	
4-Amino-2,6-dinitrotoluene	40	35.659	89	
HMX	40	45.151	113	
Nitrobenzene	40	49.82	125	
PETN	40	46.402	116	
RDX	40	43.703	109	
Tetryl	40	36.051	90	
m-Dinitrobenzene	40	39.792	99	
m-Nitrotoluene	40	37.14	93	
o-Nitrotoluene	40	40.127	100	
p-Nitrotoluene	40	32.699	82	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010

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Date: 02-Mar-2010

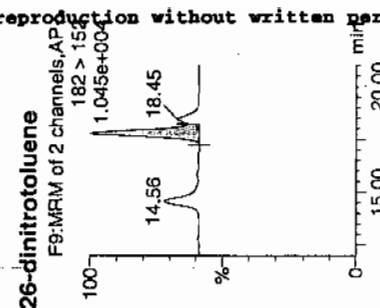
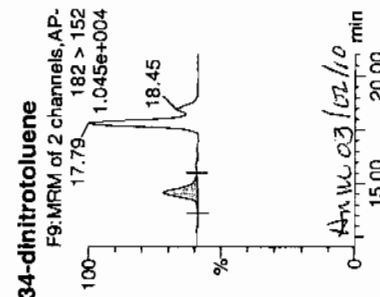
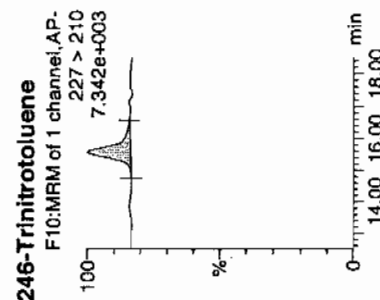
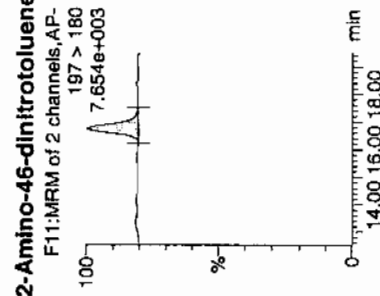
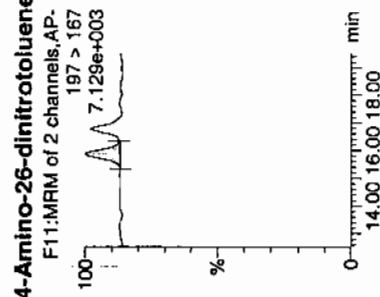
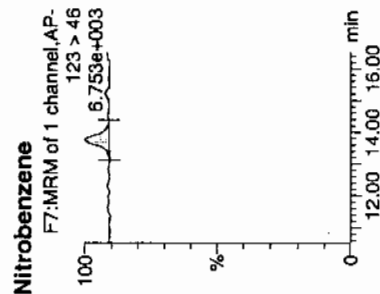
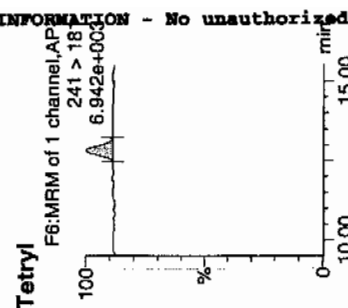
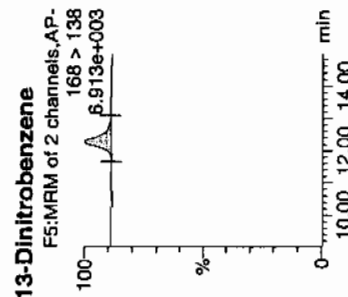
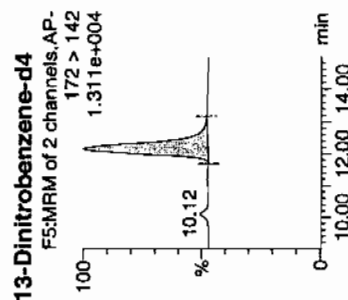
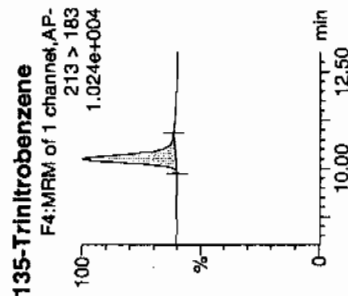
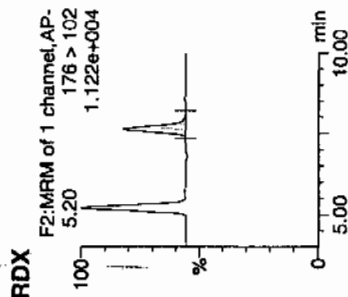
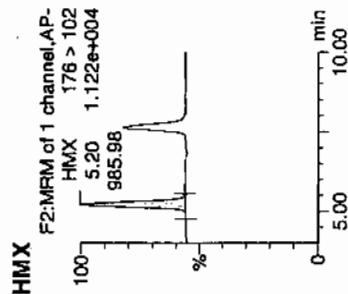
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ID: WXX100301-08CRI

Vial: 1:1,C

3/2/10

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

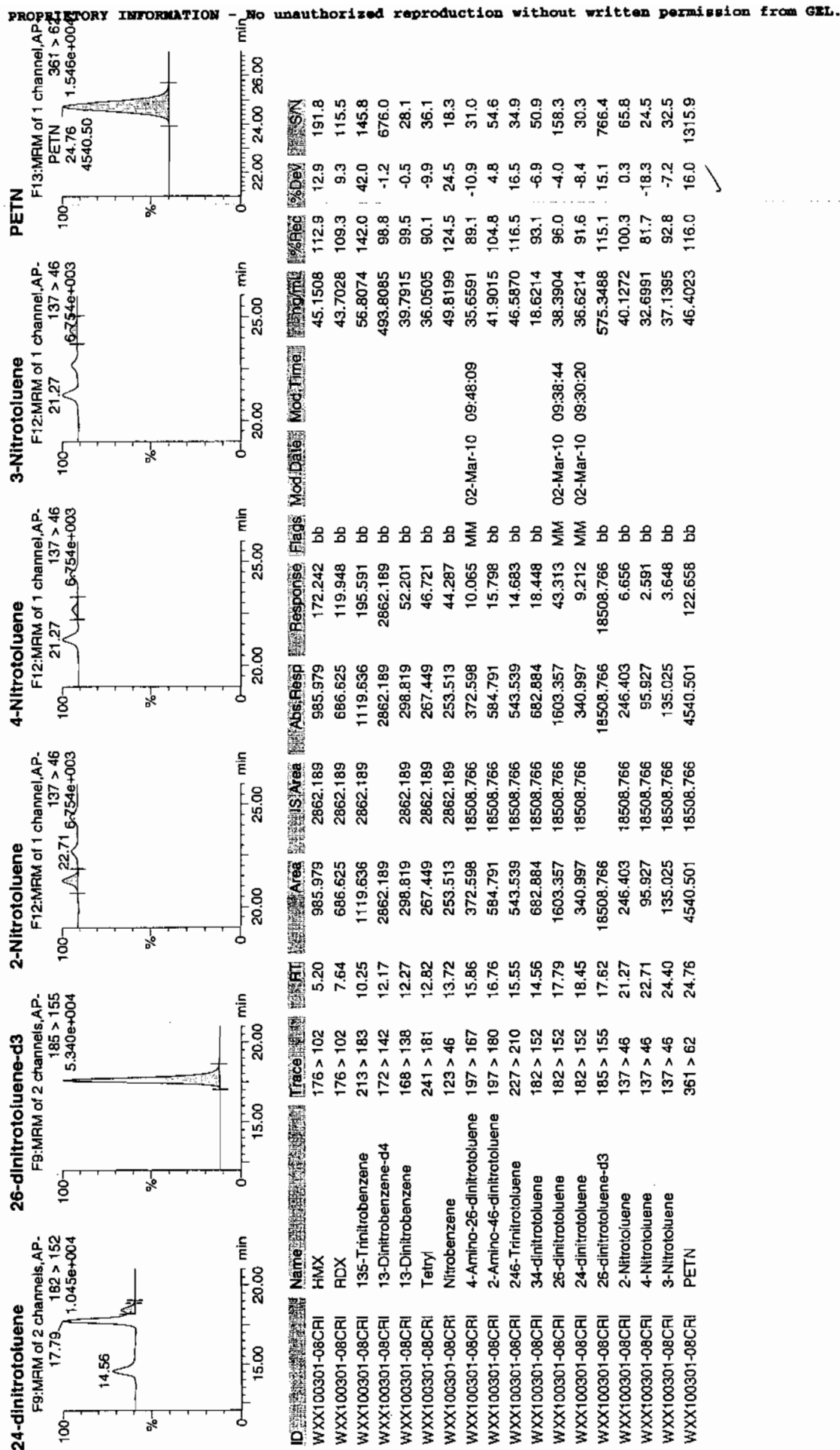


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Mar 02 10:00:11 2010, Page 64 of 65

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA.qld, Time: Tue Mar 02 09:59:16 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/02/10
 Time of Injection 0647
 Standard Number WXX100301-08CRI
 Data File EXP0301032a

HMX	112.9
RDX	109.3
135-TNB	142.0
13-DNB	99.5
Tetryl	90.1
Nitrobenzene	124.5
4A-26-DNT	89.1
2A-46-DNT	104.8
246-TNT	116.5
34-DNT(surr)	93.1
26-DNT	96.0
24-DNT	91.6
2-NT	100.3
4-NT	81.7
3-NT	92.8
PETN	116.0
Total	1660.2

MTT
3/2/10

Total

1660.2

Average

103.8

4mm 0.310/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0301043a

Analysis Date: 02-MAR-10 12:12

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	600	656.909	109	
2,6-Dinitrotoluene	600	614.349	102	
2,6-Dinitrotoluene-d3	500	563.804	113	
2-Amino-4,6-dinitrotoluene	600	721.579	120	*
3,4-Dinitrotoluene	300	252.075	84	
4-Amino-2,6-dinitrotoluene	600	528.132	88	
HMX	600	750.903	125	*
Nitrobenzene	600	564.338	94	
PETN	600	561.884	94	
RDX	600	599.348	100	
Tetryl	600	539.471	90	
m-Dinitrobenzene	600	583.866	97	
m-Nitrotoluene	600	483.41	81	
o-Nitrotoluene	600	523.965	87	
p-Nitrotoluene	600	533.33	89	
1,3,5-Trinitrobenzene	600	588.95	98	
1,3-Dinitrobenzene-d4	500	488.117	98	
2,4,6-Trinitrotoluene	600	582.004	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

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Date: 02-Mar-2010

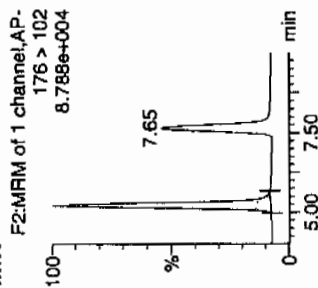
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ID: WXX100301-07CCV

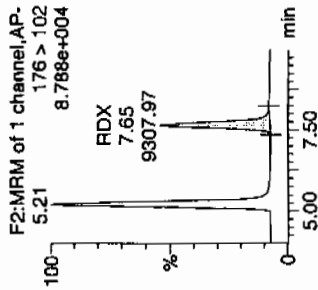
Vial: 1:1,B

1.477
3.1310

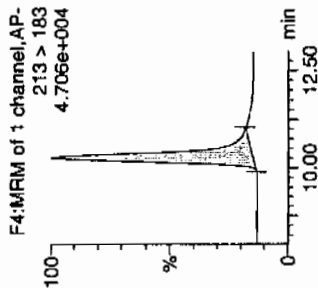
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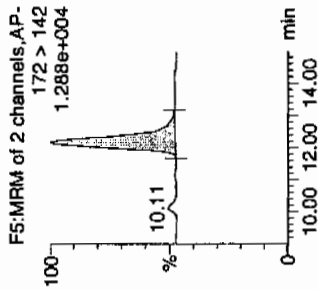
RDX



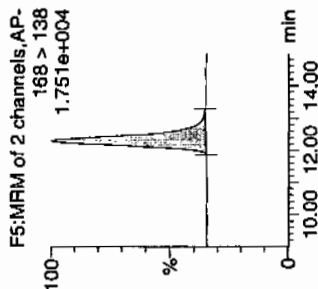
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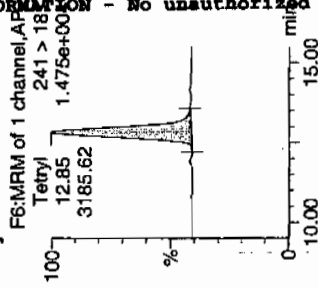
13-Dinitrobenzene-d4



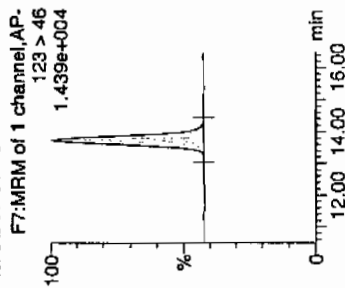
13-Dinitrobenzene



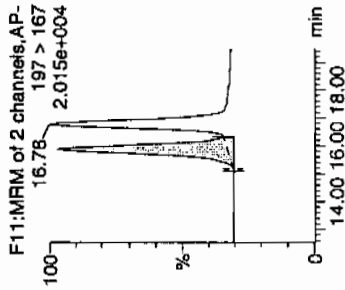
Tetryl



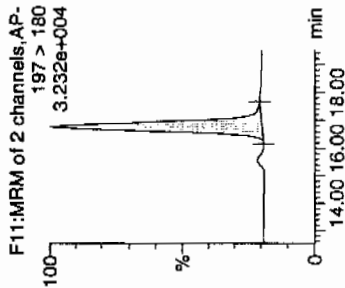
Nitrobenzene



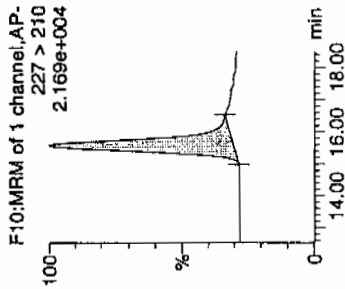
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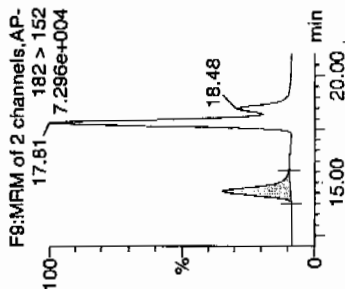
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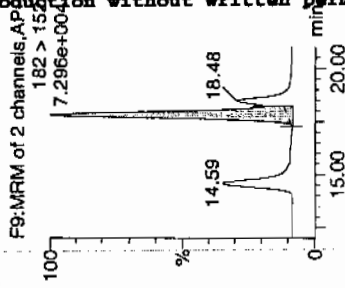
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



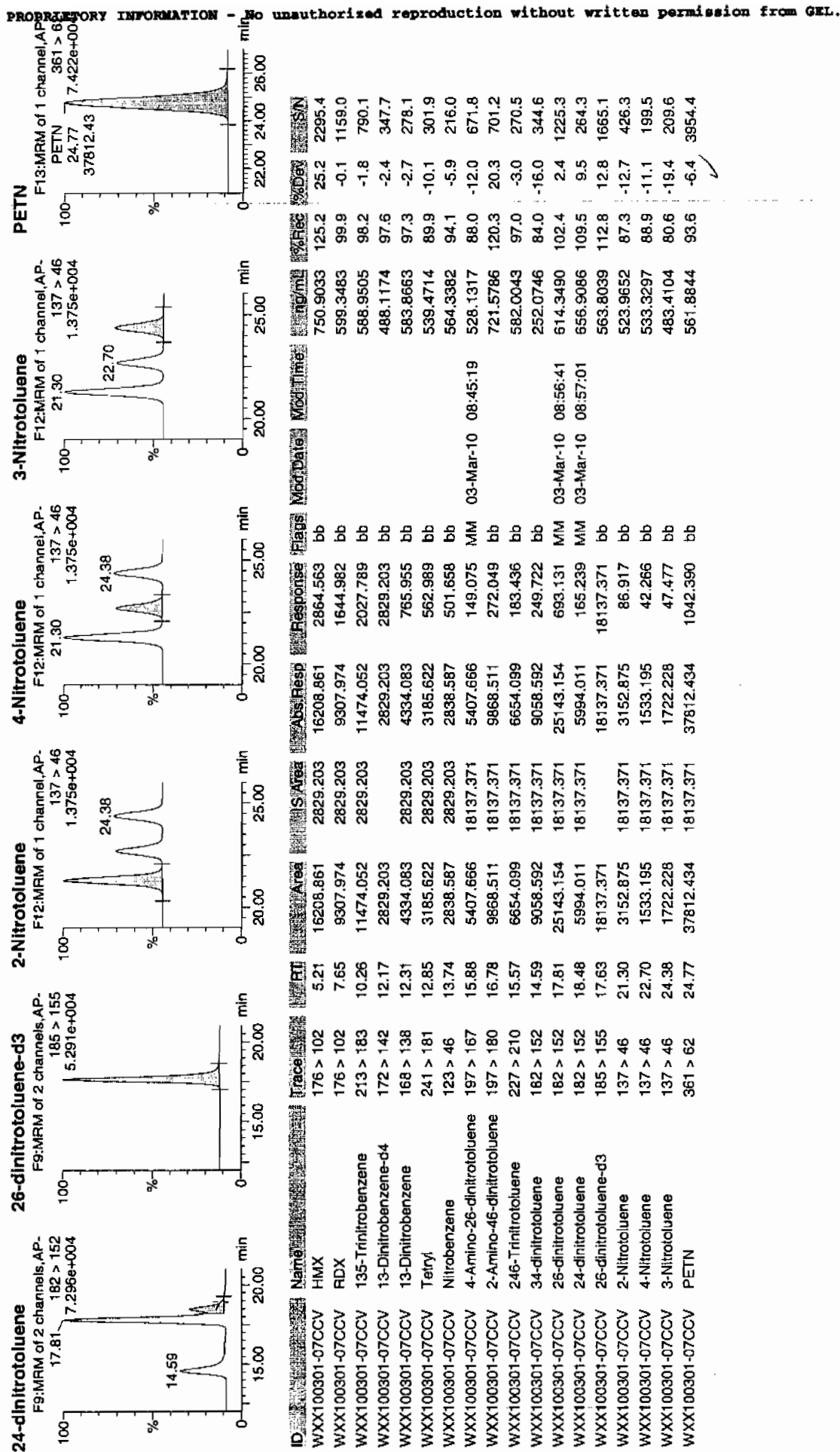
Am 03/04/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 22 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/02/10
 Time of Injection: 1212
 Standard Number: WXX100301-07CCV
 Data File: EXP0301043a

HMX	125.2
RDX	99.9
135-TNB	98.2
13-DNB	97.3
Tetryl	89.9
Nitrobenzene	94.1
4A-26-DNT	88.0
2A-46-DNT	120.3
246-TNT	97.0
34-DNT(surr)	84.0
26-DNT	102.4
24-DNT	109.5
2-NT	87.3
4-NT	88.9
3-NT	80.6
PETN	93.6

1477
3/3/10

Total 1556.2

Average 97.3

4777-23804/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0301045a

Analysis Date: 02-MAR-10 13:11

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.342	131	*
1,3-Dinitrobenzene-d4	500	567.192	113	
2,4,6-Trinitrotoluene	40	43.217	108	
2,4-Dinitrotoluene	40	40.629	102	
2,6-Dinitrotoluene	40	39.638	99	
2,6-Dinitrotoluene-d3	500	584.534	117	
2-Amino-4,6-dinitrotoluene	40	44.683	112	
3,4-Dinitrotoluene	20	18.858	94	
4-Amino-2,6-dinitrotoluene	40	41.968	105	
HMX	40	44.598	111	
Nitrobenzene	40	33.284	83	
PETN	40	44.336	111	
RDX	40	40.437	101	
Tetryl	40	37.348	93	
m-Dinitrobenzene	40	41.99	105	
m-Nitrotoluene	40	45.416	114	
o-Nitrotoluene	40	39.436	99	
p-Nitrotoluene	40	37.7	94	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301045a

Date: 02-Mar-2010

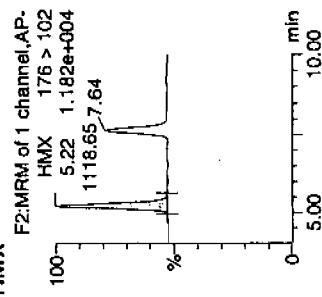
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ID: WXX100301-08CRI

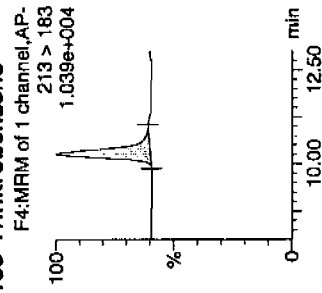
Vial: 1:1,C

1.039e+004
213 > 183
1.039e+004

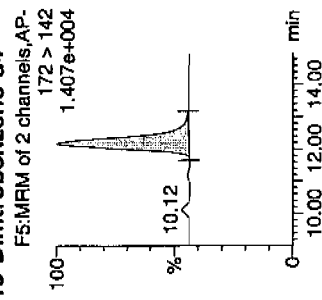
RDX



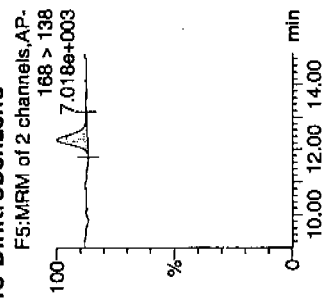
135-Trinitrobenzene



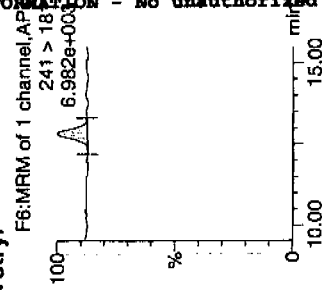
13-Dinitrobenzene-d4



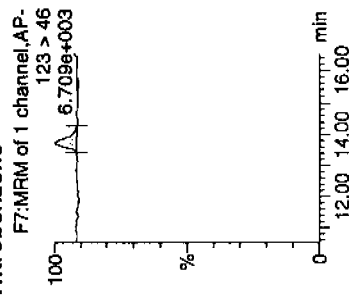
13-Dinitrobenzene



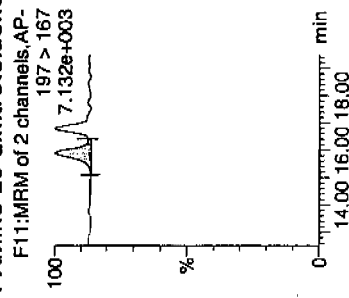
Tetryl



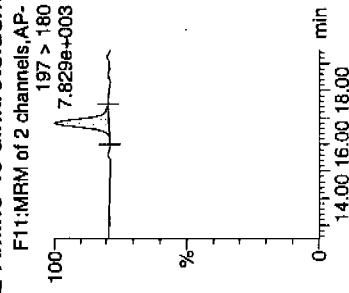
Nitrobenzene



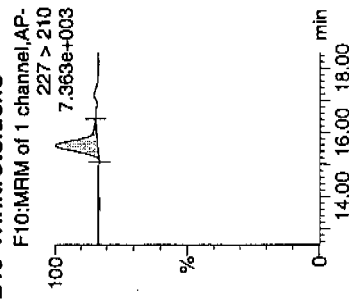
4-Amino-26-dinitrotoluene



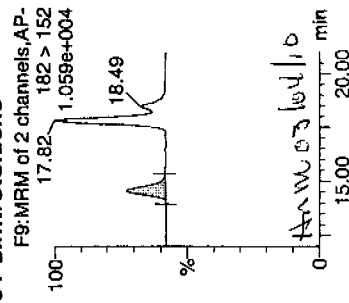
2-Amino-46-dinitrotoluene



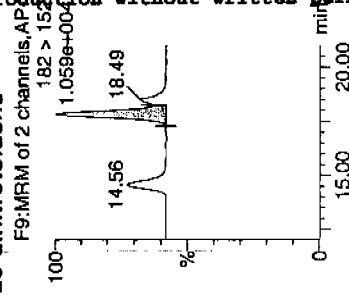
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

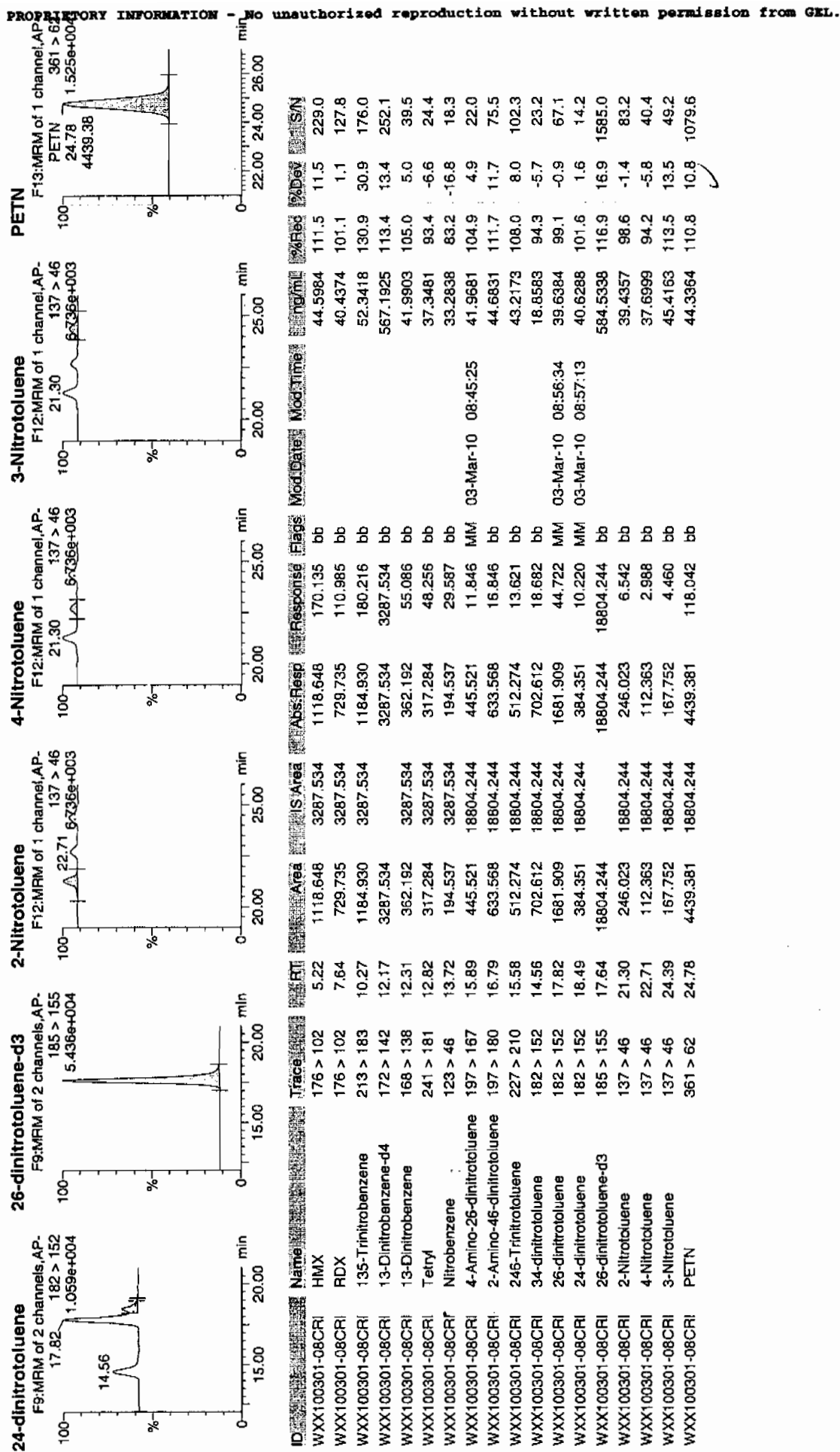


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 26 of 103

Dataset: C:\WASSL\YNXNew_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/02/10
 Time of Injection 1311
 Standard Number WXX100301-08CRI
 Data File EXP0301045a

HMX	111.5
RDX	101.1
135-TNB	130.9
13-DNB	105.0
Tetryl	93.4
Nitrobenzene	83.2
4A-26-DNT	104.9
2A-46-DNT	111.7
246-TNT	108.0
34-DNT(surr)	94.3
26-DNT	99.1
24-DNT	101.6
2-NT	98.6
4-NT	94.2
3-NT	113.5
PETN	110.8

*WFF
3/3/10*

Total 1661.8

Average 103.9

from 03/04/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0301056a

Analysis Date: 02-MAR-10 18:42

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Tetryl	600	576.331	96	
m-Dinitrobenzene	600	617.22	103	
m-Nitrotoluene	600	550.813	92	
o-Nitrotoluene	600	566.894	94	
p-Nitrotoluene	600	589.286	98	
1,3,5-Trinitrobenzene	600	663.068	111	
1,3-Dinitrobenzene-d4	500	453.09	91	
2,4,6-Trinitrotoluene	600	691.385	115	
2,4-Dinitrotoluene	600	651.233	109	
2,6-Dinitrotoluene	600	612.072	102	
2,6-Dinitrotoluene-d3	500	486.839	97	
2-Amino-4,6-dinitrotoluene	600	682.306	114	
3,4-Dinitrotoluene	300	294.085	98	
4-Amino-2,6-dinitrotoluene	600	628.379	105	
HMX	600	655.741	109	
Nitrobenzene	600	593.858	99	
PETN	600	708.678	118	
RDX	600	661.836	110	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

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Date: 02-Mar-2010

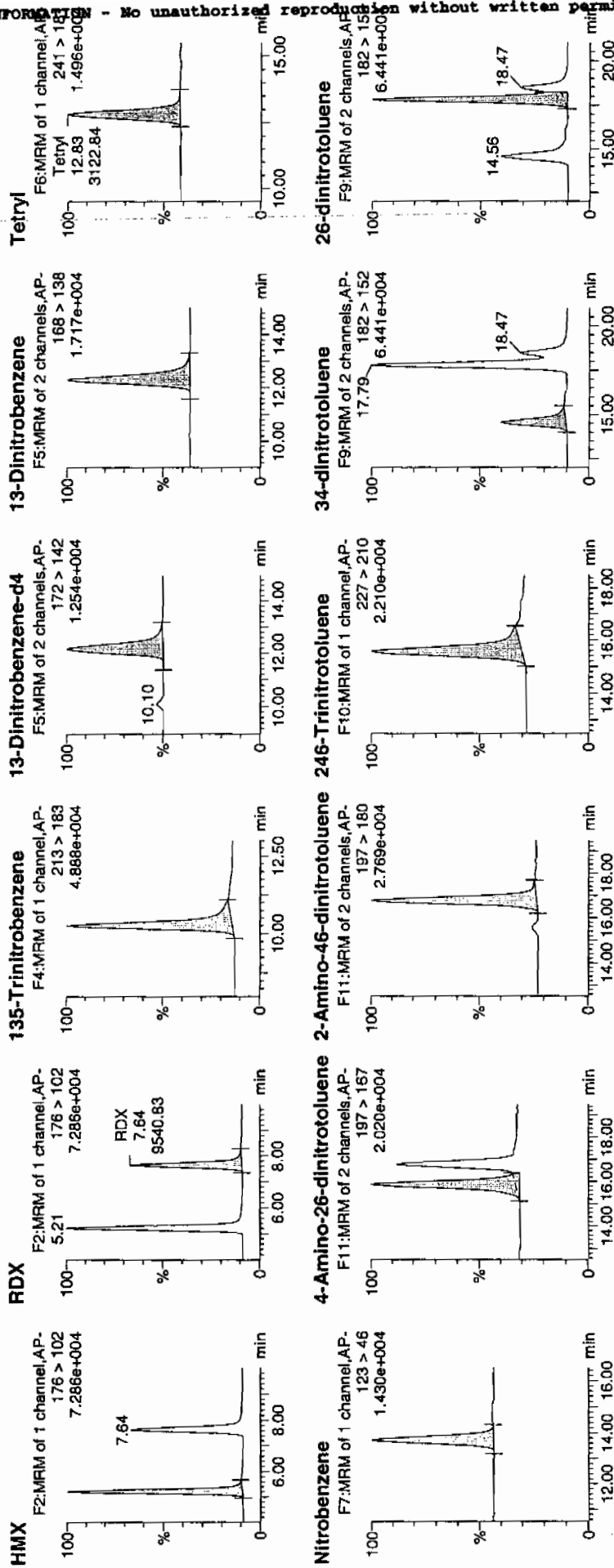
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ID: WXX100301-07CCV

Vial: 1:1,B

10/11
3/3/10

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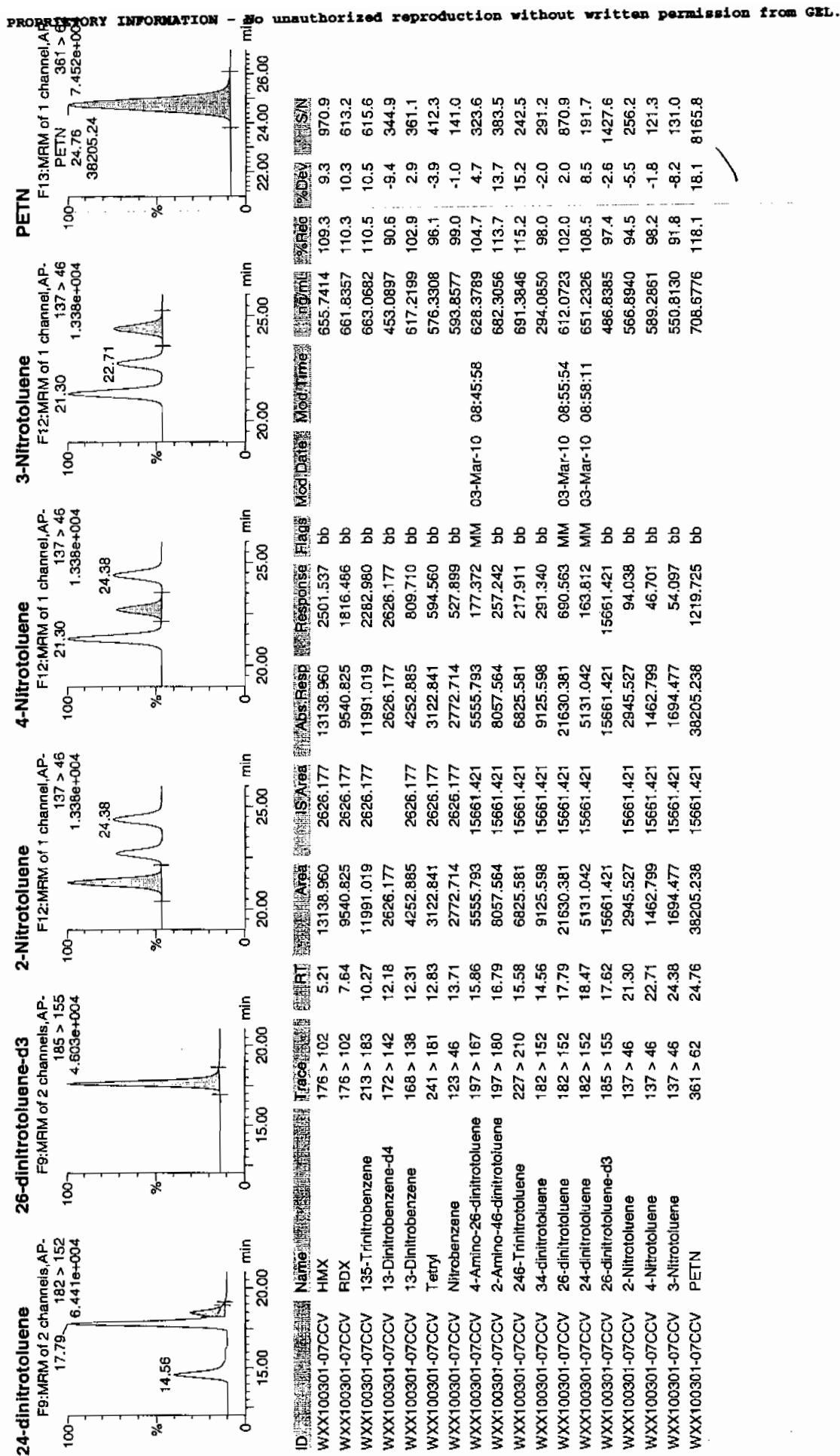
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Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 48 of 103

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/02/10
 Time of Injection: 1842
 Standard Number: WXX100301-07CCV
 Data File: EXP0301056a

HMX	109.3
RDX	110.3
135-TNB	110.5
13-DNB	102.9
Tetryl	96.1
Nitrobenzene	99.0
4A-26-DNT	104.7
2A-46-DNT	113.7
246-TNT	115.2
34-DNT(surr)	98.0
26-DNT	102.0
24-DNT	108.5
2-NT	94.5
4-NT	98.2
3-NT	91.8
PETN	118.1
Total	1672.8

4.77
3/3/10

Average 104.6

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0301058a

Analysis Date: 02-MAR-10 19:41

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	43.335	108	
PETN	40	52.803	132	*
RDX	40	40.001	100	
Tetryl	40	39.676	99	
m-Dinitrobenzene	40	30.191	75	
m-Nitrotoluene	40	44.578	111	
o-Nitrotoluene	40	40.684	102	
p-Nitrotoluene	40	40.786	102	
1,3,5-Trinitrobenzene	40	54.949	137	*
1,3-Dinitrobenzene-d4	500	526.73	105	
2,4,6-Trinitrotoluene	40	42.619	107	
2,4-Dinitrotoluene	40	40.949	102	
2,6-Dinitrotoluene	40	39.716	99	
2,6-Dinitrotoluene-d3	500	543.465	109	
2-Amino-4,6-dinitrotoluene	40	45.865	115	
3,4-Dinitrotoluene	20	20.539	103	
4-Amino-2,6-dinitrotoluene	40	39.394	98	
HMX	40	47.031	118	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 51 of 103

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0301058a

Date: 02-Mar-2010

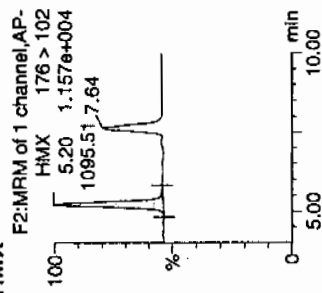
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ID: WXX100301-08CRI

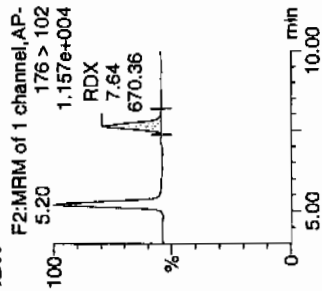
Vial: 1:1,C

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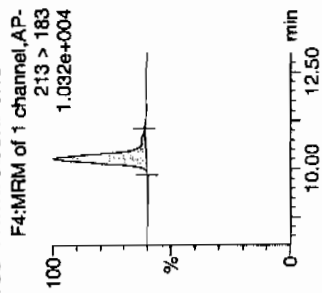
HMX



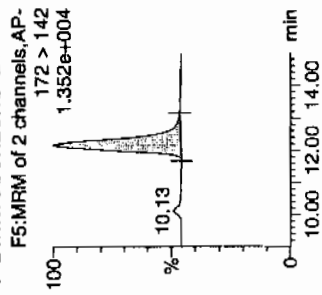
RDX



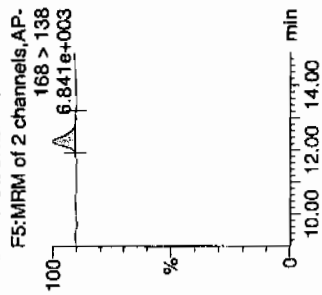
135-Trinitrobenzene



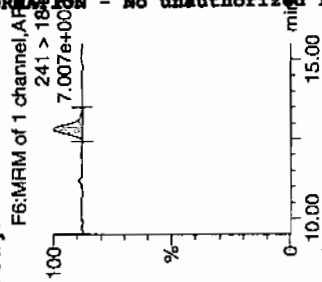
13-Dinitrobenzene-d4



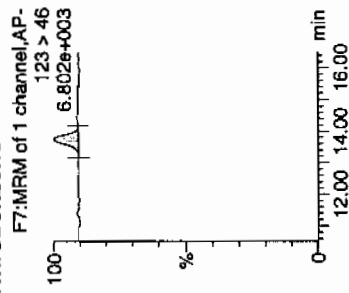
13-Dinitrobenzene



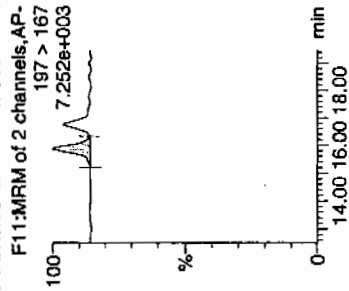
Tetryl



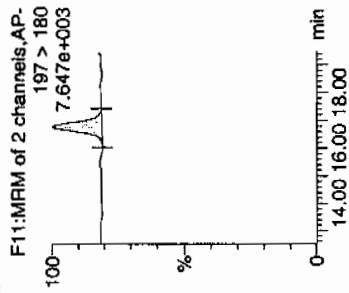
Nitrobenzene



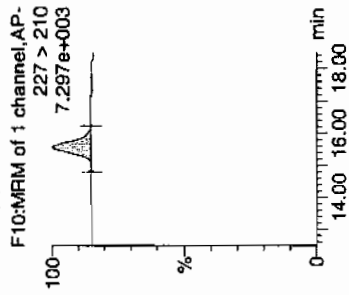
4-Amino-26-dinitrotoluene



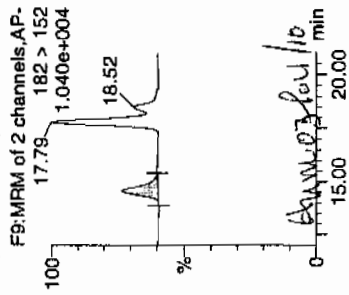
2-Amino-46-dinitrotoluene



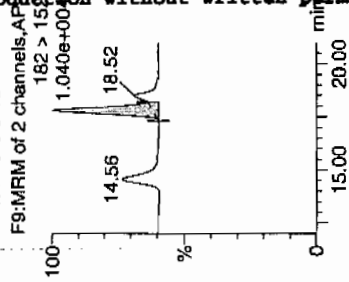
246-Trinitrotoluene



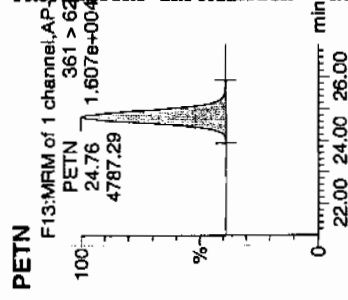
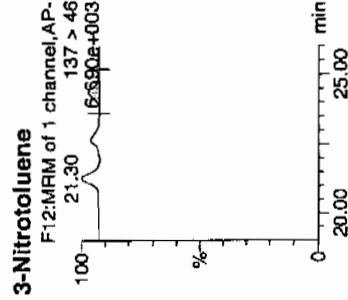
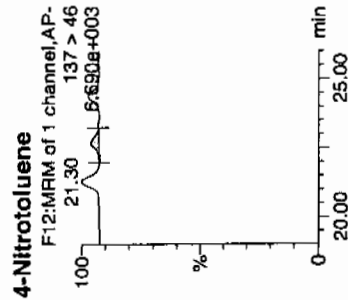
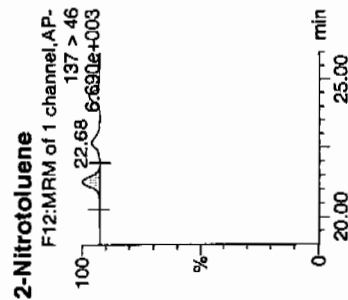
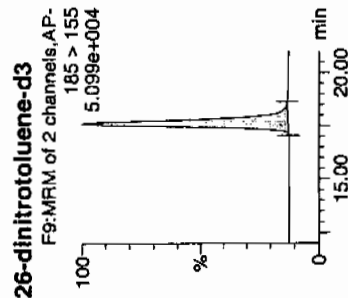
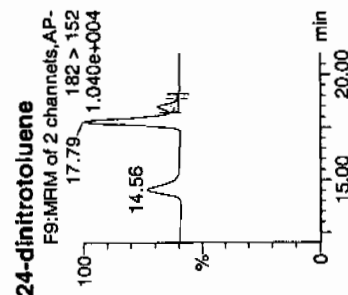
34-dinitrotoluene



26-dinitrotoluene



Dataset: C:\MASSLYN\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



ID	Name	Trace	RT	Area	SArea	Agbs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Red	%Dev	SIN
WXX100301-08CRI	HMIX	176 > 102	5.20	1095.506	3053.009	1095.506	179.414	bb			47.0308	117.6	17.6	153.7
WXX100301-08CRI	RDX	176 > 102	7.64	670.361	3053.009	670.361	109.787	bb			40.0008	100.0	0.0	84.2
WXX100301-08CRI	135-Trinitrobenzene	213 > 183	10.27	1155.212	3053.009	1155.212	189.192	bb			54.9490	137.4	37.4	160.1
WXX100301-08CRI	13-Dinitrobenzene-d4	172 > 142	12.17	3053.009		3053.009	3053.009	bb			526.7303	105.3	5.3	171.3
WXX100301-08CRI	13-Dinitrobenzene	168 > 138	12.31	241.838	3053.009	241.838	39.606	bb			30.1909	75.5	-24.5	29.4
WXX100301-08CRI	Tetryl	241 > 181	12.82	311.444	3053.009	311.444	51.006	bb			39.6762	99.2	-0.8	31.1
WXX100301-08CRI	Nitrobenzene	123 > 46	13.72	235.215	3053.009	235.215	38.522	bb			43.3349	108.3	8.3	31.8
WXX100301-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.89	388.816	17483.064	388.816	11.120	MM	03-Mar-10	08:46:06	39.3943	98.5	-1.5	28.5
WXX100301-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.79	604.638	17483.064	604.638	17.292	bb			45.8653	114.7	14.7	73.5
WXX100301-08CRI	246-Trinitrotoluene	227 > 210	15.58	469.685	17483.064	469.685	13.433	bb			42.6187	106.5	6.5	49.4
WXX100301-08CRI	34-dinitrotoluene	182 > 152	14.56	711.467	17483.064	711.467	20.347	bb			20.5390	102.7	2.7	53.9
WXX100301-08CRI	26-dinitrotoluene	182 > 152	17.79	1566.794	17483.064	1566.794	44.809	MM	03-Mar-10	08:55:43	39.7159	99.3	-0.7	159.0
WXX100301-08CRI	24-dinitrotoluene	182 > 152	18.52	360.159	17483.064	360.159	10.300	MM	03-Mar-10	08:58:23	40.9485	102.4	2.4	33.8
WXX100301-08CRI	26-dinitrotoluene-d3	185 > 155	17.62	17483.064		17483.064	17483.064	bb			543.4647	108.7	8.7	1571.5
WXX100301-08CRI	2-Nitrotoluene	137 > 46	21.30	235.979	17483.064	235.979	6.749	bb			40.6842	101.7	1.7	103.7
WXX100301-08CRI	4-Nitrotoluene	137 > 46	22.68	113.019	17483.064	113.019	3.232	bb			40.7856	102.0	2.0	47.3
WXX100301-08CRI	3-Nitrotoluene	137 > 46	24.38	153.088	17483.064	153.088	4.378	bb			44.5783	111.4	11.4	61.5
WXX100301-08CRI	PETN	361 > 62	24.76	4787.289	17483.064	4787.289	136.912	bb			52.8026	132.0	32.0	1269.3

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GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/02/10
 Time of Injection 1941
 Standard Number WXX100301-08CRI
 Data File EXP0301058a

HMX	117.6
RDX	100.0
135-TNB	137.4
13-DNB	75.5
Tetryl	99.2
Nitrobenzene	108.3
4A-26-DNT	98.5
2A-46-DNT	114.7
246-TNT	106.5
34-DNT(surr)	102.7
26-DNT	99.3
24-DNT	102.4
2-NT	101.7
4-NT	102.0
3-NT	111.4
PETN	132.0

Handwritten: 1147
3/2/10

Total 1709.2

Average 106.8

Handwritten: Hmx on Post 10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0301068a

Analysis Date: 03-MAR-10 00:36

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	625.261	104	
1,3-Dinitrobenzene-d4	500	521.037	104	
2,4,6-Trinitrotoluene	600	703.496	117	
2,4-Dinitrotoluene	600	657.764	110	
2,6-Dinitrotoluene	600	618.87	103	
2,6-Dinitrotoluene-d3	500	562.762	113	
2-Amino-4,6-dinitrotoluene	600	672.055	112	
3,4-Dinitrotoluene	300	301.113	100	
4-Amino-2,6-dinitrotoluene	600	621.473	104	
HMX	600	594.011	99	
Nitrobenzene	600	603.396	101	
PETN	600	563.001	94	
RDX	600	653.924	109	
Tetryl	600	574.954	96	
m-Dinitrobenzene	600	607.15	101	
m-Nitrotoluene	600	622	104	
o-Nitrotoluene	600	561.005	94	
p-Nitrotoluene	600	634.214	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 71 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

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Date: 03-Mar-2010

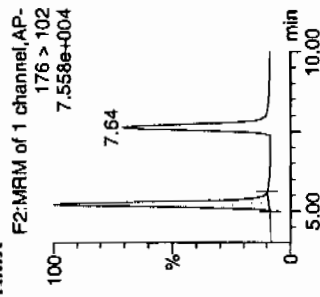
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ID: WXX100301-07CCV

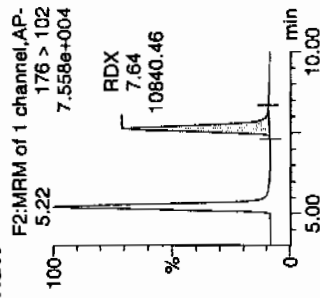
Vial: 1:1,B

3/3/10

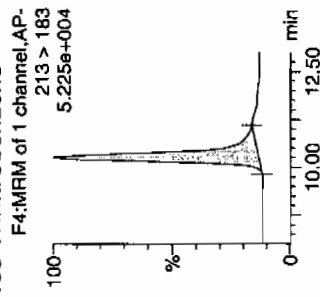
HMX



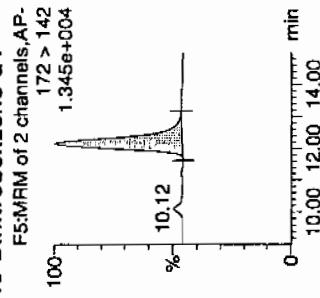
RDX



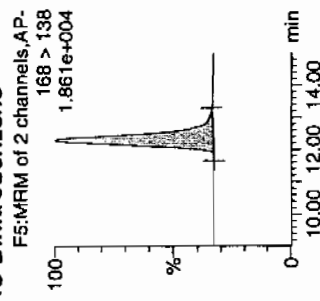
135-Trinitrobenzene



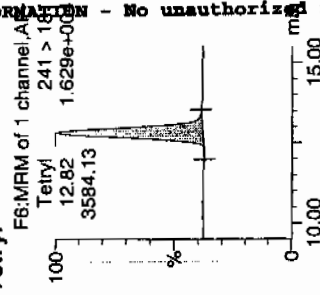
13-Dinitrobenzene-d4



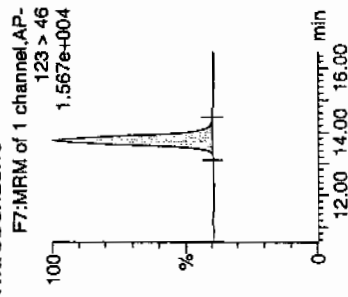
13-Dinitrobenzene



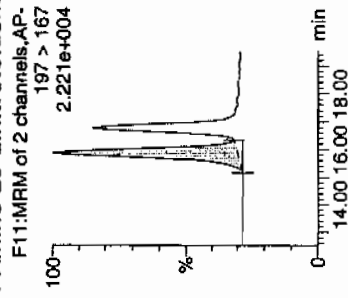
Tetryl



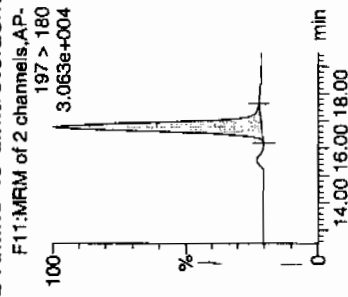
Nitrobenzene



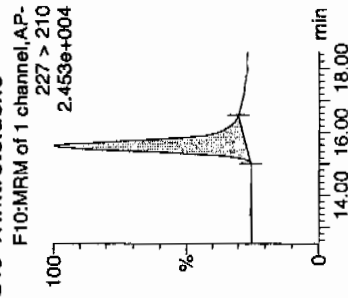
4-Amino-26-dinitrotoluene



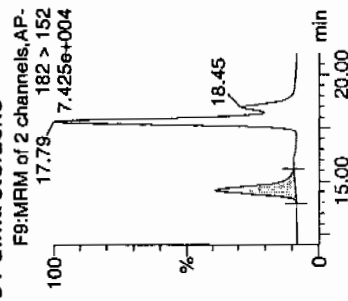
2-Amino-46-dinitrotoluene



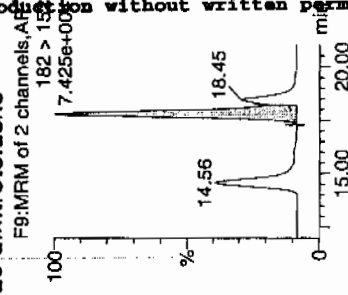
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



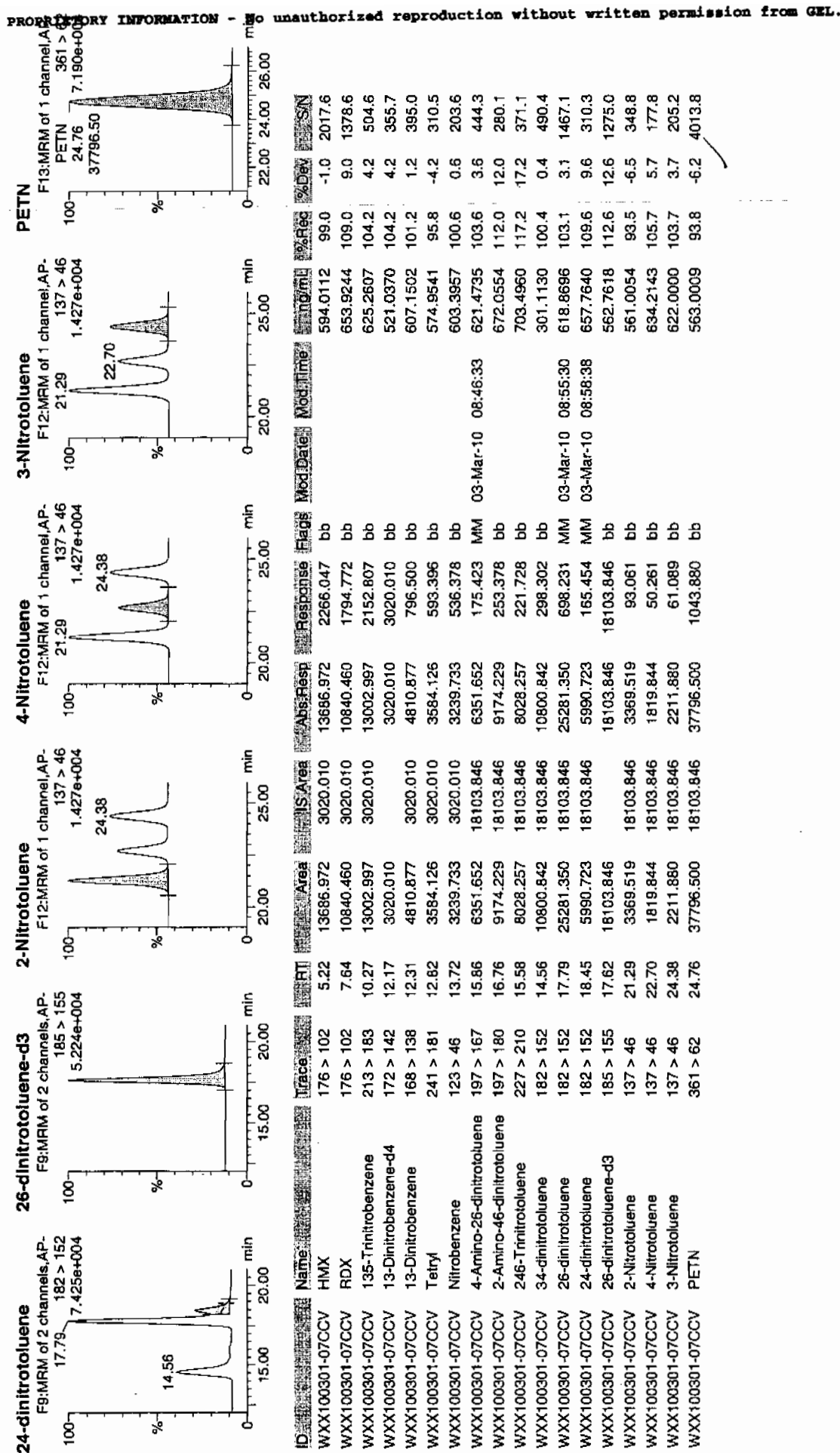
Handwritten signature/initials.

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 72 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/03/10
 Time of Injection: 0036
 Standard Number: WXX100301-07CCV
 Data File: EXP0301068a

HMX	99.0
RDX	109.0
135-TNB	104.2
13-DNB	101.2
Tetryl	95.8
Nitrobenzene	100.6
4A-26-DNT	103.6
2A-46-DNT	112.0
246-TNT	117.2
34-DNT(surr)	100.4
26-DNT	103.1
24-DNT	109.6
2-NT	93.5
4-NT	105.7
3-NT	103.7
PETN	93.8

*with
3/3/10*

Total 1652.4

Average 103.3

Handwritten: 103.3

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0301070a

Analysis Date: 03-MAR-10 01:35

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.024	125	
1,3-Dinitrobenzene-d4	500	599.39	120	
2,4,6-Trinitrotoluene	40	42.921	107	
2,4-Dinitrotoluene	40	44.869	112	
2,6-Dinitrotoluene	40	39.409	99	
2,6-Dinitrotoluene-d3	500	621.51	124	
2-Amino-4,6-dinitrotoluene	40	47.604	119	
3,4-Dinitrotoluene	20	18.932	95	
4-Amino-2,6-dinitrotoluene	40	42.217	106	
HMX	40	49.129	123	
Nitrobenzene	40	36.502	91	
PETN	40	47.635	119	
RDX	40	42.752	107	
Tetryl	40	36.156	90	
m-Dinitrobenzene	40	43.178	108	
m-Nitrotoluene	40	41.745	104	
o-Nitrotoluene	40	37.385	93	
p-Nitrotoluene	40	41.194	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0301070a

Date: 03-Mar-2010

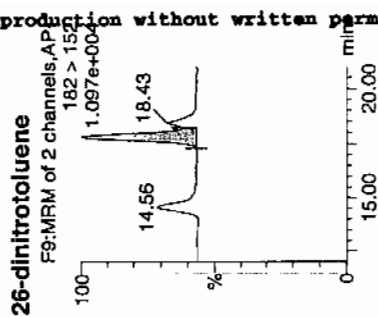
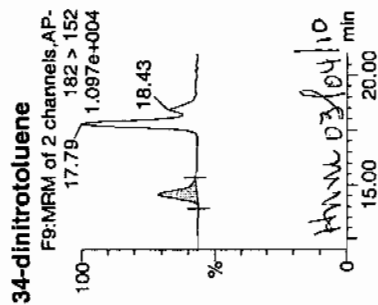
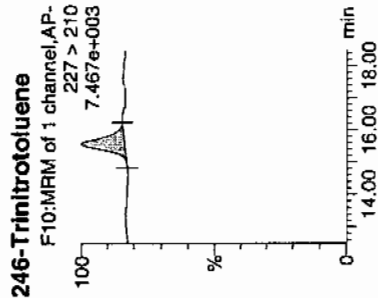
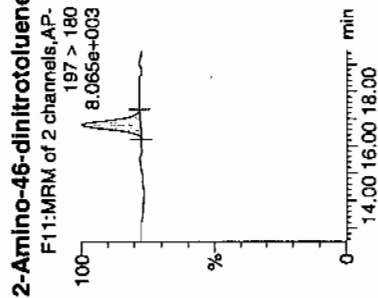
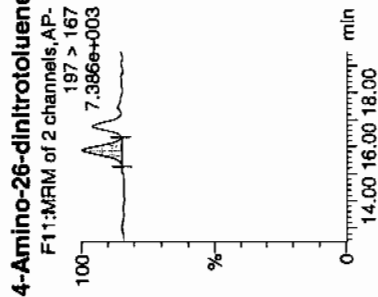
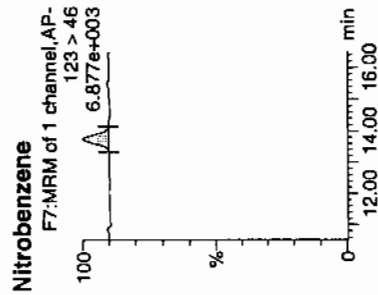
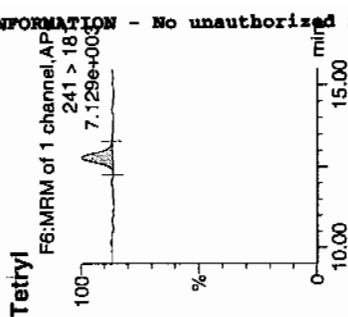
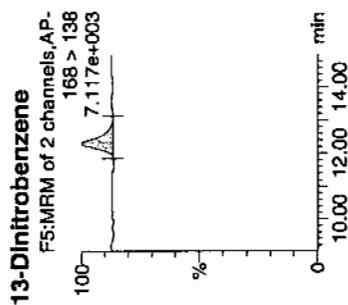
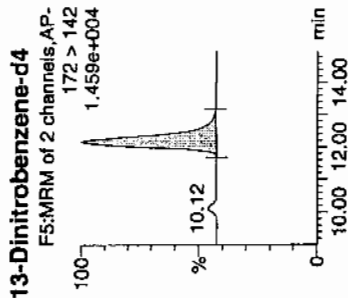
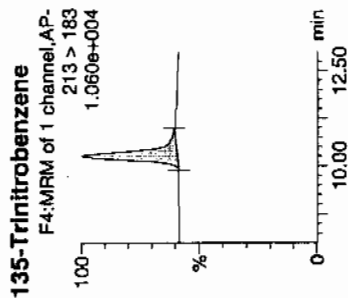
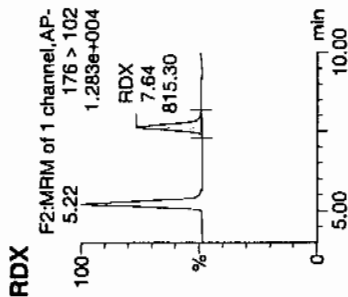
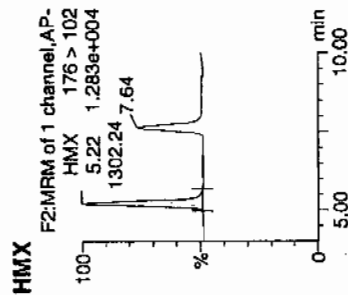
Time: 01:35:49

ID: WXX100301-08CRI

Vial: 1:1,C

107
3/3/10

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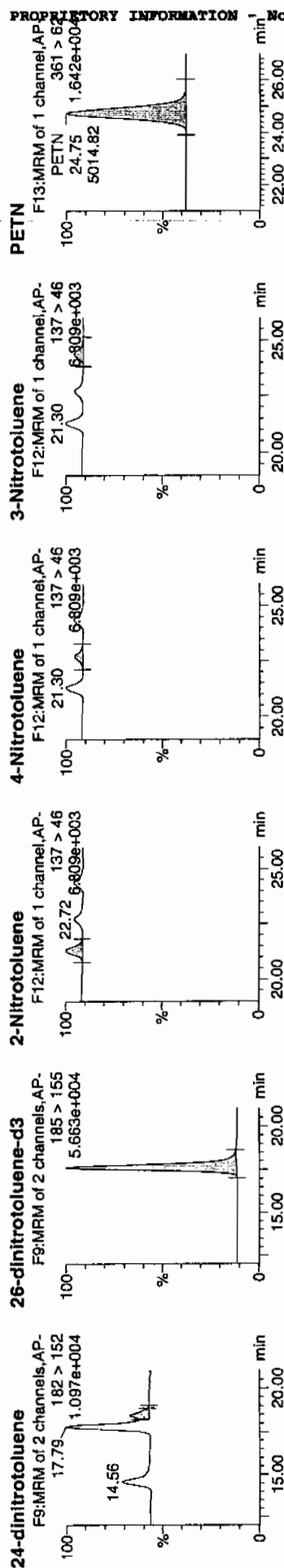


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 76 of 103

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



PROPRIETARY INFORMATION No unauthorized reproduction without written permission from GEL.

ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Integr	%Rec	%Dev	SN
WXX100301-08CRI	HMX	176 > 102	5.22	1302.244	3474.158	1302.244	187.419	bb			49.1291	122.8	22.8	190.8
WXX100301-08CRI	RDx	176 > 102	7.64	815.297	3474.158	815.297	117.337	bb			42.7518	106.9	6.9	102.4
WXX100301-08CRI	135-Trinitrobenzene	213 > 183	10.27	1196.755	3474.158	1196.755	172.237	bb			50.0244	125.1	25.1	250.0
WXX100301-08CRI	13-Dinitrobenzene-d4	172 > 142	12.17	3474.158		3474.158	3474.158	bb			599.3904	119.9	19.9	657.7
WXX100301-08CRI	13-Dinitrobenzene	168 > 138	12.31	393.580	3474.158	393.580	56.644	bb			43.1781	107.9	7.9	53.6
WXX100301-08CRI	Tetryl	241 > 181	12.82	325.501	3474.158	325.501	46.846	bb			36.1561	90.4	-9.6	25.8
WXX100301-08CRI	Nitrobenzene	123 > 46	13.76	225.458	3474.158	225.458	32.448	bb			36.5021	91.3	-8.7	24.8
WXX100301-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.86	476.509	19993.752	476.509	11.916	MM	03-Mar-10	08:46:42	42.2166	105.5	5.5	58.7
WXX100301-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.76	717.676	19993.752	717.676	17.948	bb			47.6037	119.0	19.0	66.5
WXX100301-08CRI	246-Trinitrotoluene	227 > 210	15.55	540.942	19993.752	540.942	13.528	bb			42.9208	107.3	7.3	54.8
WXX100301-08CRI	34-dinitrotoluene	182 > 152	14.56	749.975	19993.752	749.975	18.755	bb			18.9319	94.7	-5.3	51.3
WXX100301-08CRI	26-dinitrotoluene	182 > 152	17.79	1777.950	19993.752	1777.950	44.463	MM	03-Mar-10	08:55:19	39.4090	98.5	-1.5	150.3
WXX100301-08CRI	24-dinitrotoluene	182 > 152	18.43	451.310	19993.752	451.310	11.286	MM	03-Mar-10	08:58:49	44.8686	112.2	12.2	35.6
WXX100301-08CRI	26-dinitrotoluene-d3	185 > 155	17.62	19993.752		19993.752	19993.752	bb			621.5099	124.3	24.3	3720.8
WXX100301-08CRI	2-Nitrotoluene	137 > 46	21.30	247.985	19993.752	247.985	6.202	bb			37.3853	93.5	-6.5	85.9
WXX100301-08CRI	4-Nitrotoluene	137 > 46	22.72	130.542	19993.752	130.542	3.265	bb			41.1935	103.0	3.0	42.2
WXX100301-08CRI	3-Nitrotoluene	137 > 46	24.38	163.944	19993.752	163.944	4.100	bb			41.7447	104.4	4.4	47.7
WXX100301-08CRI	PETN	361 > 62	24.75	5014.823	19993.752	5014.823	125.410	bb			47.6353	119.1	19.1	1827.7

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/03/10
 Time of Injection 0135
 Standard Number WXX100301-08CRI
 Data File EXP0301070a

HMX	122.8
RDX	106.9
135-TNB	125.1
13-DNB	107.9
Tetryl	90.4
Nitrobenzene	91.3
4A-26-DNT	105.5
2A-46-DNT	119.0
246-TNT	107.3
34-DNT(surr)	94.7
26-DNT	98.5
24-DNT	112.2
2-NT	93.5
4-NT	103.0
3-NT	104.4
PETN	119.1

Handwritten: 100%
3/3/10

Total 1701.6

Average 106.4

Handwritten: HMX 122.8/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0301081a

Analysis Date: 03-MAR-10 07:00

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
PETN	600	494.993	82	
RDX	600	611.075	102	
Tetryl	600	521.429	87	
m-Dinitrobenzene	600	581.641	97	
m-Nitrotoluene	600	494.415	82	
o-Nitrotoluene	600	483.022	81	
p-Nitrotoluene	600	520.182	87	
1,3,5-Trinitrobenzene	600	597.421	100	
1,3-Dinitrobenzene-d4	500	541.498	108	
2,4,6-Trinitrotoluene	600	710.046	118	
2,4-Dinitrotoluene	600	678.751	113	
2,6-Dinitrotoluene	600	618.273	103	
2,6-Dinitrotoluene-d3	500	564.163	113	
2-Amino-4,6-dinitrotoluene	600	652.34	109	
3,4-Dinitrotoluene	300	313.63	105	
4-Amino-2,6-dinitrotoluene	600	563.974	94	
HMX	600	654.039	109	
Nitrobenzene	600	549.595	92	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 97 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301081a

Date: 03-Mar-2010

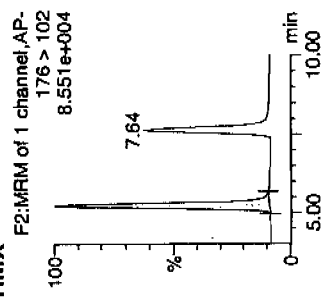
Time: 07:00:23

ID: WXX100301-07CCV

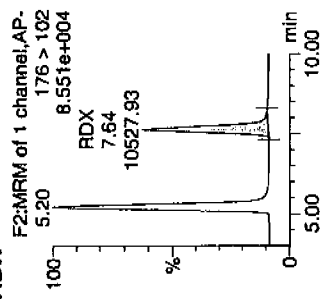
Vial: 1:1,B

100%
3/3/10

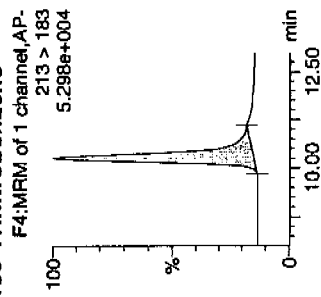
HMX



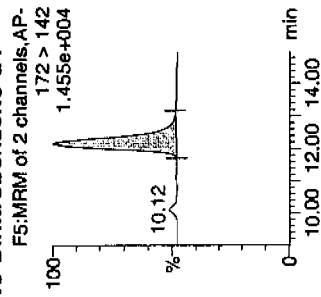
RDX



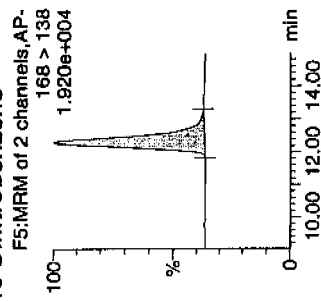
135-Trinitrobenzene



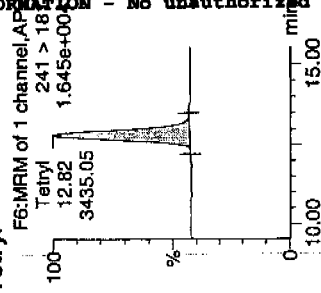
13-Dinitrobenzene-d4



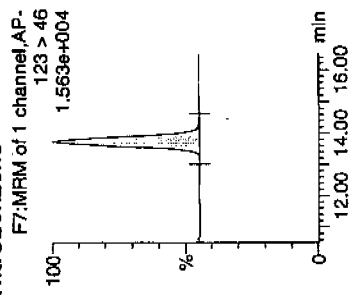
13-Dinitrobenzene



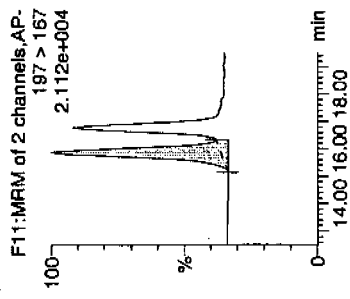
Tetryl



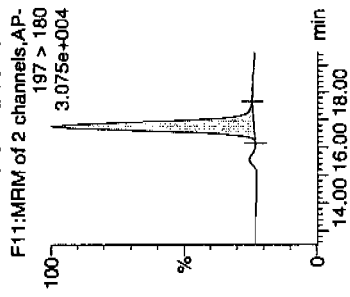
Nitrobenzene



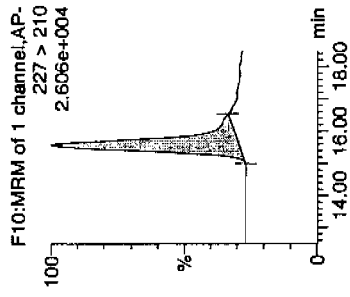
4-Amino-26-dinitrotoluene



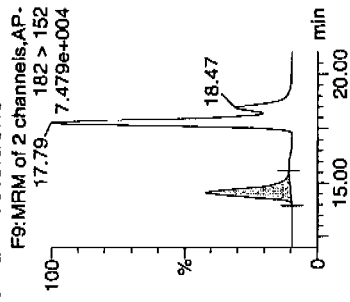
2-Amino-46-dinitrotoluene



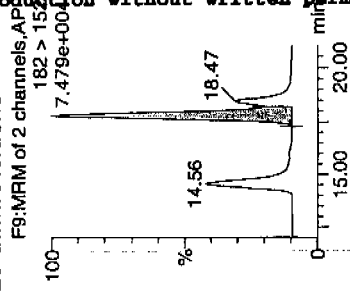
246-Trinitrotoluene



34-dinitrotoluene



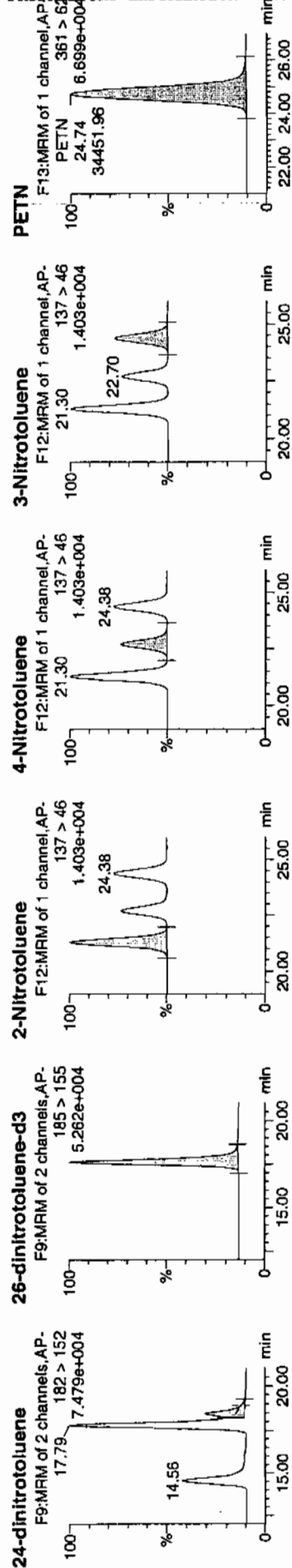
26-dinitrotoluene



Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

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ID	Name	Trace	RT	Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Area	Ref	Ref	Ref	Ref
WXX100301-07CCV	HMX	176 > 102	5.20	15661.918	15661.918	2495.044	bb	03-Mar-10	08:47:27	654.0394	108.0	9.0	3102.5	
WXX100301-07CCV	RDX	176 > 102	7.64	10527.930	10527.930	1677.167	bb			611.0751	101.8	1.8	1822.8	
WXX100301-07CCV	135-Trinitrobenzene	213 > 183	10.27	12911.929	12911.929	2056.953	bb			597.4211	99.6	-0.4	1467.1	
WXX100301-07CCV	13-Dinitrobenzene-d4	172 > 142	12.17	3138.605	3138.605	3138.605	bb			541.4980	108.3	8.3	166.7	
WXX100301-07CCV	13-Dinitrobenzene	168 > 138	12.31	4789.737	4789.737	763.036	bb			581.6414	96.9	-3.1	257.6	
WXX100301-07CCV	Tetryl	241 > 181	12.82	3435.049	3435.049	547.225	bb			521.4288	86.9	-13.1	219.6	
WXX100301-07CCV	Nitrobenzene	123 > 46	13.72	3066.749	3066.749	488.553	bb			549.5952	91.6	-8.4	340.0	
WXX100301-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.86	5778.337	5778.337	159.192	MM	03-Mar-10	08:47:27	563.9737	94.0	-6.0	205.9	
WXX100301-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.76	8927.271	8927.271	245.945	bb			652.3405	108.7	8.7	535.8	
WXX100301-07CCV	246-Trinitrotoluene	227 > 210	15.58	8123.173	8123.173	223.792	bb			710.0455	118.3	18.3	153.9	
WXX100301-07CCV	34-dinitrotoluene	182 > 152	14.56	11277.819	11277.819	310.702	bb			313.6296	104.5	4.5	278.4	
WXX100301-07CCV	26-dinitrotoluene	182 > 152	17.79	25319.865	25319.865	697.559	MM	03-Mar-10	08:54:25	618.2731	103.0	3.0	783.2	
WXX100301-07CCV	24-dinitrotoluene	182 > 152	18.47	6197.255	6197.255	170.733	MM	03-Mar-10	09:00:43	678.7508	113.1	13.1	175.4	
WXX100301-07CCV	26-dinitrotoluene-d3	185 > 155	17.62	18148.918	18148.918	18148.918	bb			564.1629	112.8	12.8	1480.8	
WXX100301-07CCV	2-Nitrotoluene	137 > 46	21.30	2908.356	2908.356	80.125	bb			483.0219	80.5	-19.5	479.2	
WXX100301-07CCV	4-Nitrotoluene	137 > 46	22.70	1496.350	1496.350	41.224	bb			520.1818	86.7	-13.3	228.8	
WXX100301-07CCV	3-Nitrotoluene	137 > 46	24.38	1762.555	1762.555	48.558	bb			494.4149	82.4	-17.6	262.9	
WXX100301-07CCV	PETN	361 > 62	24.74	34451.961	34451.961	949.146	bb			494.9929	82.5	-17.5	509.3	



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/03/10
 Time of Injection: 0700
 Standard Number: WXX100301-07CCV
 Data File: EXP0301081a

HMX	109.0
RDX	101.8
135-TNB	99.6
13-DNB	96.9
Tetryl	86.9
Nitrobenzene	91.6
4A-26-DNT	94.0
2A-46-DNT	108.7
246-TNT	118.3
34-DNT(surr)	104.5
26-DNT	103.0
24-DNT	113.1
2-NT	80.5
4-NT	86.7
3-NT	82.4
PETN	82.5

*1007
3/3/10*

Total 1559.5

Average 97.5

4hrm 03/04/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0301083a

Analysis Date: 03-MAR-10 07:59

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	40	42.604	107	
2,6-Dinitrotoluene	40	40.372	101	
2,6-Dinitrotoluene-d3	500	642.665	129	
2-Amino-4,6-dinitrotoluene	40	41.73	104	
3,4-Dinitrotoluene	20	17.556	88	
4-Amino-2,6-dinitrotoluene	40	40.477	101	
HMX	40	36.066	90	
Nitrobenzene	40	30.414	76	
PETN	40	46.771	117	
RDX	40	30.064	75	
Tetryl	40	29.332	73	
m-Dinitrobenzene	40	42.74	107	
m-Nitrotoluene	40	29.241	73	
o-Nitrotoluene	40	36.839	92	
p-Nitrotoluene	40	41.871	105	
1,3,5-Trinitrobenzene	40	49.866	125	
1,3-Dinitrobenzene-d4	500	643.486	129	
2,4,6-Trinitrotoluene	40	47.216	118	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301083a

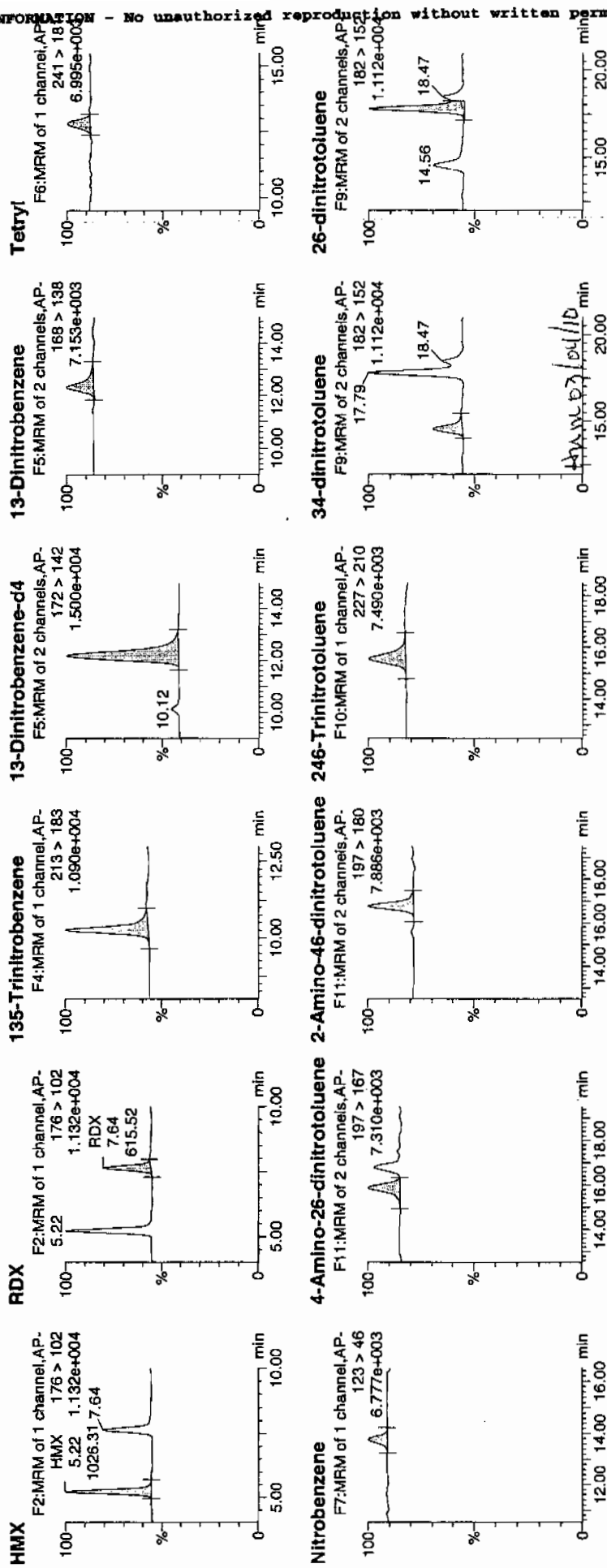
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ID: WXX100301-08CRI

Vial: 1:1,C

WJ
3/3/10

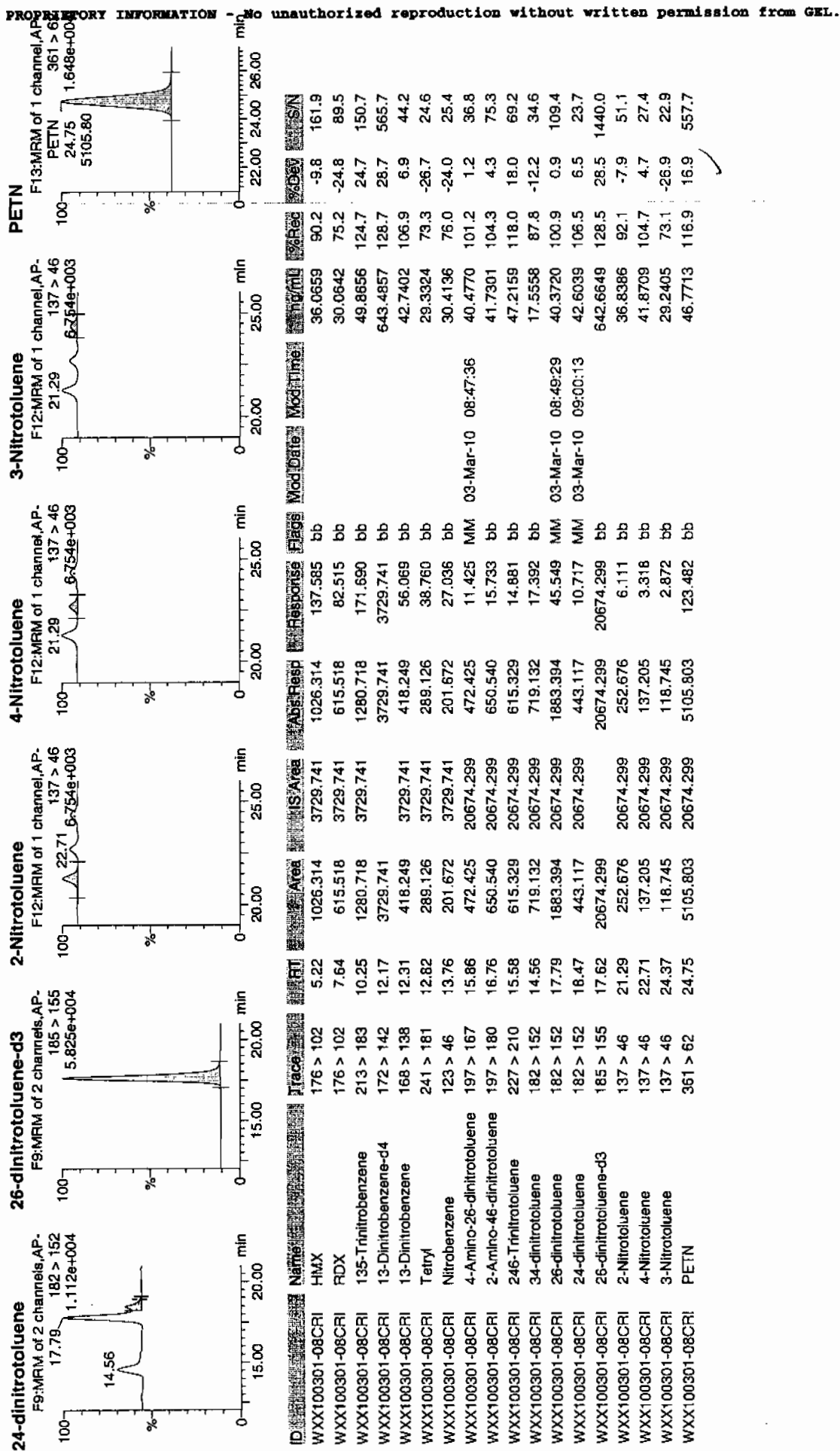


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 102 of 103

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/03/10
 Time of Injection 0759
 Standard Number WXX100301-08CRI
 Data File EXP0301083a

HMX	90.2
RDX	75.2
135-TNB	124.7
13-DNB	106.9
Tetryl	73.3
Nitrobenzene	76.0
4A-26-DNT	101.2
2A-46-DNT	104.3
246-TNT	118.0
34-DNT(surr)	87.8
26-DNT	100.9
24-DNT	106.5
2-NT	92.1
4-NT	104.7
3-NT	73.1
PETN	116.9

*MSB
3/3/10*

Total 1551.8

Average 97.0

4/12/10 03/04/10

ICV Limits 85-115%
 CRI Limits 70-130%
 CCV Limits 85-115%

No single analyte > +/- 60%

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0301096a

Analysis Date: 03-MAR-10 14:23

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	608.469	101	
1,3-Dinitrobenzene-d4	500	564.313	113	
2,4,6-Trinitrotoluene	600	632.483	105	
2,4-Dinitrotoluene	600	611.259	102	
2,6-Dinitrotoluene	600	610.95	102	
2,6-Dinitrotoluene-d3	500	602.468	120	*
2-Amino-4,6-dinitrotoluene	600	653.472	109	
3,4-Dinitrotoluene	300	285.157	95	
4-Amino-2,6-dinitrotoluene	600	592.074	99	
HMX	600	609.032	102	
Nitrobenzene	600	563.081	94	
PETN	600	555.607	93	
RDX	600	727.597	121	*
Tetryl	600	570.012	95	
m-Dinitrobenzene	600	579.98	97	
m-Nitrotoluene	600	544.654	91	
o-Nitrotoluene	600	587.721	98	
p-Nitrotoluene	600	615.437	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

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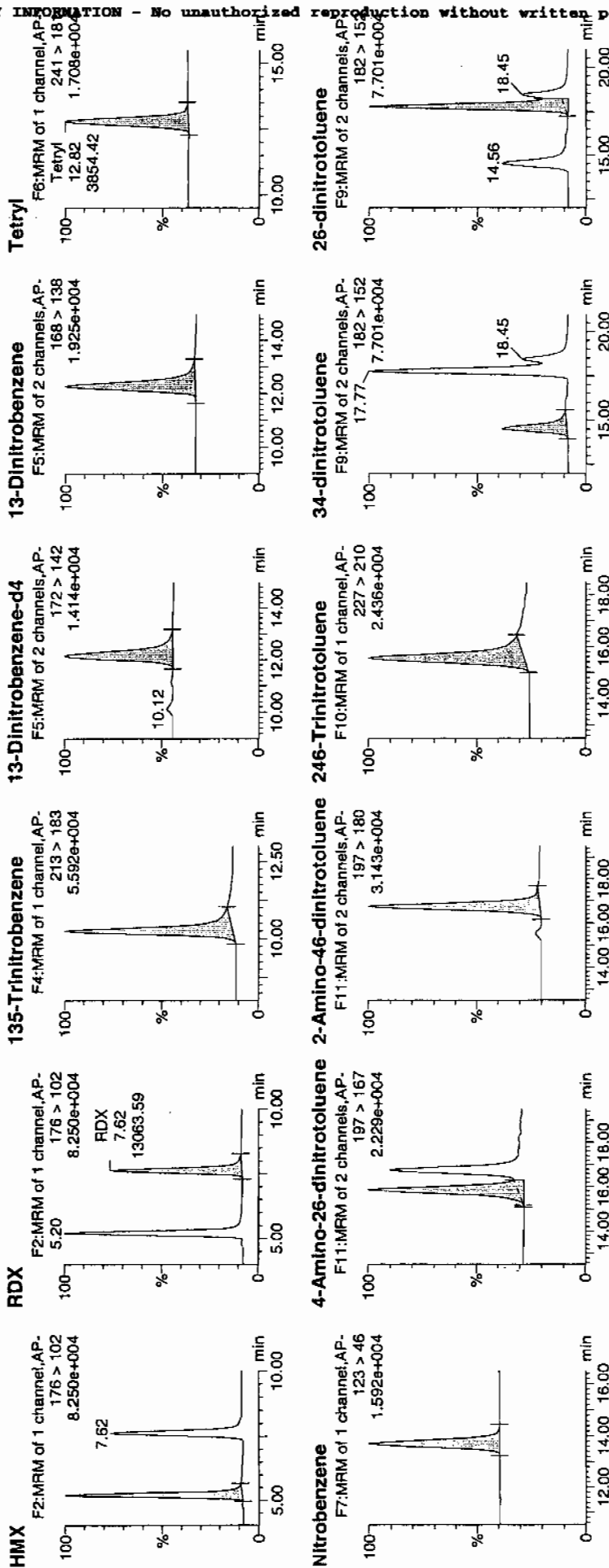
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Time: 14:23:52

ID: WXX100301-07CCV

Vial: 1:1,B

HT
3/4/10



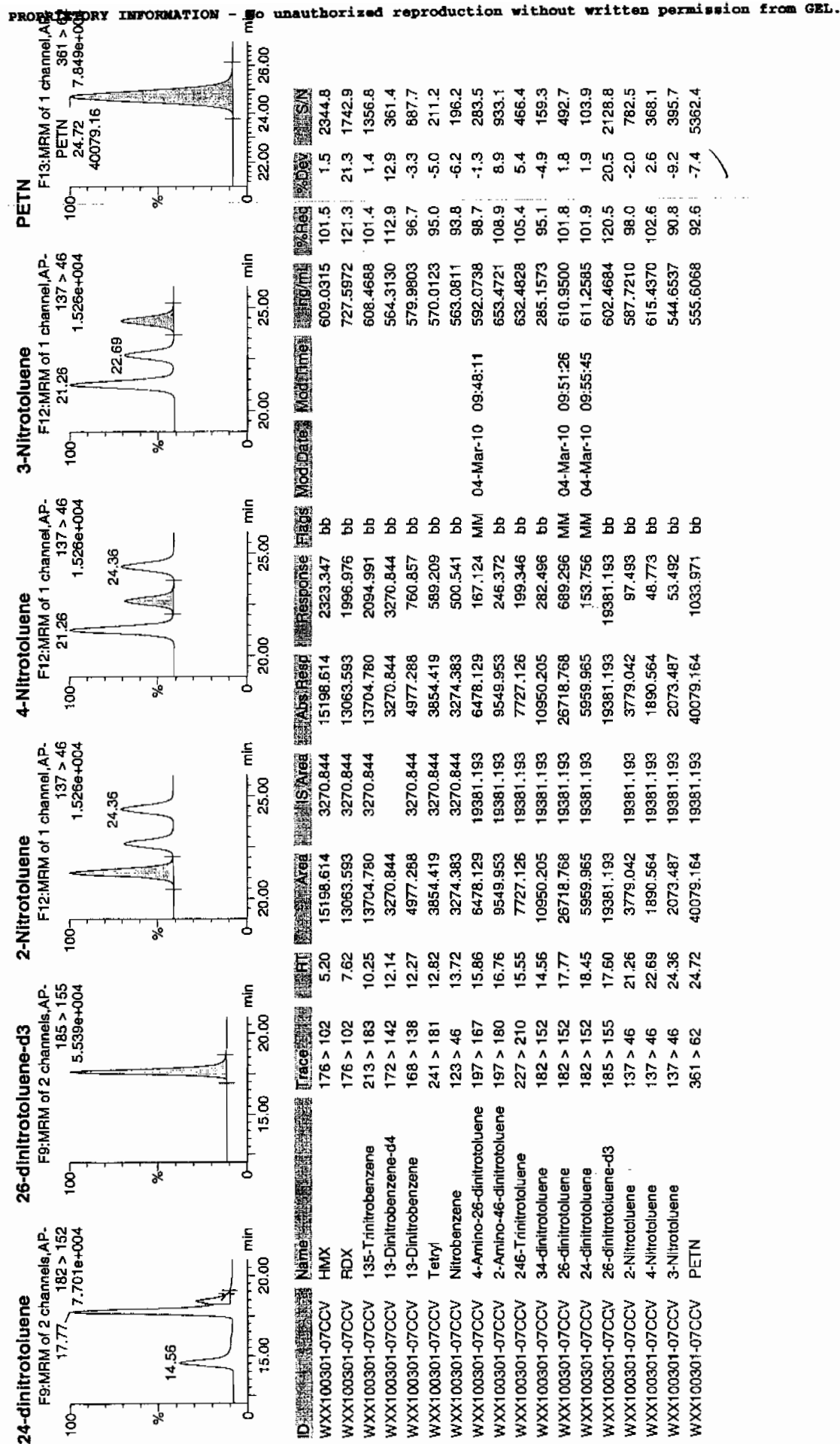
Amu 03/04/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Mar 04 09:56:46 2010, Page 26 of 81

Dataset: C:\MASSLYNX\New_Exp\PRO1030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/03/10
 Time of Injection: .1423
 Standard Number: WXX100301-07CCV
 Data File: EXP0301096a

HMX	101.5
RDX	121.3
135-TNB	101.4
13-DNB	96.7
Tetryl	95.0
Nitrobenzene	93.8
4A-26-DNT	98.7
2A-46-DNT	108.9
246-TNT	105.4
34-DNT(surr)	95.1
26-DNT	101.8
24-DNT	101.9
2-NT	98.0
4-NT	102.6
3-NT	90.8
PETN	92.6

*1423
3/4/10*

Total 1605.5

Average 100.3

100.3 0.3/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0301098a

Analysis Date: 03-MAR-10 15:22

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	42.506	106	
1,3-Dinitrobenzene-d4	500	552.568	111	
2,4,6-Trinitrotoluene	40	52.156	130	*
2,4-Dinitrotoluene	40	41.794	104	
2,6-Dinitrotoluene	40	39.346	98	
2,6-Dinitrotoluene-d3	500	581.098	116	
2-Amino-4,6-dinitrotoluene	40	52.106	130	*
3,4-Dinitrotoluene	20	18.601	93	
4-Amino-2,6-dinitrotoluene	40	46.843	117	
HMX	40	55.874	140	*
Nitrobenzene	40	34.616	87	
PETN	40	46.069	115	
RDX	40	47.407	119	
Tetryl	40	38.641	97	
m-Dinitrobenzene	40	44.084	110	
m-Nitrotoluene	40	43.315	108	
o-Nitrotoluene	40	42.886	107	
p-Nitrotoluene	40	47.245	118	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Mar 04 09:56:46 2010, Page 29 of 81

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

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Date: 03-Mar-2010

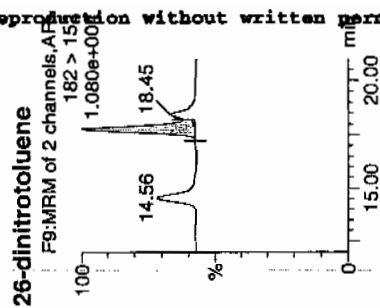
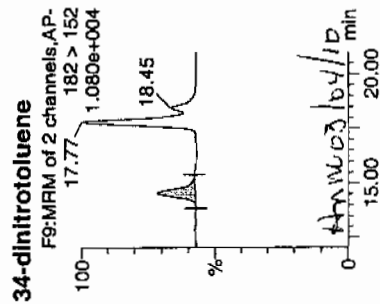
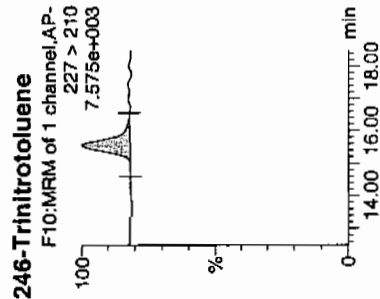
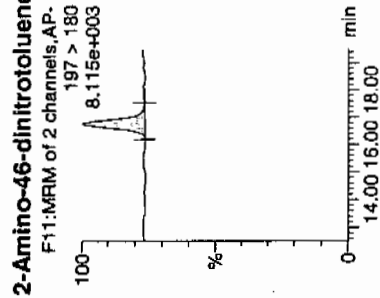
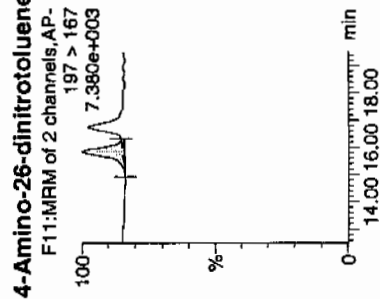
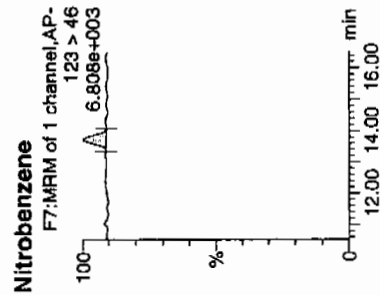
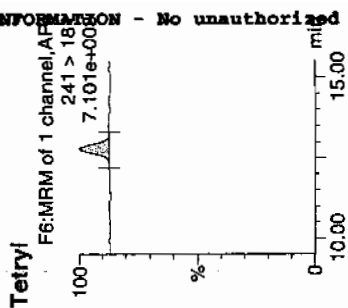
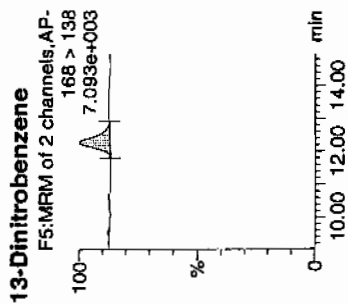
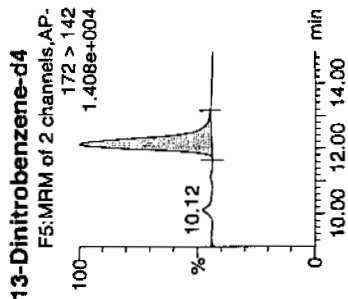
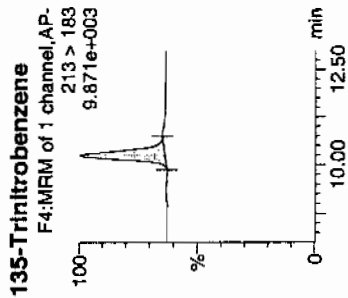
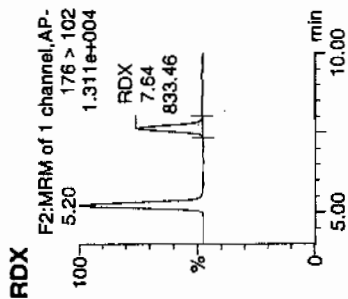
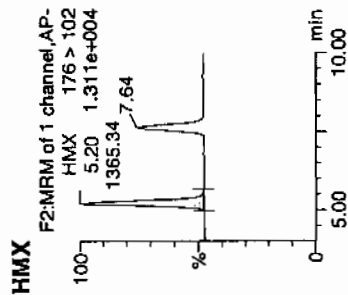
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ID: WXX100301-08CRI

Vial: 1:1,C

3/4/10
MJP

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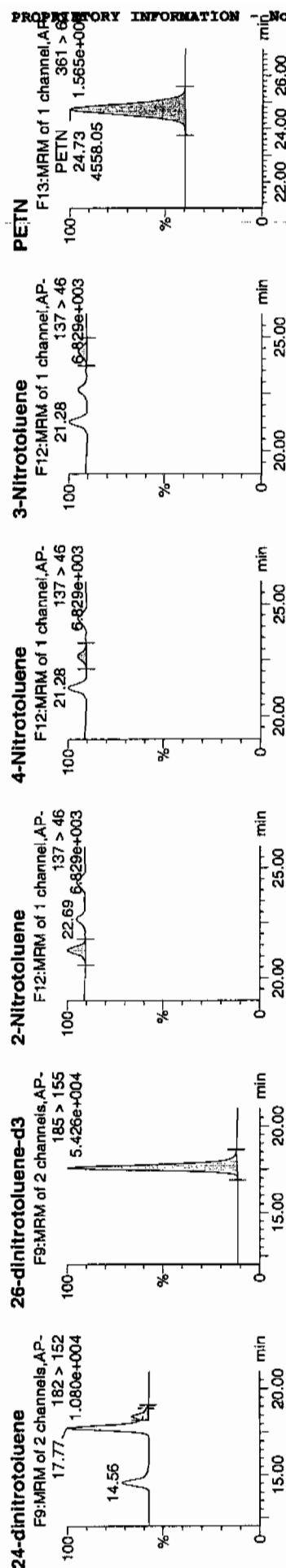


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 04 09:56:46 2010, Page 30 of 81

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



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ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (mg/ml)	% Rec	% Dev	S/N
WXX100301-08CRI	HMZ	176 > 102	5.20	1365.344	3202.767	1365.344	213.151	bb			55.8743	139.7	39.7	163.2
WXX100301-08CRI	RDX	176 > 102	7.64	833.455	3202.767	833.455	130.115	bb			47.4073	118.5	18.5	87.0
WXX100301-08CRI	135-Trinitrobenzene	213 > 183	10.25	937.450	3202.767	937.450	146.350	bb			42.5059	106.3	6.3	141.1
WXX100301-08CRI	13-Dinitrobenzene-d4	172 > 142	12.14	3202.767	3202.767	3202.767	3202.767	bb			552.5678	110.5	10.5	262.1
WXX100301-08CRI	13-Dinitrobenzene	168 > 138	12.27	370.444	3202.767	370.444	57.832	bb			44.0836	110.2	10.2	45.0
WXX100301-08CRI	Tetryl	241 > 181	12.82	318.889	3202.767	318.889	49.783	bb			38.6409	96.6	-3.4	33.3
WXX100301-08CRI	Nitrobenzene	123 > 46	13.71	197.104	3202.767	197.104	30.771	bb			34.6156	86.5	-13.5	21.4
WXX100301-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.86	494.348	18693.730	494.348	13.222	MM	04-Mar-10	09:48:00	46.8429	117.1	17.1	16.8
WXX100301-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.76	734.473	18693.730	734.473	19.645	bb			52.1058	130.3	30.3	80.5
WXX100301-08CRI	246-Trinitrotoluene	227 > 210	15.55	614.591	18693.730	614.591	16.438	bb			52.1557	130.4	30.4	54.0
WXX100301-08CRI	34-dinitrotoluene	182 > 152	14.56	688.937	18693.730	688.937	18.427	bb			18.6006	93.0	-7.0	55.7
WXX100301-08CRI	26-dinitrotoluene	182 > 152	17.77	1659.699	18693.730	1659.699	44.392	bb	04-Mar-10	09:51:33	39.3462	98.4	-1.6	167.2
WXX100301-08CRI	24-dinitrotoluene	182 > 152	18.45	393.046	18693.730	393.046	10.513	MM	04-Mar-10	09:55:36	41.7935	104.5	4.5	35.6
WXX100301-08CRI	26-dinitrotoluene-d3	185 > 155	17.60	18693.730	18693.730	18693.730	18693.730	bb			581.0985	116.2	16.2	1601.8
WXX100301-08CRI	2-Nitrotoluene	137 > 46	21.28	265.973	18693.730	265.973	7.114	bb			42.8856	107.2	7.2	39.6
WXX100301-08CRI	4-Nitrotoluene	137 > 46	22.69	139.984	18693.730	139.984	3.744	bb			47.2449	118.1	18.1	19.2
WXX100301-08CRI	3-Nitrotoluene	137 > 46	24.37	159.052	18693.730	159.052	4.254	bb			43.3154	108.3	8.3	19.3
WXX100301-08CRI	PETN	361 > 82	24.73	4558.049	18693.730	4558.049	121.914	bb			46.0690	115.2	15.2	1117.5

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/03/10
 Time of Injection --1522--
 Standard Number WXX100301-08CRI
 Data File EXP0301098a

HMX	139.7
RDX	118.5
135-TNB	106.3
13-DNB	110.2
Tetryl	96.6
Nitrobenzene	86.5
4A-26-DNT	117.1
2A-46-DNT	130.3
246-TNT	130.4
34-DNT(surr)	93.0
26-DNT	98.4
24-DNT	104.5
2-NT	107.2
4-NT	118.1
3-NT	108.3
PETN	115.2

WFF
3/4/10

Total 1780.3

Average 111.3

Ann 03/6/10

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0301108a

Analysis Date: 03-MAR-10 20:17

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3-Dinitrobenzene-d4	500	595.559	119	
2,4,6-Trinitrotoluene	600	698.433	116	
2,4-Dinitrotoluene	600	613.948	102	
2,6-Dinitrotoluene	600	616.041	103	
2,6-Dinitrotoluene-d3	500	562.421	112	
2-Amino-4,6-dinitrotoluene	600	699.102	117	
3,4-Dinitrotoluene	300	322.208	107	
4-Amino-2,6-dinitrotoluene	600	618.465	103	
HMX	600	626.426	104	
Nitrobenzene	600	521.734	87	
PETN	600	602.609	100	
RDX	600	640.81	107	
Tetryl	600	510.929	85	
m-Dinitrobenzene	600	599.969	100	
m-Nitrotoluene	600	549.035	92	
o-Nitrotoluene	600	556.558	93	
p-Nitrotoluene	600	598.126	100	
1,3,5-Trinitrobenzene	600	580.289	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

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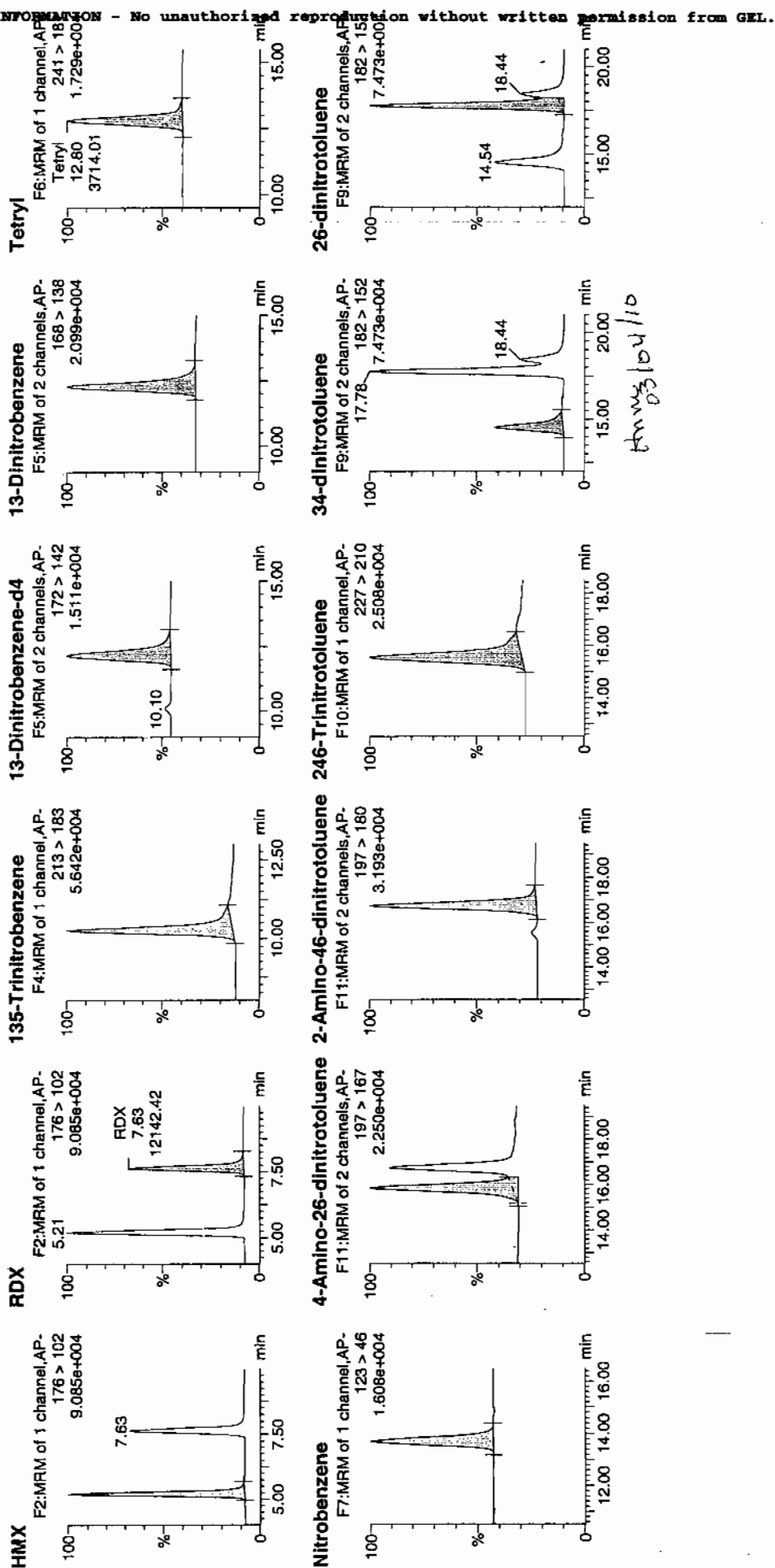
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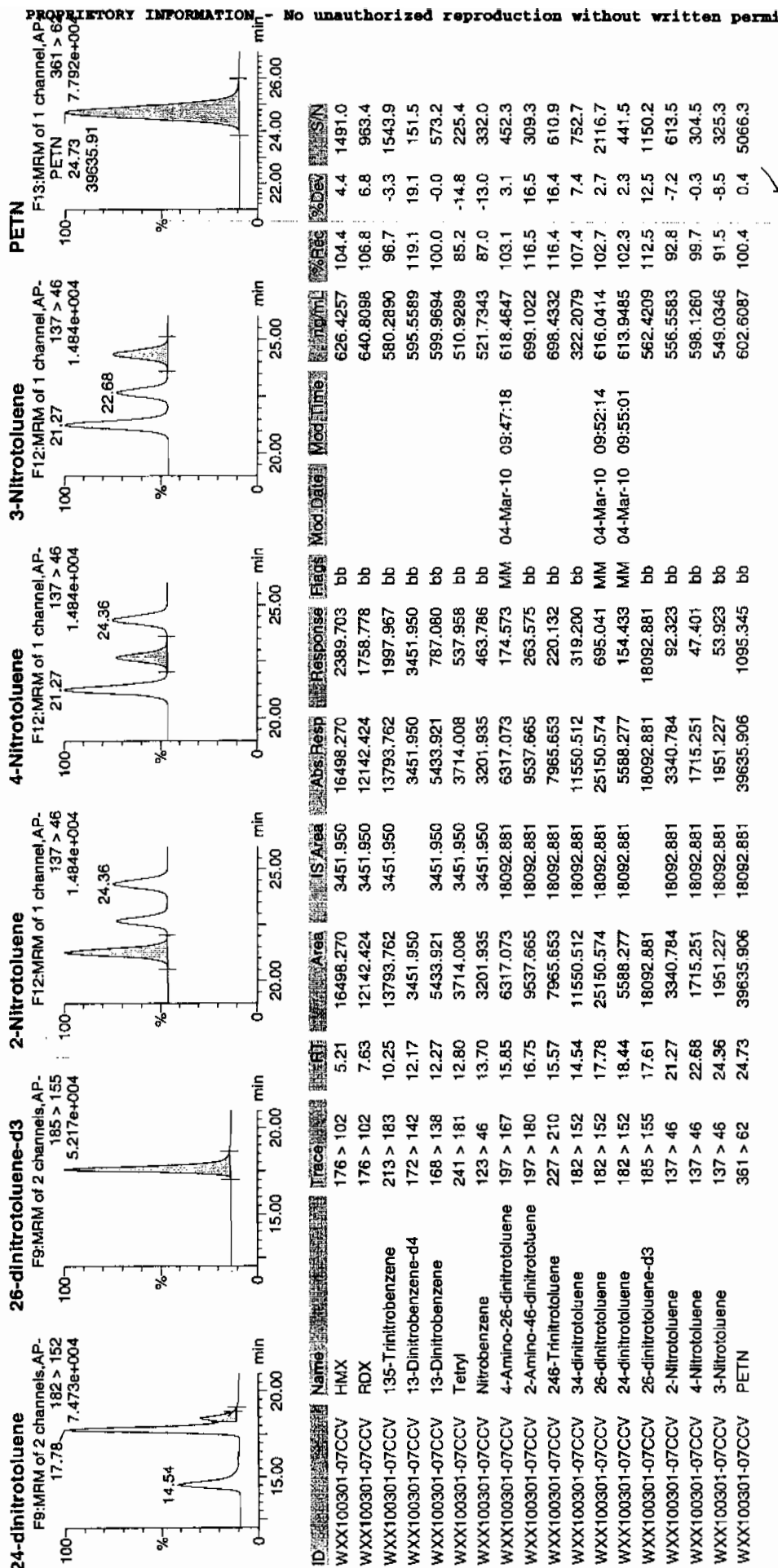
ID: WXX100301-07CCV

Vial: 1:1,B

NOT
 2/4/10



Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 03/03/10
 Time of Injection: 2017
 Standard Number: WXX100301-07CCV
 Data File: EXP0301108a

HMX	104.4
RDX	106.8
135-TNB	96.7
13-DNB	100.0
Tetryl	85.2
Nitrobenzene	87.0
4A-26-DNT	103.1
2A-46-DNT	116.5
246-TNT	116.4
34-DNT(surr)	107.4
26-DNT	102.7
24-DNT	102.3
2-NT	92.8
4-NT	99.7
3-NT	91.5
PETN	100.4

*MTY
3/4/10*

Total 1612.9

Average 100.8

Time 03/04/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0301110a

Analysis Date: 03-MAR-10 21:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	40	48.972	122	
3,4-Dinitrotoluene	20	21.523	108	
4-Amino-2,6-dinitrotoluene	40	48.76	122	
HMX	40	44.163	110	
Nitrobenzene	40	36.941	92	
PETN	40	46.105	115	
RDX	40	43.031	108	
Tetryl	40	34.785	87	
m-Dinitrobenzene	40	42.396	106	
m-Nitrotoluene	40	39.029	98	
o-Nitrotoluene	40	40.968	102	
p-Nitrotoluene	40	38.171	95	
1,3,5-Trinitrobenzene	40	45.452	114	
1,3-Dinitrobenzene-d4	500	632.25	126	
2,4,6-Trinitrotoluene	40	51.074	128	
2,4-Dinitrotoluene	40	43.164	108	
2,6-Dinitrotoluene	40	39.782	99	
2,6-Dinitrotoluene-d3	500	627.417	125	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 04 09:56:46 2010, Page 53 of 81

Dataset: C:\MASSLYNX\New_Exp\PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

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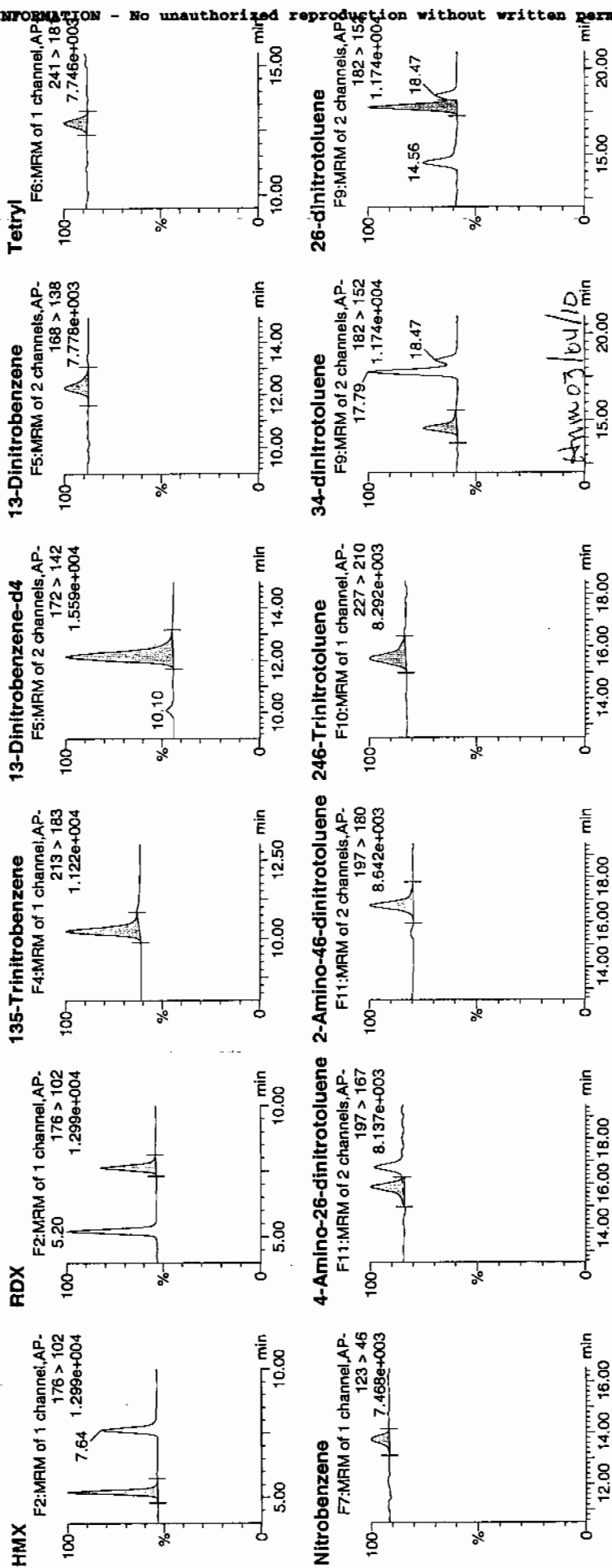
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ID: WXX100301-08CRI

Vial: 1:1,C

WRT
3/4/10

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Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Mar 04 09:56:46 2010, Page 54 of 81

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA2.qld, Time: Thu Mar 04 09:56:19 2010

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ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date
WXX100301-08CRI	HMX	176 > 102	5.20	1234.775	3664.616	1234.775	168.473	bb	04-Mar-10 09:47:08
WXX100301-08CRI	RDX	176 > 102	7.64	865.606	3664.616	865.606	118.103	bb	04-Mar-10 09:52:24
WXX100301-08CRI	135-Trinitrobenzene	213 > 183	10.25	1146.985	3664.616	1146.985	156.495	bb	04-Mar-10 09:54:48
WXX100301-08CRI	13-Dinitrobenzene-d4	172 > 142	12.17	3664.616	3664.616	3664.616	3664.616	bb	
WXX100301-08CRI	13-Dinitrobenzene	168 > 138	12.27	407.640	3664.616	407.640	55.618	bb	
WXX100301-08CRI	Tetryl	241 > 181	12.82	331.457	3664.616	331.457	45.224	bb	
WXX100301-08CRI	Nitrobenzene	123 > 46	13.72	240.676	3664.616	240.676	32.838	bb	
WXX100301-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.86	555.597	20183.787	555.597	13.763	MM	
WXX100301-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.76	745.326	20183.787	745.326	18.463	bb	
WXX100301-08CRI	246-Trinitrotoluene	227 > 210	15.55	649.818	20183.787	649.818	16.098	bb	
WXX100301-08CRI	34-dinitrotoluene	182 > 152	14.56	860.730	20183.787	860.730	21.322	bb	
WXX100301-08CRI	26-dinitrotoluene	182 > 152	17.79	1811.858	20183.787	1811.858	44.884	MM	
WXX100301-08CRI	24-dinitrotoluene	182 > 152	18.47	438.286	20183.787	438.286	10.857	MM	
WXX100301-08CRI	26-dinitrotoluene-d3	185 > 155	17.62	20183.787	20183.787	20183.787	20183.787	bb	
WXX100301-08CRI	2-Nitrotoluene	137 > 46	21.28	274.331	20183.787	274.331	6.796	bb	
WXX100301-08CRI	4-Nitrotoluene	137 > 46	22.69	122.112	20183.787	122.112	3.025	bb	
WXX100301-08CRI	3-Nitrotoluene	137 > 46	24.38	154.735	20183.787	154.735	3.833	bb	
WXX100301-08CRI	PETN	361 > 62	24.73	4924.597	20183.787	4924.597	121.994	bb	

ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Area	%Area	%Dev	%S/N
WXX100301-08CRI	HMX	176 > 102	5.20	1234.775	3664.616	1234.775	168.473	bb	04-Mar-10 09:47:08	44.1626	110.4	10.4	290.0
WXX100301-08CRI	RDX	176 > 102	7.64	865.606	3664.616	865.606	118.103	bb	04-Mar-10 09:52:24	43.0309	107.6	7.6	178.5
WXX100301-08CRI	135-Trinitrobenzene	213 > 183	10.25	1146.985	3664.616	1146.985	156.495	bb	04-Mar-10 09:54:48	45.4522	113.6	13.6	178.3
WXX100301-08CRI	13-Dinitrobenzene-d4	172 > 142	12.17	3664.616	3664.616	3664.616	3664.616	bb		632.2498	126.4	26.4	249.8
WXX100301-08CRI	13-Dinitrobenzene	168 > 138	12.27	407.640	3664.616	407.640	55.618	bb		42.3964	106.0	6.0	53.7
WXX100301-08CRI	Tetryl	241 > 181	12.82	331.457	3664.616	331.457	45.224	bb		34.7854	87.0	-13.0	15.7
WXX100301-08CRI	Nitrobenzene	123 > 46	13.72	240.676	3664.616	240.676	32.838	bb		36.9407	92.4	-7.6	30.6
WXX100301-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.86	555.597	20183.787	555.597	13.763	MM		48.7600	121.9	21.9	27.3
WXX100301-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.76	745.326	20183.787	745.326	18.463	bb		48.9722	122.4	22.4	60.6
WXX100301-08CRI	246-Trinitrotoluene	227 > 210	15.55	649.818	20183.787	649.818	16.098	bb		51.0741	127.7	27.7	42.7
WXX100301-08CRI	34-dinitrotoluene	182 > 152	14.56	860.730	20183.787	860.730	21.322	bb		21.5232	107.6	7.6	67.4
WXX100301-08CRI	26-dinitrotoluene	182 > 152	17.79	1811.858	20183.787	1811.858	44.884	MM		39.7824	99.5	-0.5	176.8
WXX100301-08CRI	24-dinitrotoluene	182 > 152	18.47	438.286	20183.787	438.286	10.857	MM		43.1635	107.9	7.9	41.6
WXX100301-08CRI	26-dinitrotoluene-d3	185 > 155	17.62	20183.787	20183.787	20183.787	20183.787	bb		627.4172	125.5	25.5	1251.4
WXX100301-08CRI	2-Nitrotoluene	137 > 46	21.28	274.331	20183.787	274.331	6.796	bb		40.9678	102.4	2.4	31.3
WXX100301-08CRI	4-Nitrotoluene	137 > 46	22.69	122.112	20183.787	122.112	3.025	bb		38.1705	95.4	-4.6	15.5
WXX100301-08CRI	3-Nitrotoluene	137 > 46	24.38	154.735	20183.787	154.735	3.833	bb		39.0288	97.6	-2.4	17.2
WXX100301-08CRI	PETN	361 > 62	24.73	4924.597	20183.787	4924.597	121.994	bb		46.1048	115.3	15.3	1886.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 03/03/10
 Time of Injection 2116
 Standard Number WXX100301-08CRI
 Data File EXP0301110a

HMX	110.4
RDX	107.6
135-TNB	113.6
13-DNB	106.0
Tetryl	87.0
Nitrobenzene	92.4
4A-26-DNT	121.9
2A-46-DNT	122.4
246-TNT	127.7
34-DNT(surr)	107.6
26-DNT	99.5
24-DNT	107.9
2-NT	102.4
4-NT	95.4
3-NT	97.6
PETN	115.3

Handwritten:
 110.4
 3/4/10

Total 1714.7

Average 107.2

Handwritten: HMM 03/04/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02220013.wiff

Analysis Date: 22-FEB-10 20:10

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	144	144	
2,6-Diamino-4-nitrotoluene	100	138	138	
3,4-Dinitrotoluene	50	46.4	93	
3,5-Dinitroaniline	100	100	100	
TATB	100	92.4	92	
tris(o-cresyl) phosphate	100	102	102	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Jan 23/10

Sample Name: "WXX100222-2701" Sample ID: "11LRF" File: "EX02220013.wif"

Peak Name: "3S-Diisobutylamine" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 100. ng/mL

Acq. Date: 2/22/2010

Acq. Time: 8:10:21 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.0 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.22 min

Use Relative RT: No

Int. Type: Valley

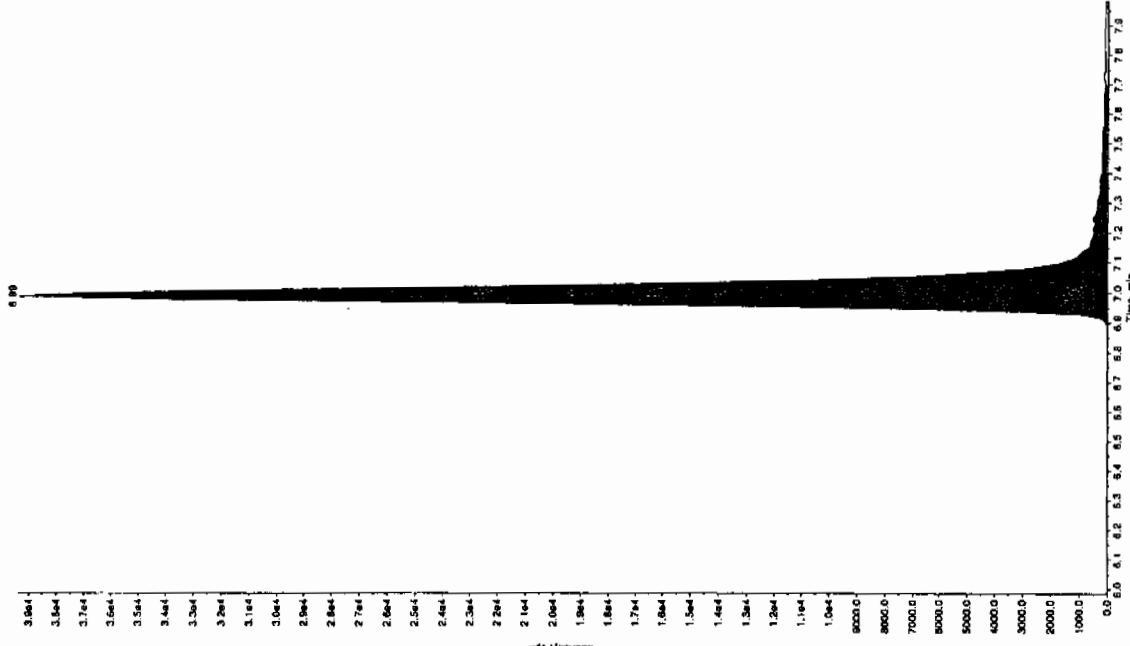
Retention Time: 8.22 min

Area: 7.08e+005 counts

Height: 169761.169 cps

Start Time: 8.10 min

End Time: 8.33 min



Jan 23/10

Sample Name: "WXX100222-2701" Sample ID: "11LRF" File: "EX02220013.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 92.4 ng/mL

Acq. Date: 2/22/2010

Acq. Time: 8:10:21 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.0 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.99 min

Use Relative RT: No

Int. Type: Valley

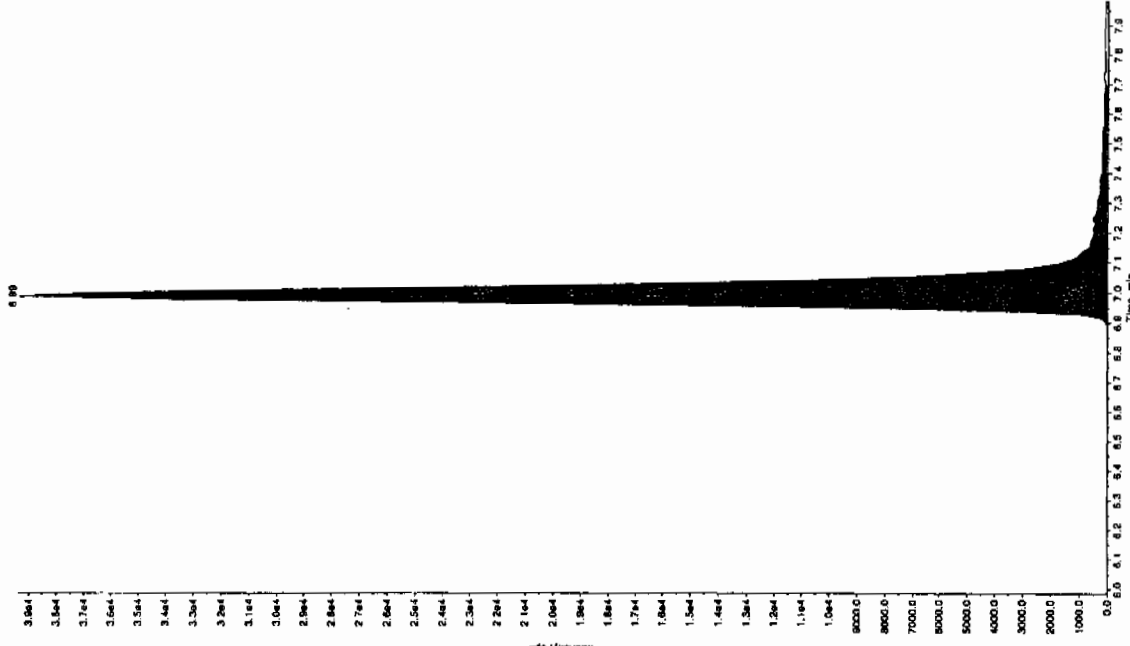
Retention Time: 6.99 min

Area: 1.83e+005 counts

Height: 39146.195 cps

Start Time: 6.87 min

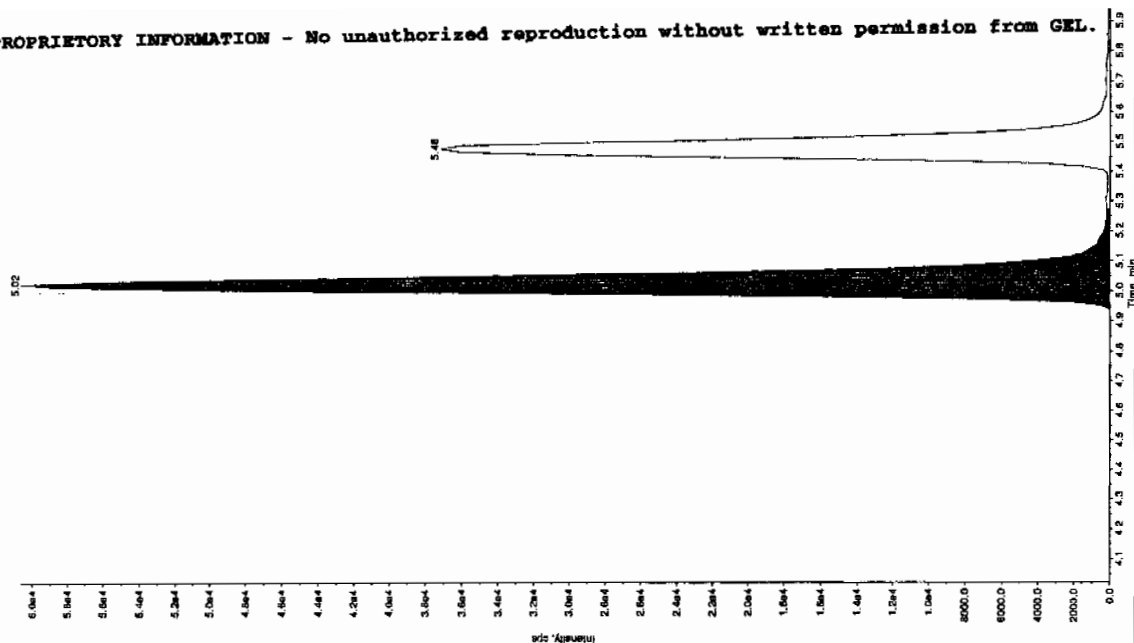
End Time: 7.10 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

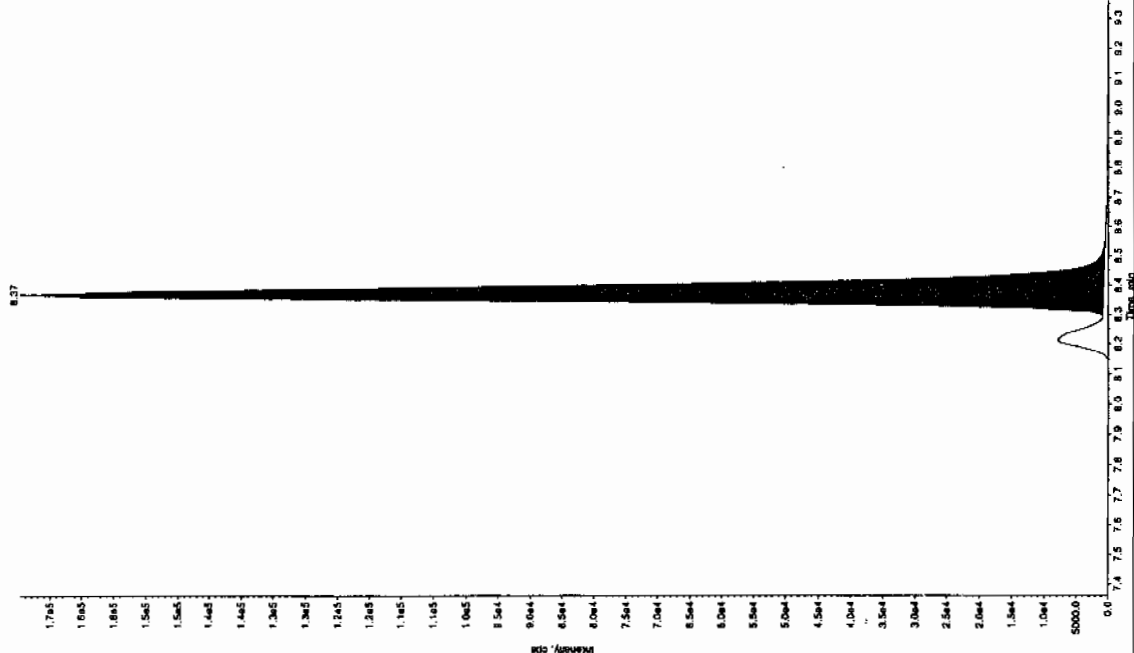
Sample Name: "WXX100222-27CPI" Sample ID: "111ER" File: "EXS02220013.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 138. ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 8:10:21 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 2.61e+005 counts
 Height: 60650.684 cps
 Start Time: 4.89 min
 End Time: 5.27 min



Sample Name: "WXX100222-27CPI" Sample ID: "111ER" File: "EXS02220013.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: OC
 Concentration: 50.0 ng/mL
 Calculated Conc: 46.4 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 8:10:21 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1450.0 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.00 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 6.36e+005 counts
 Height: 169130.783 cps
 Start Time: 8.29 min
 End Time: 8.57 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

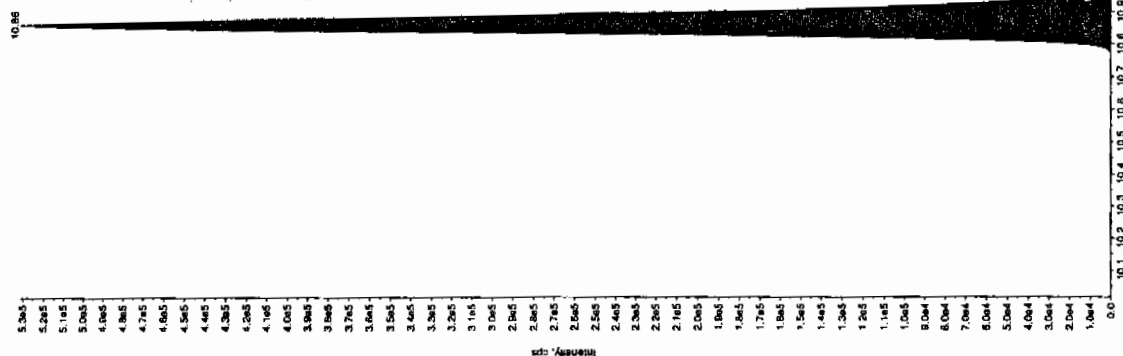
Sample Name: "WXX100222-27C01" Sample ID: "JLEP" File: "EX02220013.wif"
 Peak Name: "bis(2-chloroethyl) phosphite" Mass(es): 305.1/91.0 amu
 Comment: "LONISER_C" Annotation: "

Sample Index: 1

Sample Type: 100
 Calculated Conc: 102 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 8:10:21 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 10.9 min
 Area: 2.20e+006 counts
 Height: 510816.833 cps
 Start Time: 10.8 min
 End Time: 11.2 min



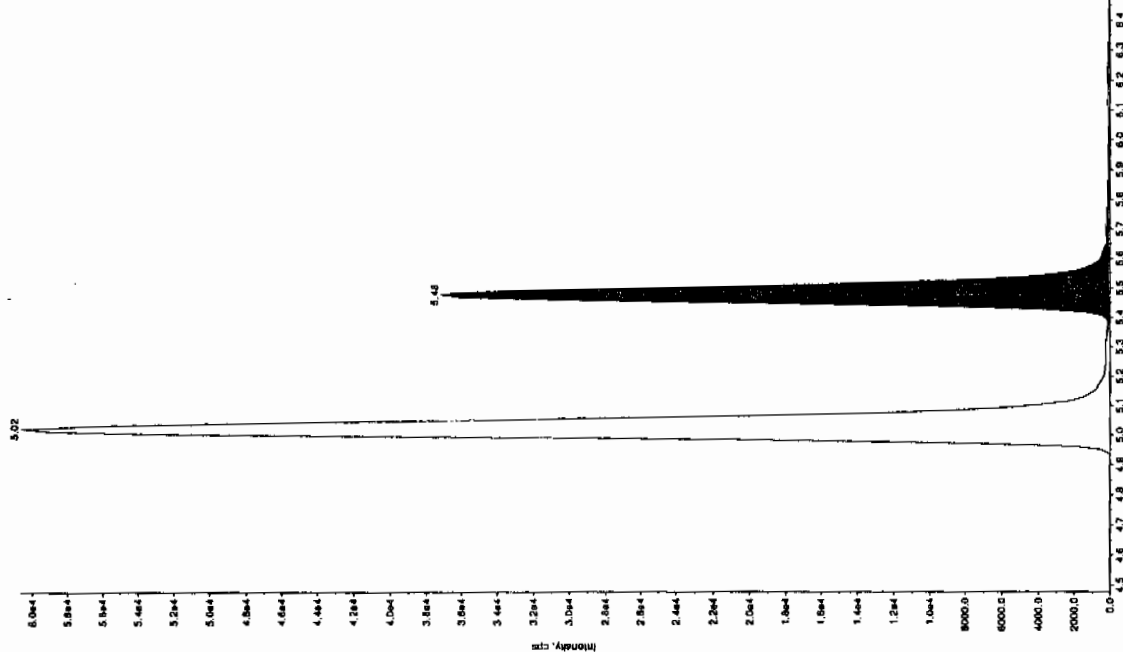
Sample Name: "WXX100222-27C01" Sample ID: "JLEP" File: "EX02220013.wif"
 Peak Name: "24-Diamino-5-nitroindole" Mass(es): 166.0/46.0 amu
 Comment: "LONISER_C" Annotation: "

Sample Index: 1

Sample Type: 100
 Calculated Conc: 144 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 8:10:21 PM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 5.42 min
 Use Relative RT: No

Int. Type: Valley
 Retention Time: 5.42 min
 Area: 1.61e+005 counts
 Height: 37082.959 cps
 Start Time: 5.37 min
 End Time: 5.83 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02220024.wiff

Analysis Date: 22-FEB-10 23:03

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	608	122	
2,6-Diamino-4-nitrotoluene	500	589	118	
3,4-Dinitrotoluene	250	240	96	
3,5-Dinitroaniline	500	502	100	
TATB	500	434	87	
tris(o-cresyl) phosphate	500	474	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Sample Name: "WXX100222-260V" Sample ID: "11LER" File: "EXS02220024.wif"

Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1

Sample Type: QC

Concentration: 500. ng/mL

Calculated Conc: 2/22/2010

Acq. Date: 11:03:13 PM

Acq. Time: 11:03:13 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.22 min

Use Relative RT: No

Int. Type: Valley

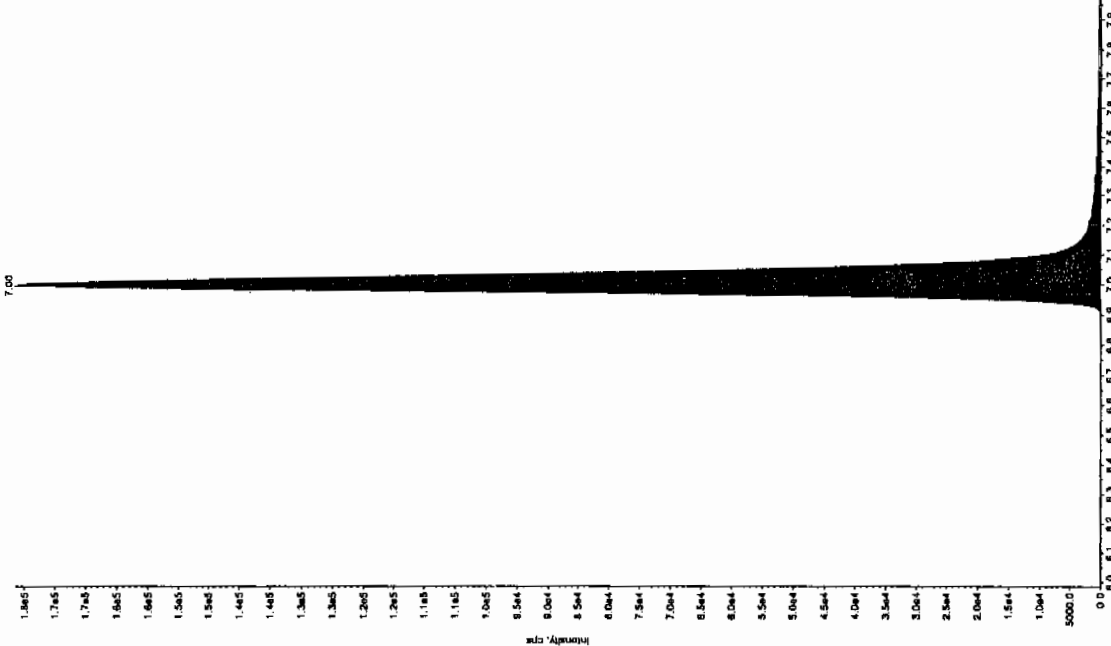
Retention Time: 8.23 min

Area: 3.66e+006 counts

Height: 888949.829 cps

Start Time: 8.13 min

End Time: 8.33 min



Sample Name: "WXX100222-260V" Sample ID: "11LER" File: "EXS02220024.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1

Sample Type: QC

Concentration: 434. ng/mL

Calculated Conc: 2/22/2010

Acq. Date: 11:03:13 PM

Acq. Time: 11:03:13 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.99 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 7.00 min

Area: 8.29e+005 counts

Height: 176079.164 cps

Start Time: 6.89 min

End Time: 7.09 min

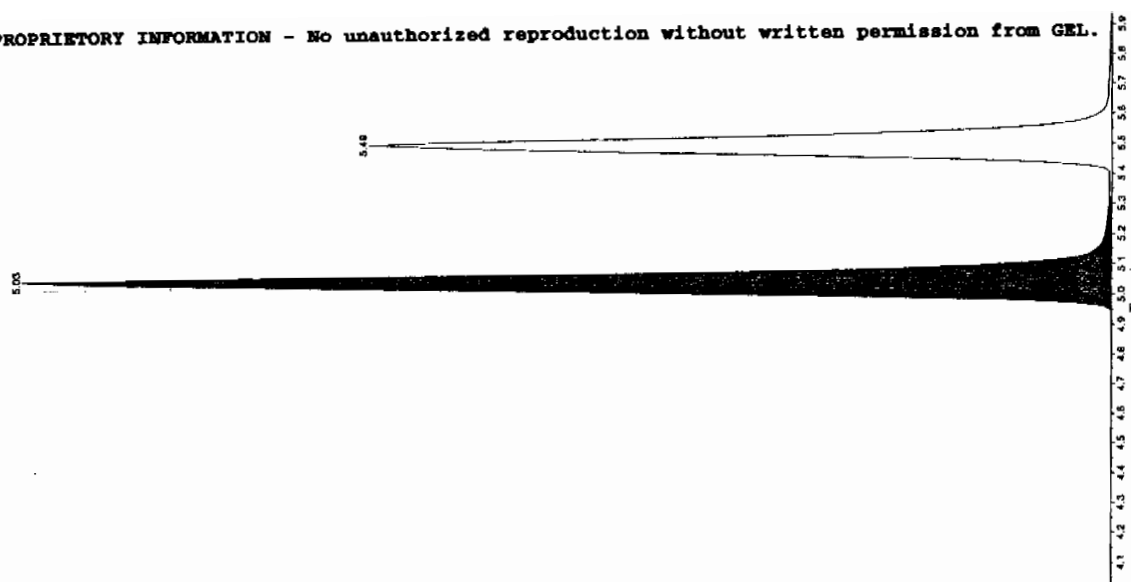
4/11/10 12:31/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100222-260CV" Sample ID: "111ER" File: "EX02220024.wif"
 Peak Name: "26-Diaming-4-nitrofluorene" Mass(es): "166.046 0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 1
 Concentration: 500 ng/mL
 Calculated Conc: 589 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 11:03:13 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.03 min
 Area: 1.12e+006 counts
 Height: 280152.069 cps
 Start Time: 4.92 min
 End Time: 5.12 min

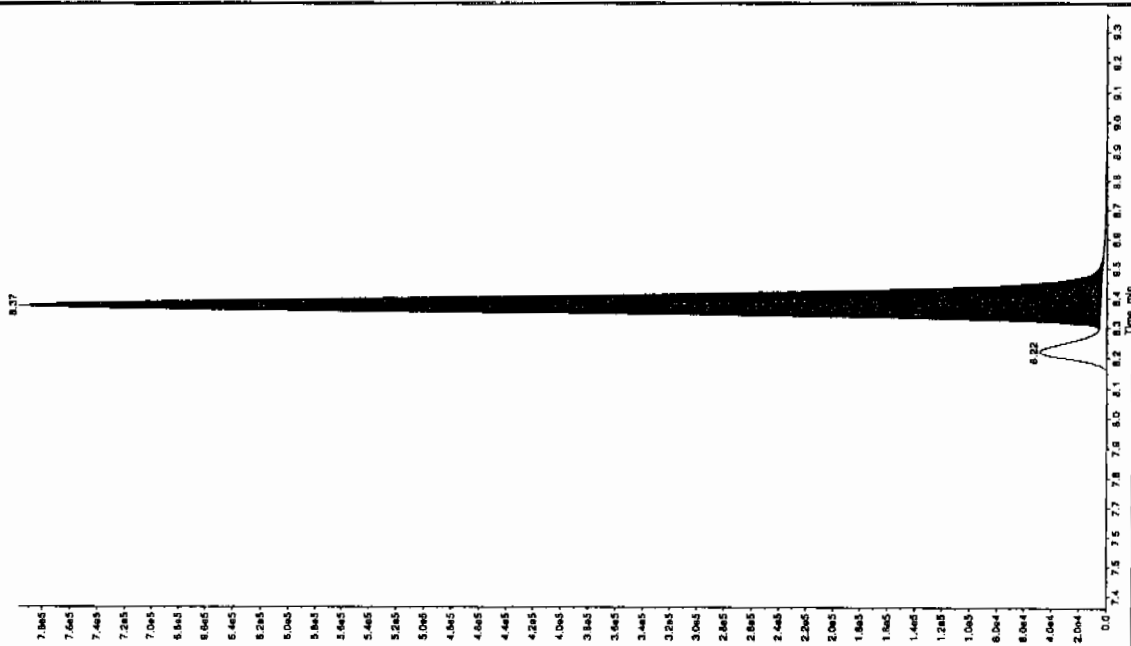
Intensity, cps



Sample Name: "WXX100222-260CV" Sample ID: "111ER" File: "EX02220024.wif"
 Peak Name: "26-Diaming-4-nitrofluorene" Mass(es): "162.1131 8 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 1
 Concentration: 253 ng/mL
 Calculated Conc: 240 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 11:03:13 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 3.21e+005 counts
 Height: 793470.642 cps
 Start Time: 8.30 min
 End Time: 8.60 min

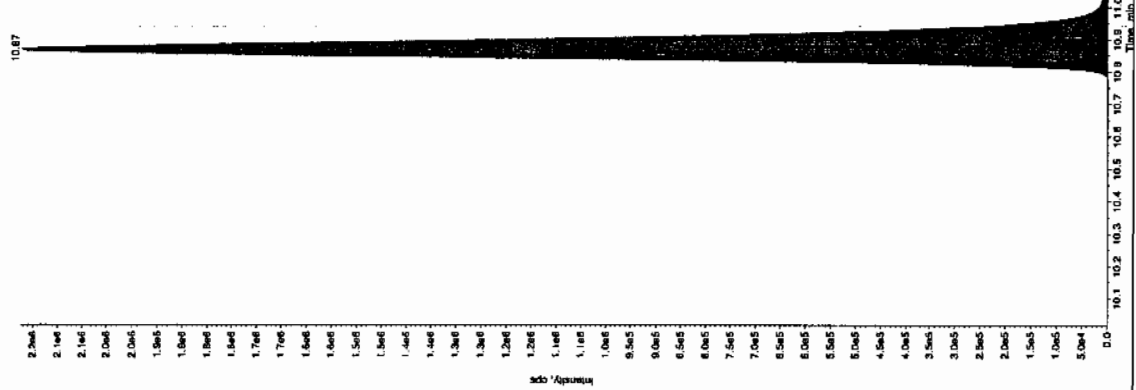
Intensity, cps



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

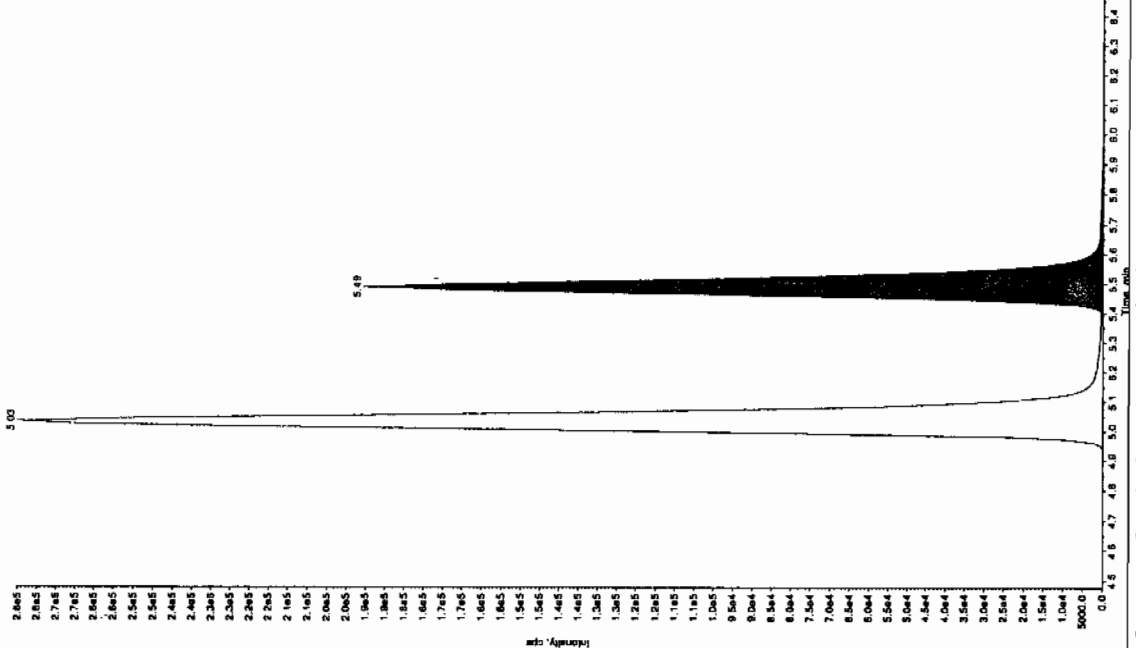
Sample Name: "WXX10022-260V" Sample ID: "HLER" File: "EXS0220024.wif"
 Peak Name: "24-Diamino-5-nitrothiophene" Mass(es): "369.1/91.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 478 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 11:03:13 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 9.50e+006 counts
 Height: 2173984.131 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX10022-260V" Sample ID: "HLER" File: "EXS0220024.wif"
 Peak Name: "24-Diamino-5-nitrothiophene" Mass(es): "166.0/46.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 608 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 11:03:13 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.49 min
 Area: 7.64e+005 counts
 Height: 190631.074 cps
 Start Time: 5.36 min
 End Time: 5.63 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02220026.wiff

Analysis Date: 22-FEB-10 23:34

LCMSMS ID: 1358

Column ID: JSphere QDS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	47.3	95	
3,5-Dinitroaniline	100	103	103	
TATB	100	87.6	88	
tris(o-cresyl) phosphate	100	99.4	99	
2,4-Diamino-6-nitrotoluene	100	125	125	

Recovery Limits:

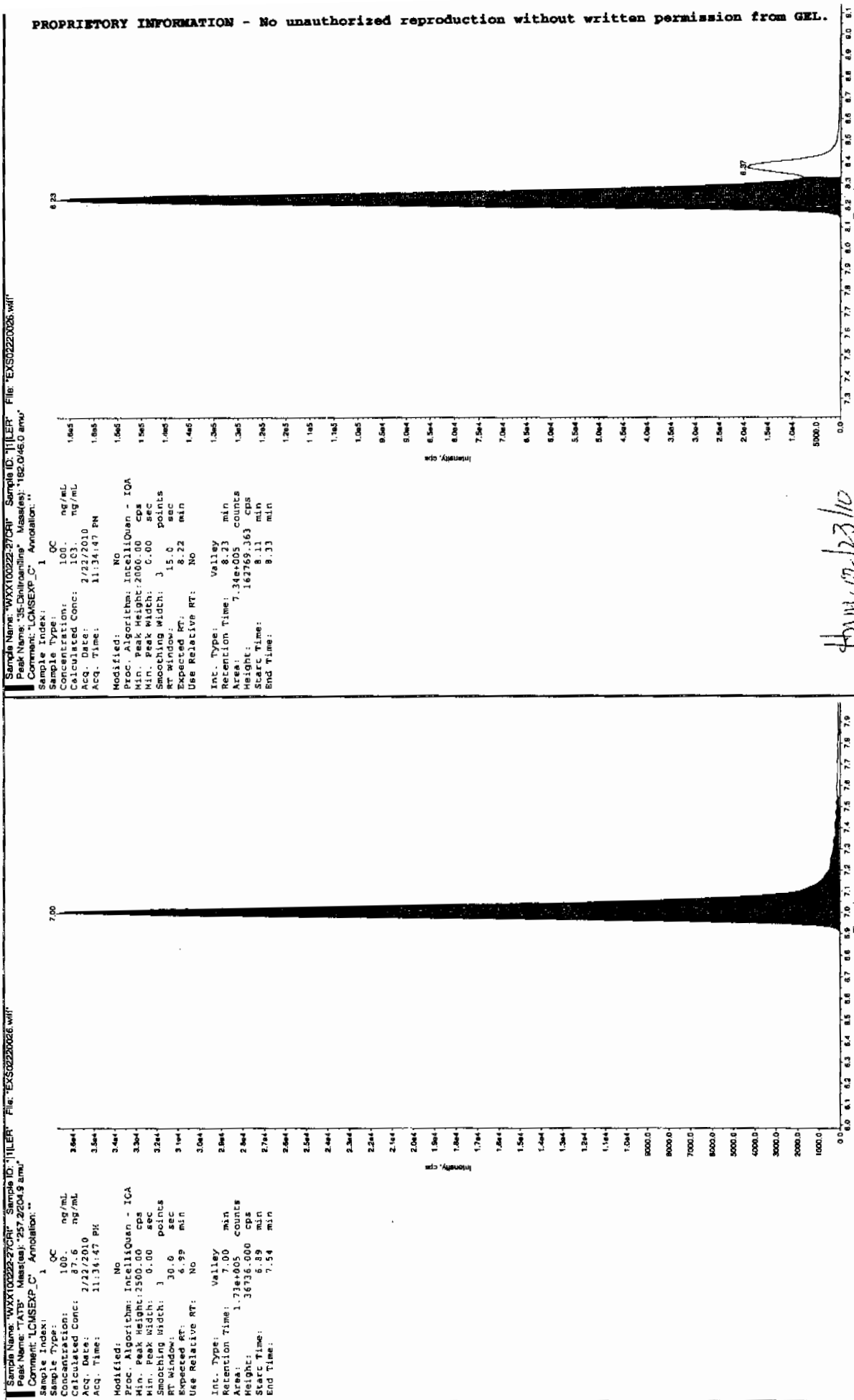
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Jan 2/23/10

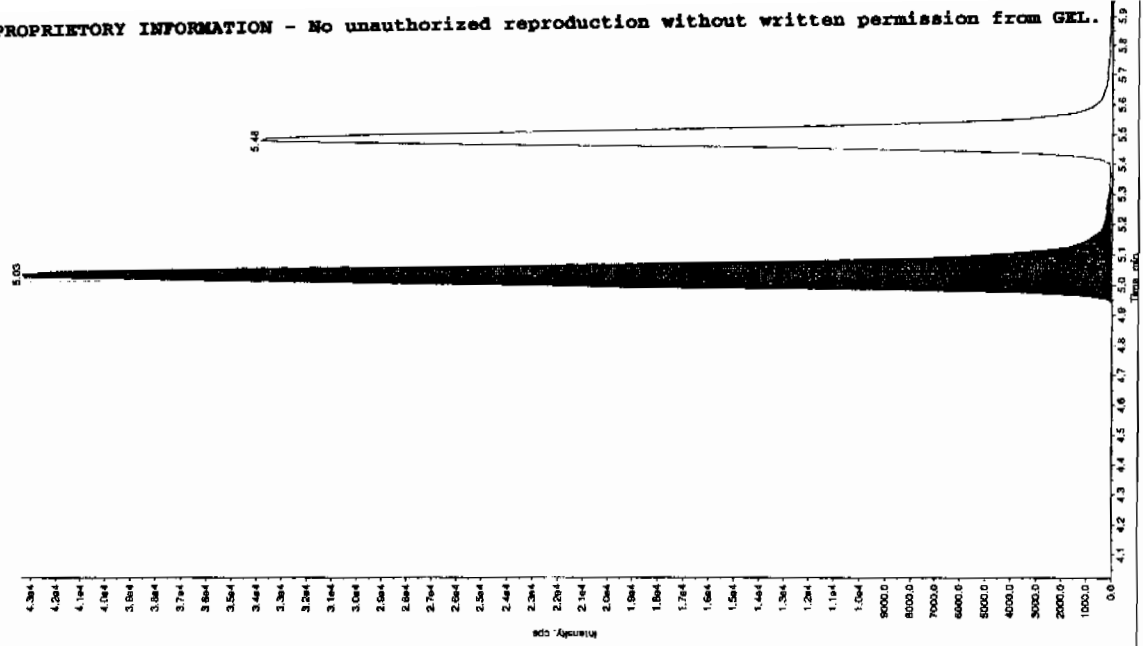


Jan 2/23/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

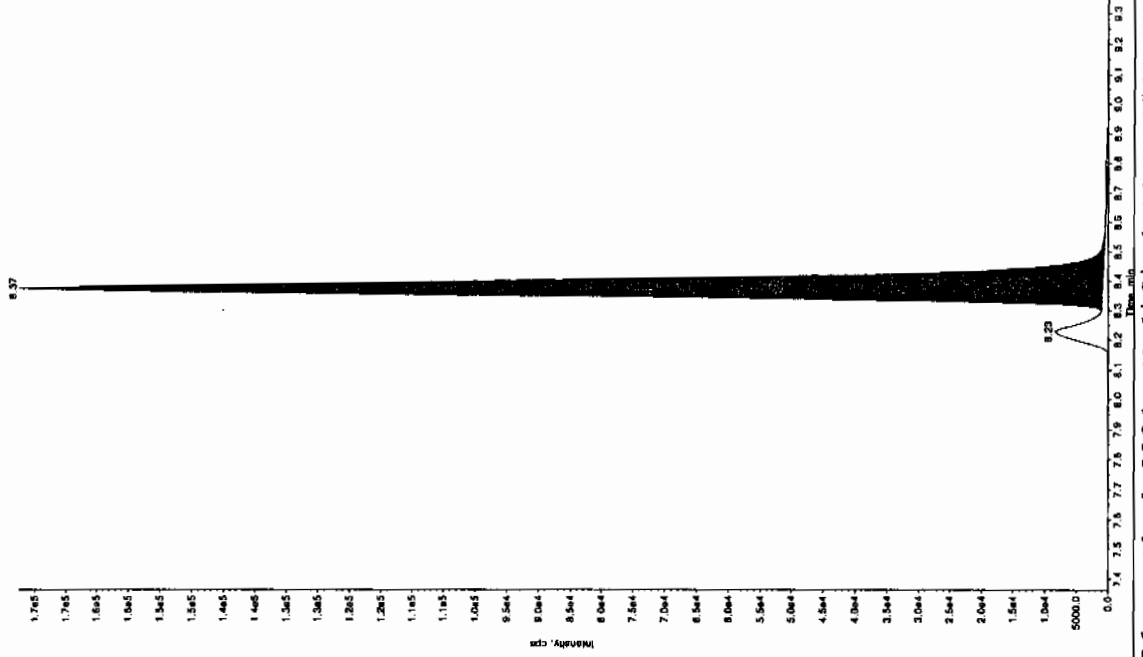
Sample Name: "WXX100222-27CR1" Sample ID: "11ER" File: "EX502220026.will"
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.04650 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: OC
Concentration: 100. ng/mL
Calculated Conc: 106. ng/mL
Acq. Date: 2/22/2010
Acq. Time: 11:34:47 PM
Modified: No
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 450.00 cps
Min. Peak Width: 0.00 sec
Smoother Width: 3.00 points
RT Window: 30.0 sec
Expected RT: 5.02 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 5.03 min
Area: 2.02e+005 counts
Height: 4339.493 cps
Start Time: 4.91 min
End Time: 5.32 min



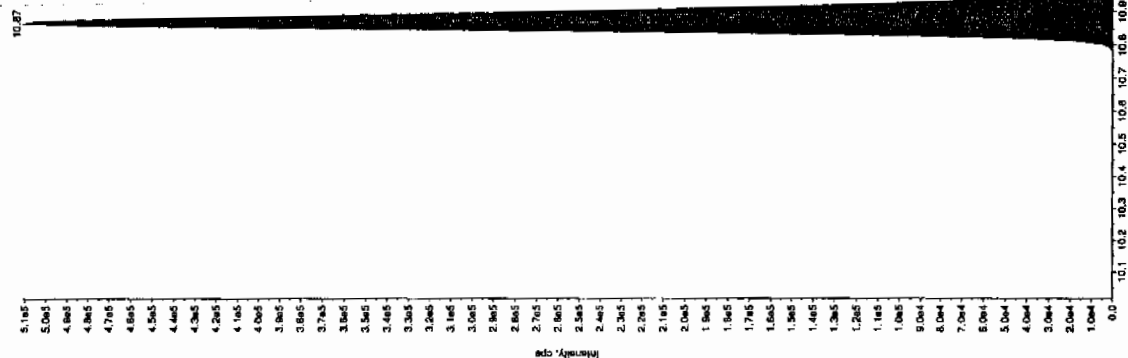
Sample Name: "WXX100222-27CR1" Sample ID: "11ER" File: "EX502220026.will"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.11519 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: OC
Concentration: 50.0 ng/mL
Calculated Conc: 47.3 ng/mL
Acq. Date: 2/22/2010
Acq. Time: 11:34:47 PM
Modified: No
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 1450.00 cps
Min. Peak Width: 0.00 sec
Smoother Width: 3.00 points
RT Window: 15.0 sec
Expected RT: 8.36 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.37 min
Area: 6.48e+005 counts
Height: 171754.425 cps
Start Time: 8.30 min
End Time: 8.57 min



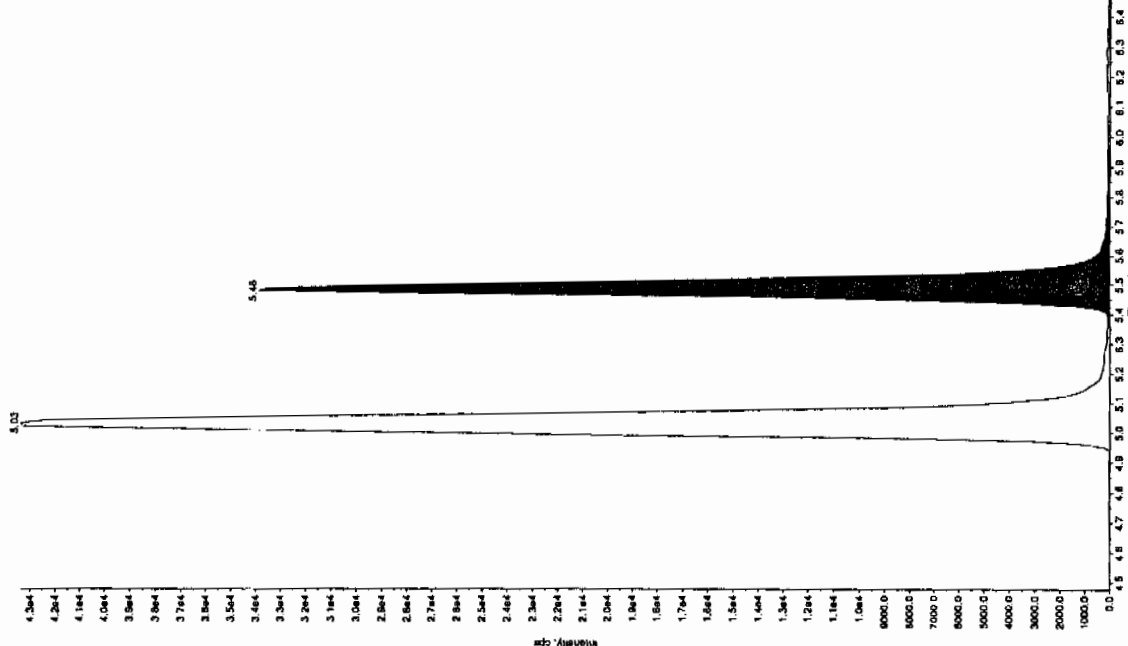
Sample Name: WXX100222-27C01 Sample ID: 111ER File: EXS0220026.will
 Peak Name: '111(0-0505) phosphite' Mass(es): '363.181.0 amu'
 Comment: 'LCMSEXP_C' Annotation: ''

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 99.4 ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 11:34:47 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Exp. Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 2.15e+006 counts
 Height: 510783.722 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: WXX100222-27C01 Sample ID: 111ER File: EXS0220026.will
 Peak Name: '24-Dinitro-6-nitrotoluene' Mass(es): '166.046.0 amu'
 Comment: 'LCMSEXP_C' Annotation: ''

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 125. ng/mL
 Acq. Date: 2/22/2010
 Acq. Time: 11:34:47 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Exp. Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.48 min
 Area: 1.16e+005 counts
 Height: 33829.556 cps
 Start Time: 5.36 min
 End Time: 5.67 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02220037.wiff

Analysis Date: 23-FEB-10 02:27

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	599	120	
2,6-Diamino-4-nitrotoluene	500	568	114	
3,4-Dinitrotoluene	250	263	105	
3,5-Dinitroaniline	500	547	109	
TATB	500	445	89	
tris(o-cresyl) phosphate	500	485	97	

Recovery Limits:

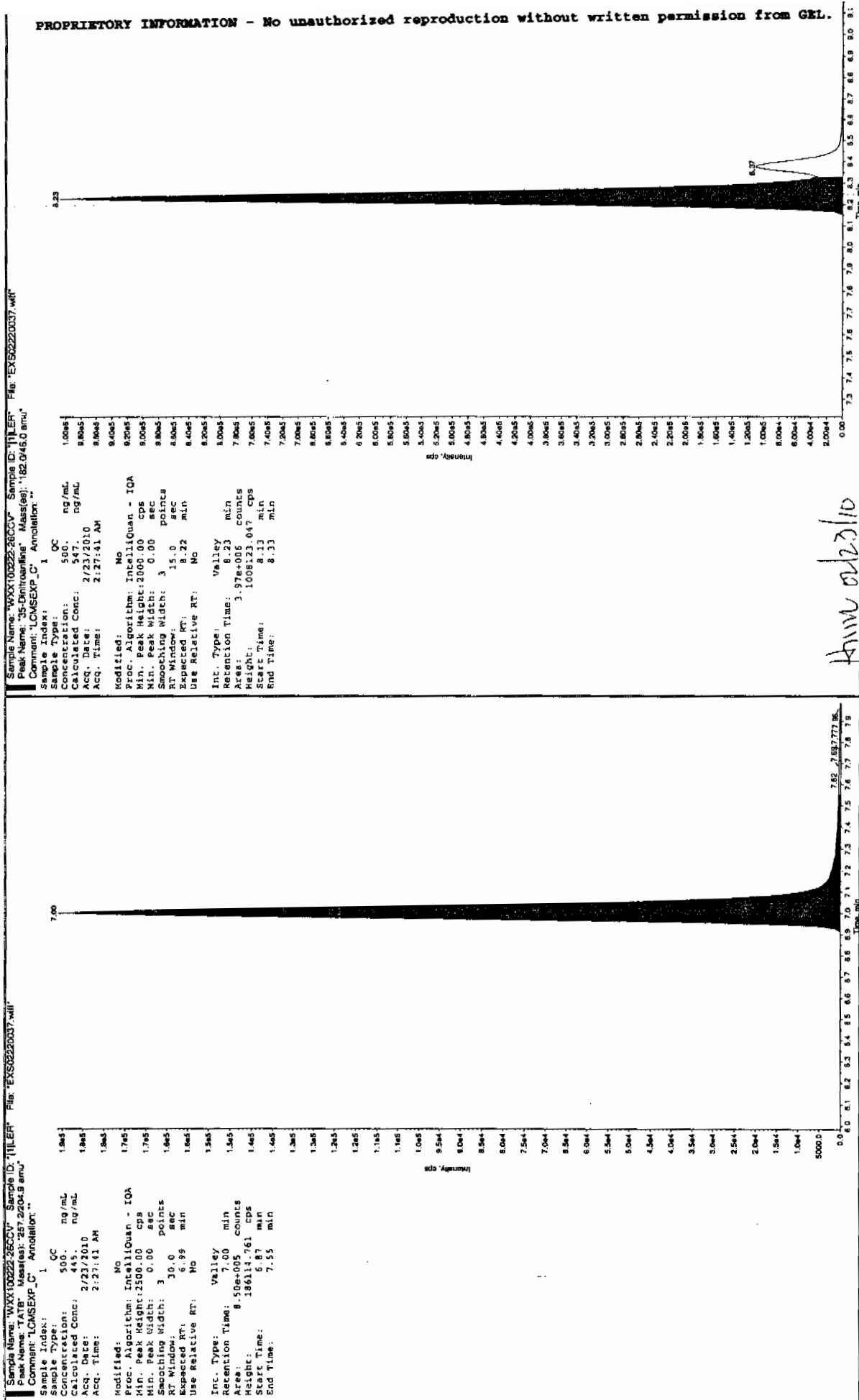
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Ken 2/23/10

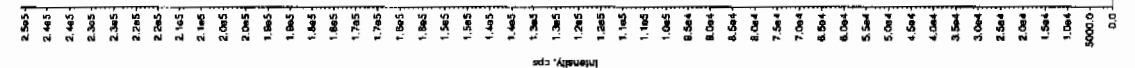


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Ken 2/23/10

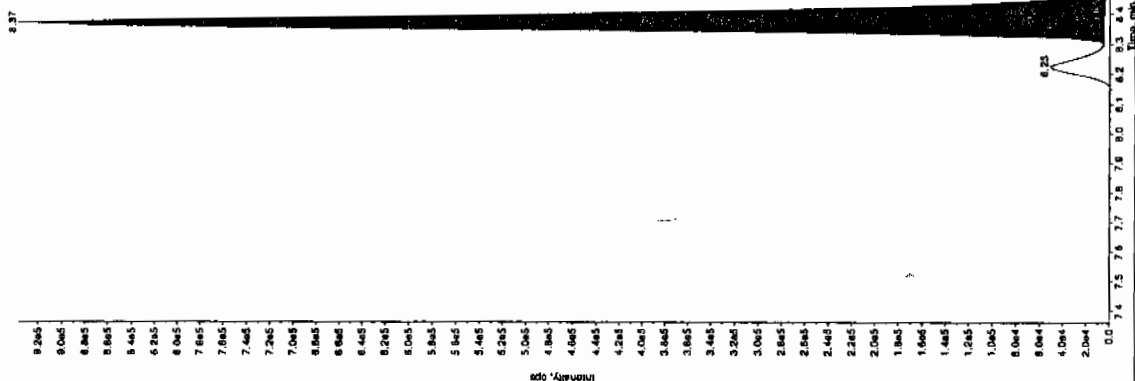
Sample Name: WXX10022-260V Sample ID: 111ER File: EX50220037.wif
 Peak Name: 26-Diamino-4-nitrotoluene Mass(es): 166.046.0 amu
 Comment: LCMSEXP_C Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 500. ng/mL
 Calculated Conc: 568. ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 2:27:41 AM
 Modified: No
 Proc. Algorithm: InCellQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.03 min
 Area: 1.08e+006 counts
 Height: 245930.420 cps
 Start Time: 4.92 min
 End Time: 5.32 min



Sample Name: WXX10022-260V Sample ID: 111ER File: EX50220037.wif
 Peak Name: 34-Chlorotoluene Mass(es): 182.151.8 amu
 Comment: LCMSEXP_C Annotation: "

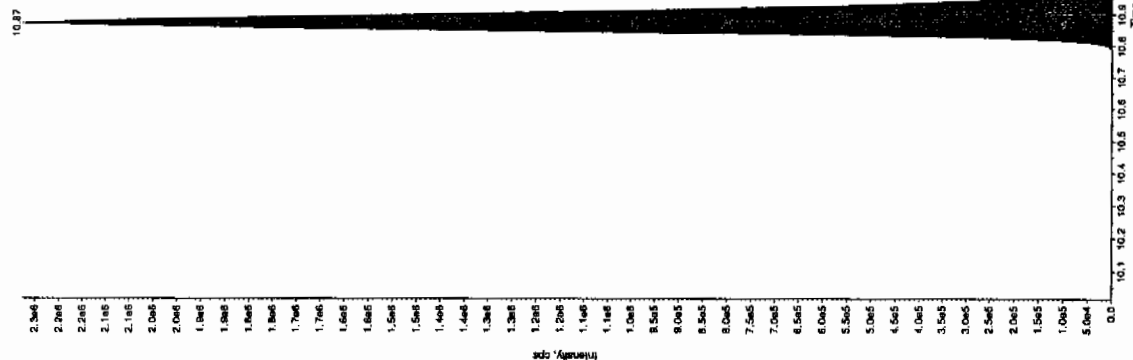
Sample Index: 1
 Sample Type: OC
 Concentration: 250. ng/mL
 Calculated Conc: 283. ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 2:27:41 AM
 Modified: No
 Proc. Algorithm: InCellQuan - IOA
 Min. Peak Height: 146.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.00 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 3.49e+006 counts
 Height: 93301.006 cps
 Start Time: 8.30 min
 End Time: 8.59 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

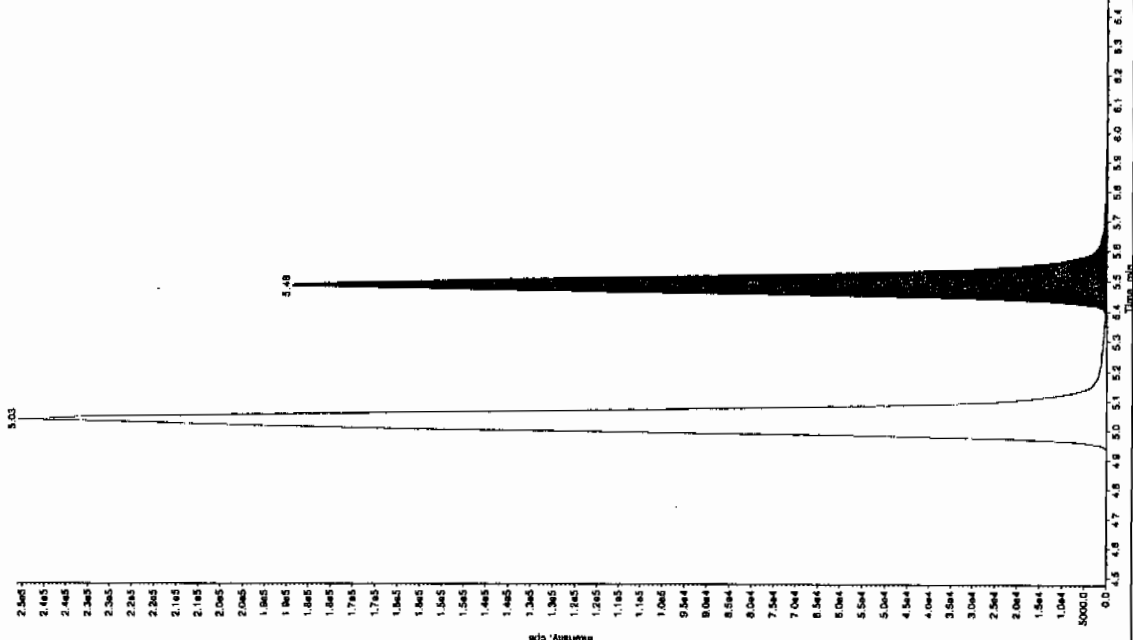
Sample Name: "WXX100222-26CCV" Sample ID: "11LRF" File: "EXS0220037.wif"
 Peak Name: "1,3-bis(4-chlorophenyl) phosphine" Mass(es): "368.1/91.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 485. ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 2:27:41 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 5000.00 cps
 Min. Peak Width: 3.00 points
 Smoothing Width: 30.0 sec
 RT Window: 10.9 min
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 9.71e+006 counts
 Height: 2276301.025 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX100222-26CCV" Sample ID: "11LRF" File: "EXS0220037.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 339.010 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 2:27:41 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.48 min
 Area: 7.33e+005 counts
 Height: 181671.036 cps
 Start Time: 5.38 min
 End Time: 5.64 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02220039.wiff

Analysis Date: 23-FEB-10 02:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	120	120	
2,6-Diamino-4-nitrotoluene	100	125	125	
3,4-Dinitrotoluene	50	53.4	107	
3,5-Dinitroaniline	100	114	114	
TATB	100	91.3	91	
tris(o-cresyl) phosphate	100	103	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

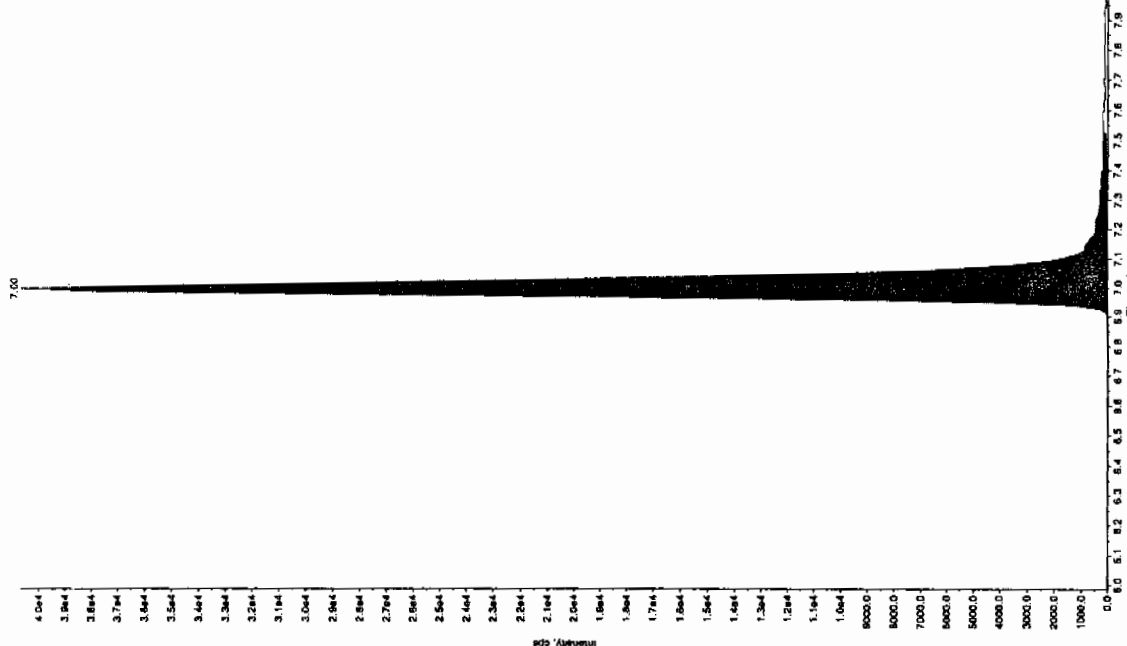
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 2/23/10

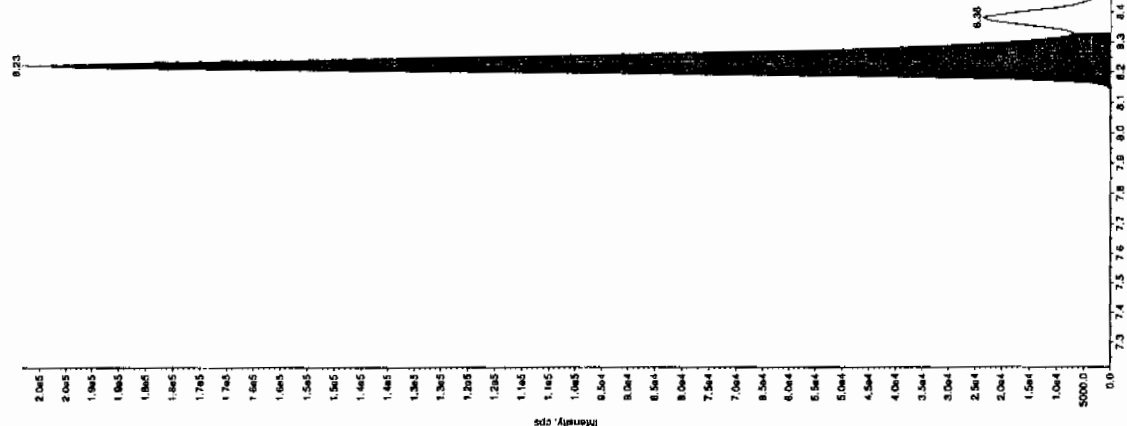
Sample Name: WXX100222-27CR1 Sample ID: 111ER File: EX502220038.wif
Peak Name: TATE Mass(es): 257.2024.9 amu
Comment: LCMSEXP_C Annotation:

Sample Index: 1 QC
Concentration: 100. ng/mL
Calculated Conc: 91.3 ng/mL
Acq. Date: 2/23/2010
Acq. Time: 2:59:14 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 3.00 points
Smoothing Width: 3.00 points
RT Window: 30.0 sec
Expected RT: 6.99 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 7.00 min
Area: 1.80e+005 counts
Height: 40684.280 cps
Start Time: 6.85 min
End Time: 7.52 min



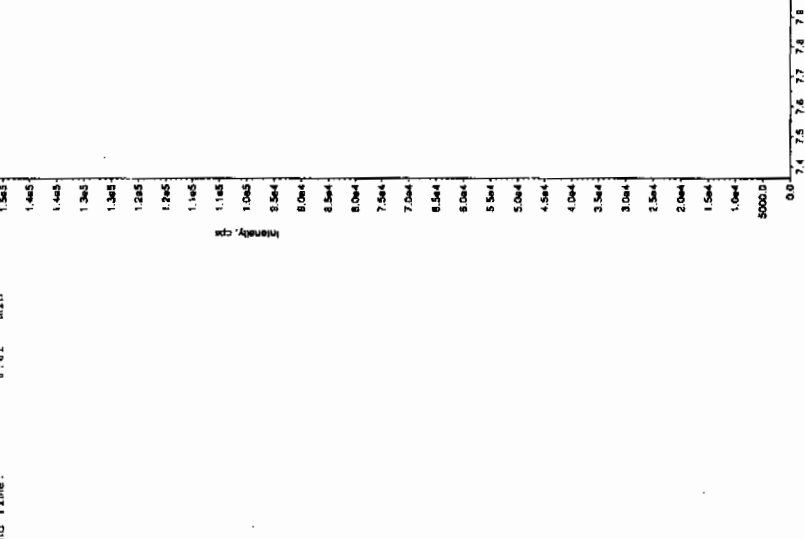
Sample Name: WXX100222-27CR1 Sample ID: 111ER File: EX502220038.wif
Peak Name: 35-Dinitroaniline Mass(es): 182.046.0 amu
Comment: LCMSEXP_C Annotation:

Sample Index: 1 QC
Concentration: 100. ng/mL
Calculated Conc: 114. ng/mL
Acq. Date: 2/23/2010
Acq. Time: 2:59:14 AM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 3.00 points
Smoothing Width: 3.00 points
RT Window: 35.0 sec
Expected RT: 8.22 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.23 min
Area: 8.18e+005 counts
Height: 203416.280 cps
Start Time: 8.12 min
End Time: 8.33 min



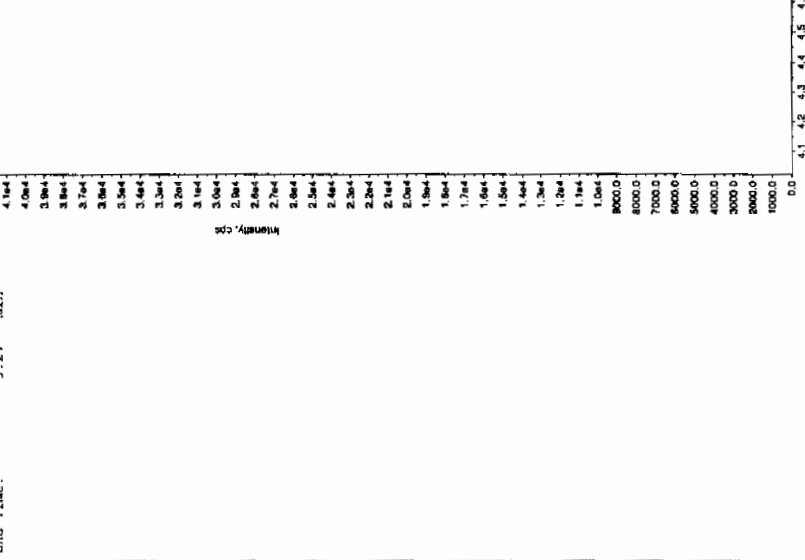
Sample Name: "WXX10022-2701" Sample ID: "111ER" File: "EXS0220038.wif"
 Peak Name: "34-Dihydroquinone" Mass(es): "182.1/151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 53.4 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 2:59:14 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 7.31±0.05 min
 Area: 19528.600 counts
 Height: 1545
 Start Time: 8.30 min
 End Time: 8.41 min



Sample Name: "WXX10022-2701" Sample ID: "111ER" File: "EXS0220038.wif"
 Peak Name: "26-Diamino-4-nitrophenol" Mass(es): "166.0/66.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 125. ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 2:59:14 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 2.37e+005 counts
 Height: 56829.735 cps
 Start Time: 4.92 min
 End Time: 5.27 min



Sample Name: WXX10022-270R Sample ID: J1LER File: EXS0220039.wif

Peak Name: Tris(2-crenol) phosphate Mass(es): 359.1791.0 amu

Comment: LCMSXP_C Annotate: "

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 103. ng/mL

Acq. Date: 2/27/2010

Acq. Time: 2:59:14 AM

Modified: No

Proc. Algorithm: IntelliQuan - ICA

Min. Peak Height: 8000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 10.9 min

Use Relative RT: No

Int. Type: Valley

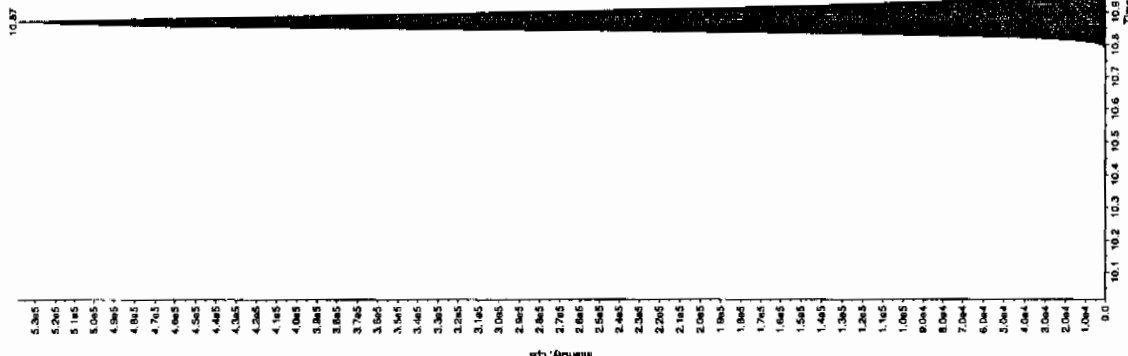
Retention Time: 10.9 min

Area: 2.23e+006 counts

Height: 53822.603 cps

Start Time: 10.8 min

End Time: 11.2 min



Sample Name: WXX10022-270R Sample ID: J1LER File: EXS0220039.wif

Peak Name: 24-Dienino-6-nitroolene Mass(es): 165.046.0 amu

Comment: LCMSXP_C Annotate: "

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 103. ng/mL

Acq. Date: 2/27/2010

Acq. Time: 2:59:14 AM

Modified: No

Proc. Algorithm: IntelliQuan - ICA

Min. Peak Height: 350.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 5.48 min

Use Relative RT: No

Int. Type: Valley

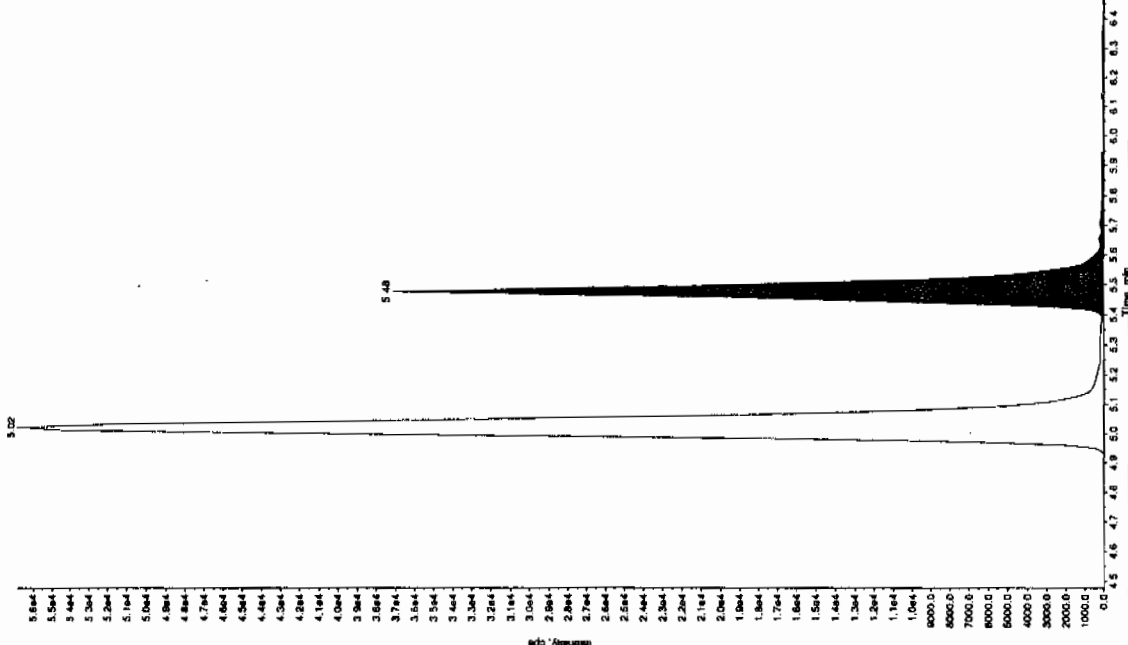
Retention Time: 5.48 min

Area: 1.29e+005 counts

Height: 37130.470 cps

Start Time: 5.38 min

End Time: 5.85 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02220050.wiff

Analysis Date: 23-FEB-10 05:52

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	590	118	
2,6-Diamino-4-nitrotoluene	500	623	125	
3,4-Dinitrotoluene	250	250	100	
3,5-Dinitroaniline	500	530	106	
TATB	500	448	90	
tris(o-cresyl) phosphate	500	493	99	

Recovery Limits:

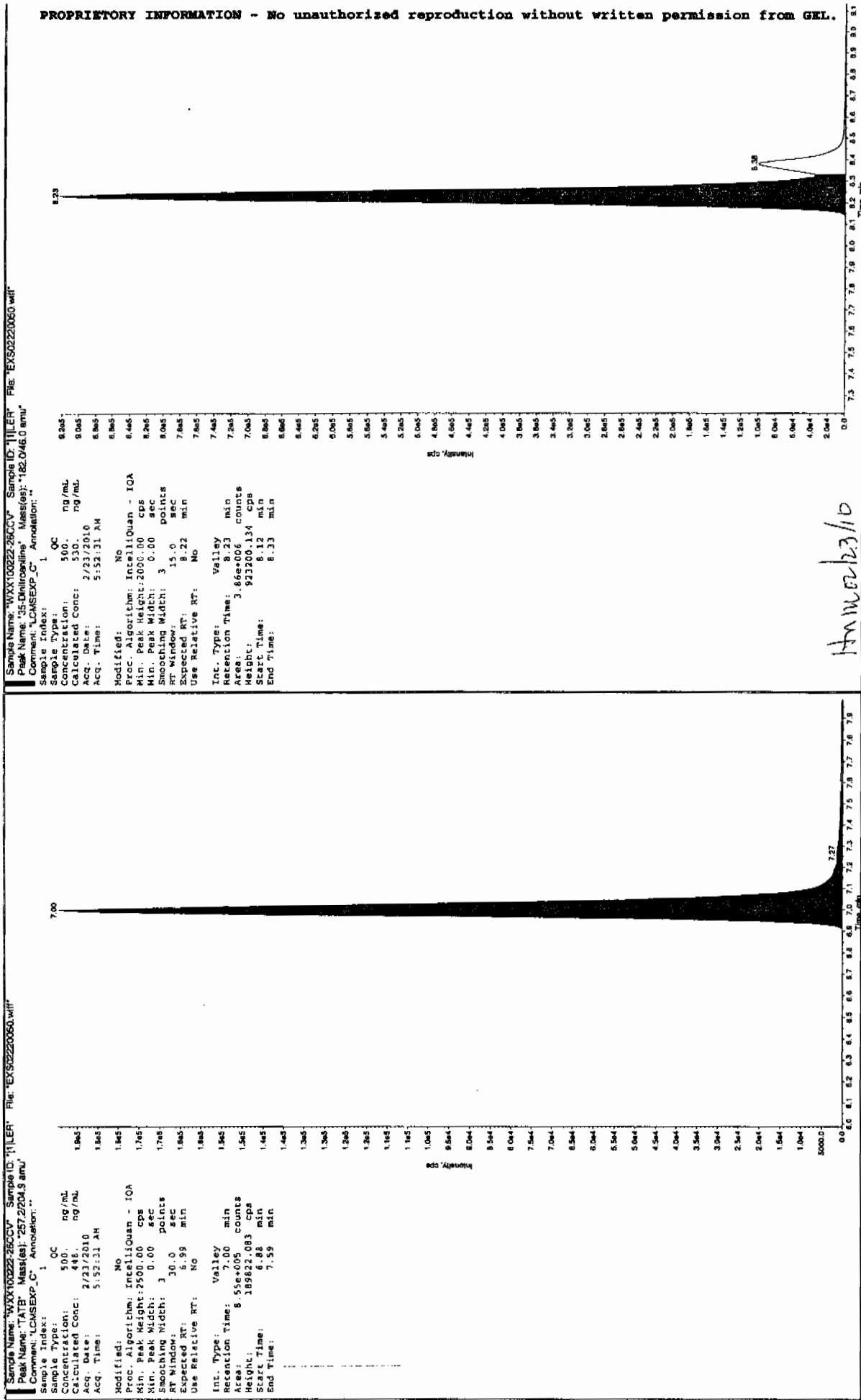
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

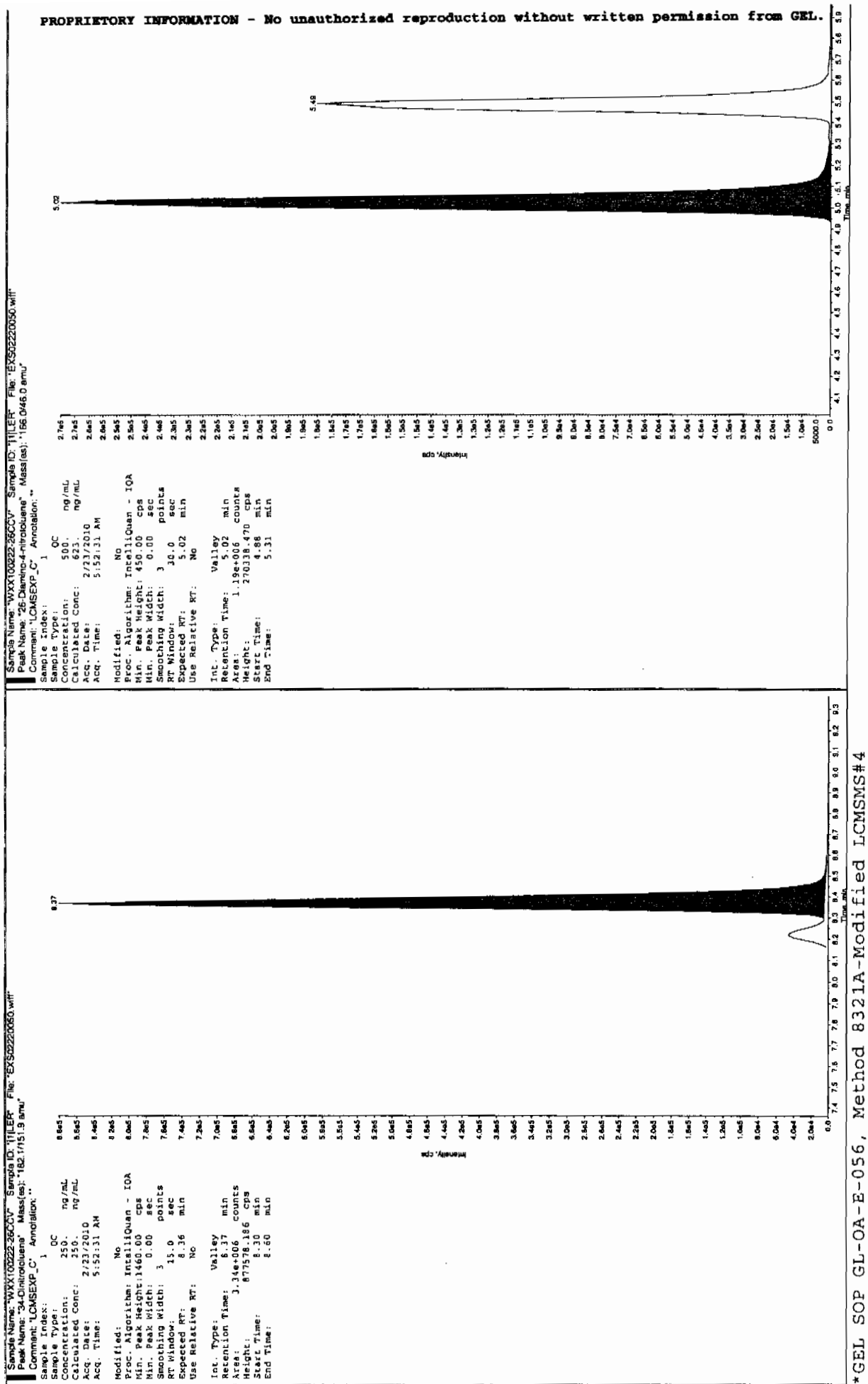
* Value outside of Recovery Limits

Jan 21/23/10



Jan 21/23/10

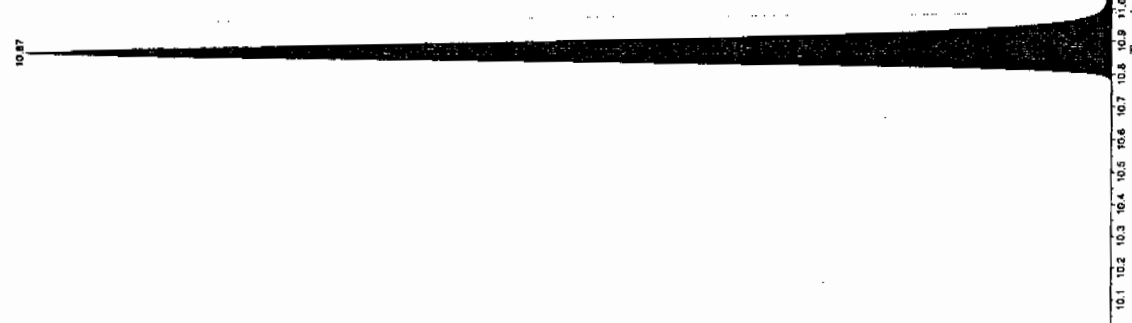
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

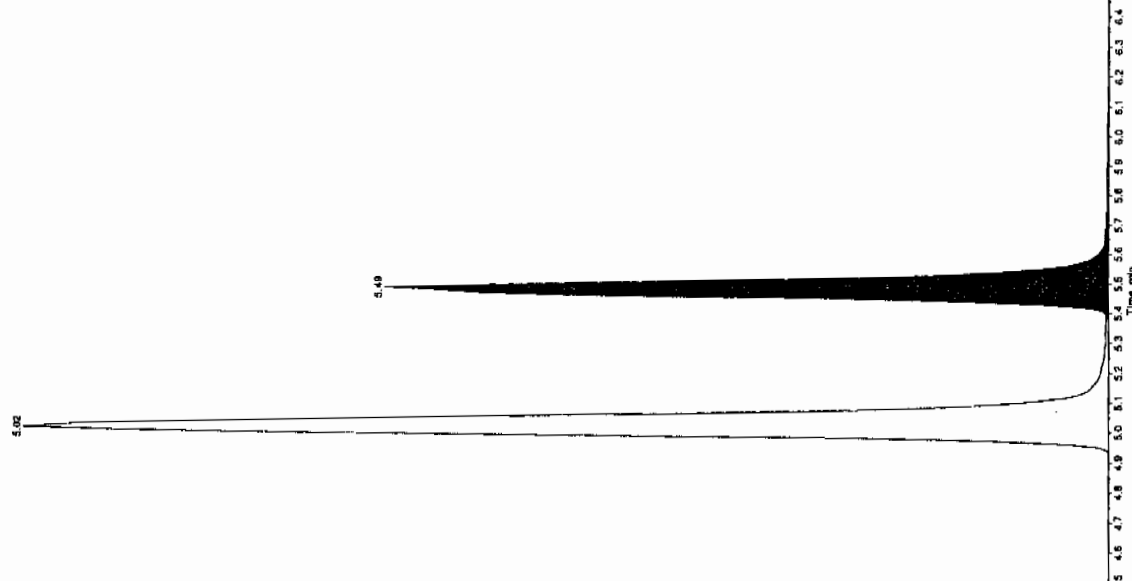
Sample Name: "WXX100222-260CV" Sample ID: "JLIER" File: "EXS0220050.wif"
 Peak Name: "bis(4-chlorophenyl) phosphine" Mass(es): "369.191.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 493. ng/mL
 Acq. Date: 7/23/2010
 Acq. Time: 5:52:31 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 9.86e+006 counts
 Height: 2315829.346 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX100222-260CV" Sample ID: "JLIER" File: "EXS0220050.wif"
 Peak Name: "24-Diamino-6-nitrocouens" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 510. ng/mL
 Acq. Date: 7/23/2010
 Acq. Time: 5:52:31 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.49 min
 Area: 7.42e+005 counts
 Height: 180096.237 cps
 Start Time: 5.38 min
 End Time: 5.79 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02220052.wiff

Analysis Date: 23-FEB-10 06:24

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	129	129	
2,6-Diamino-4-nitrotoluene	100	140	140	
3,4-Dinitrotoluene	50	50.5	101	
3,5-Dinitroaniline	100	111	111	
TATB	100	95.9	96	
tris(o-cresyl) phosphate	100	107	107	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Jan 2/23/10

Sample Name: "WXX100222-2701" Sample ID: "111ER" File: "EXSD2220052.wif"

Peak Name: "35-Dinitrophenol" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC

Concentration: 100. ng/mL

Calculated Conc: 111. ng/mL

Acq. Date: 2/23/2010

Acq. Time: 6:24:05 AM

Modified: Yes

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.21 min

Use Relative RT: No

Int. Type: Valley

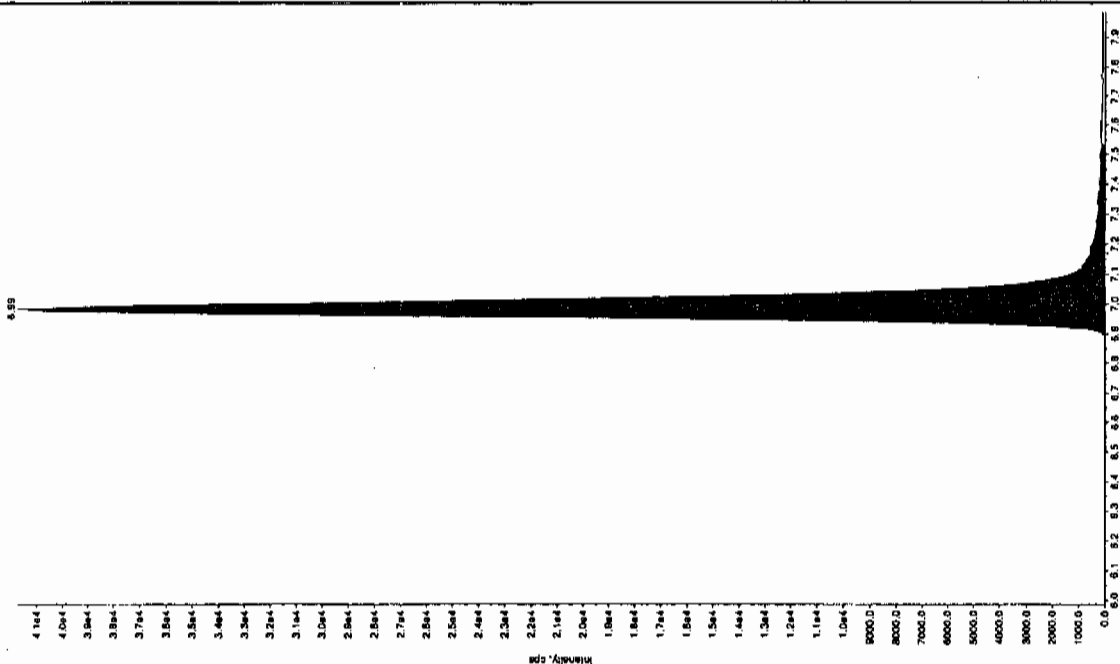
Retention Time: 8.21 min

Area: 7.89e+005 counts

Height: 184727.554 cps

Start Time: 8.11 min

End Time: 8.32 min

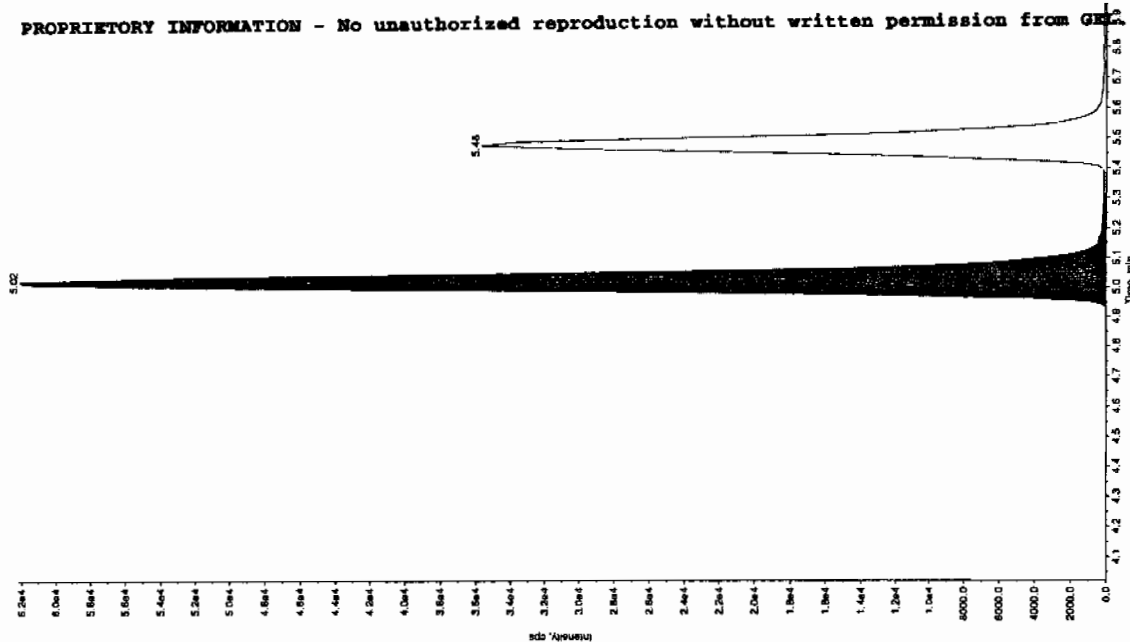


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Jan 2/23/10

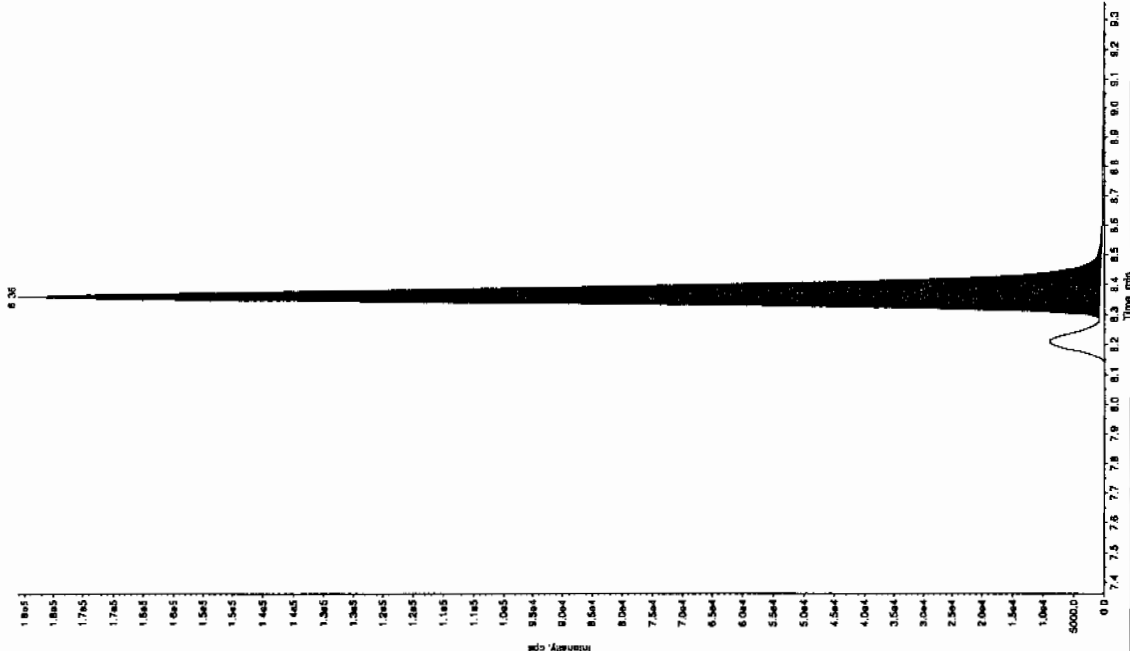
Sample Name: "XXX100222-2709" Sample ID: "JILLER" File: "EXS02220032.wll"
 Peak Name: "25-Dimethylnitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 2/23/2010 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 6:24:05 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 2.66e+005 counts
 Height: 62152.336 cps
 Start Time: 4.36 min
 End Time: 5.31 min



Sample Name: "XXX100222-2709" Sample ID: "JILLER" File: "EXS02220032.wll"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_C" Annotation: "

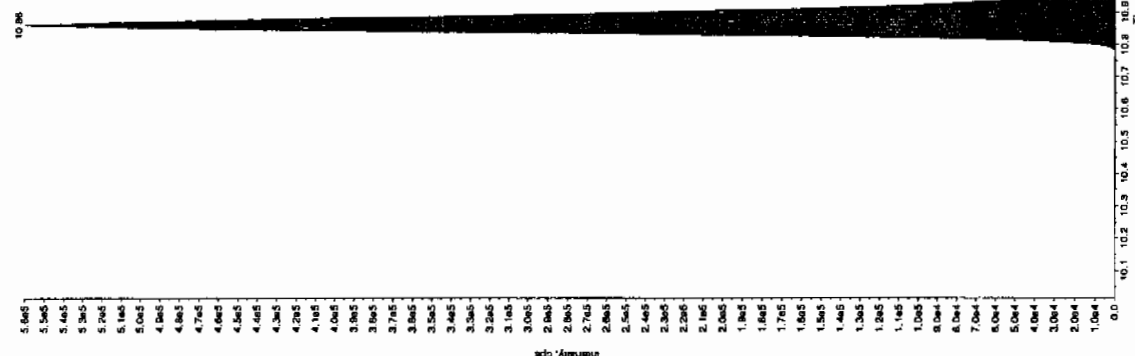
Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 50.0 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 6:24:05 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.36 min
 Area: 6.92e+005 counts
 Height: 180337.654 cps
 Start Time: 7.76 min
 End Time: 8.66 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

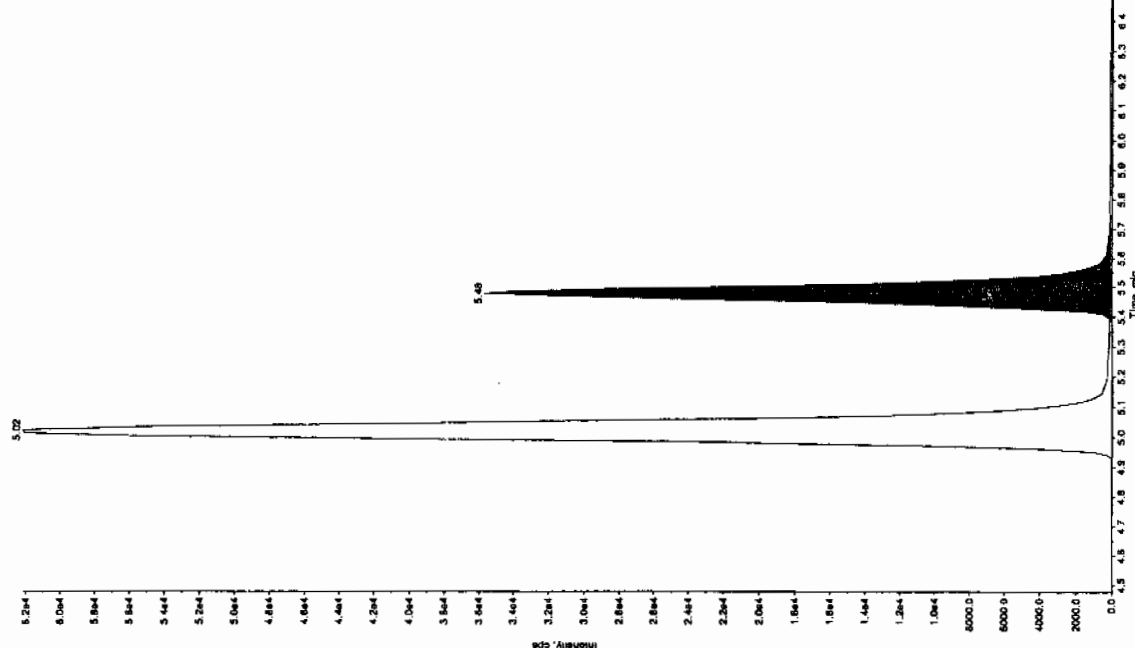
Sample Name: "WXX100222-27CR" Sample ID: "JILER" File: "EXS0220052.wif"
 Peak Name: "Tri(o-cresyl) phosphate" Mass(es): "385.1/91.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: 100
 Concentration: 100 ng/mL
 Calculated Conc: 100 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 6:24:05 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 10.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 2.31e+006 counts
 Height: 56037.781 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX100222-27CR" Sample ID: "JILER" File: "EXS0220052.wif"
 Peak Name: "24-Dinitro-6-nitrotoluene" Mass(es): "186.0/45.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: 100
 Concentration: 128 ng/mL
 Calculated Conc: 128 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 6:24:05 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.48 min
 Area: 1.41e+005 counts
 Height: 35624.271 cps
 Start Time: 5.38 min
 End Time: 5.74 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02240013.wiff

Analysis Date: 24-FEB-10 13:06

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	91.3	91	
2,6-Diamino-4-nitrotoluene	100	99	99	
3,4-Dinitrotoluene	50	46.6	93	
3,5-Dinitroaniline	100	96.6	97	
TATB	100	102	102	
tris(o-cresyl) phosphate	100	98.6	99	

Recovery Limits:

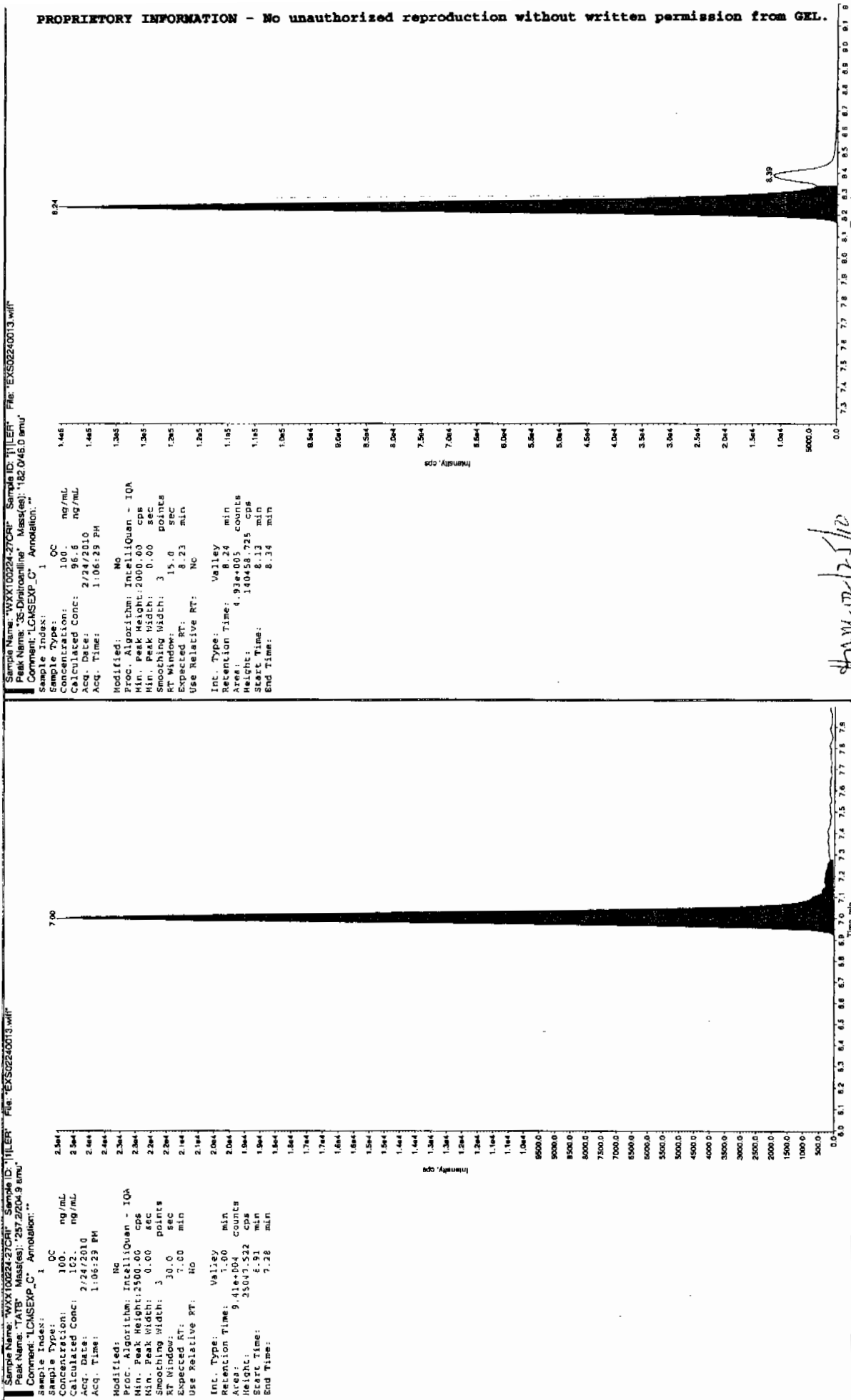
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

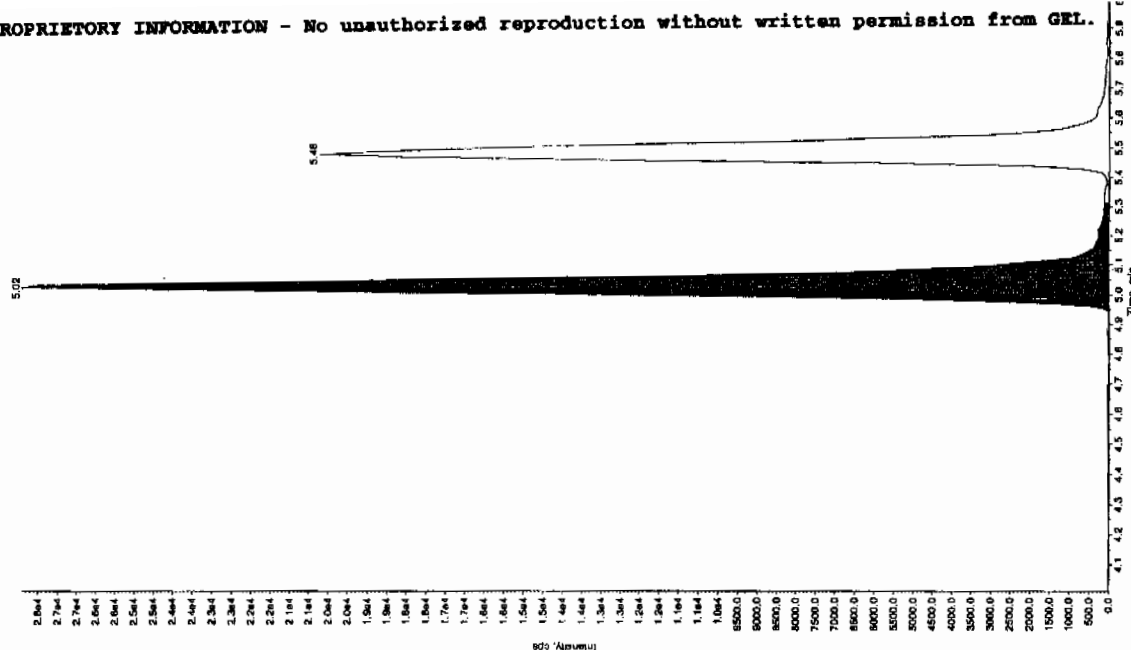
Jan 21/28/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

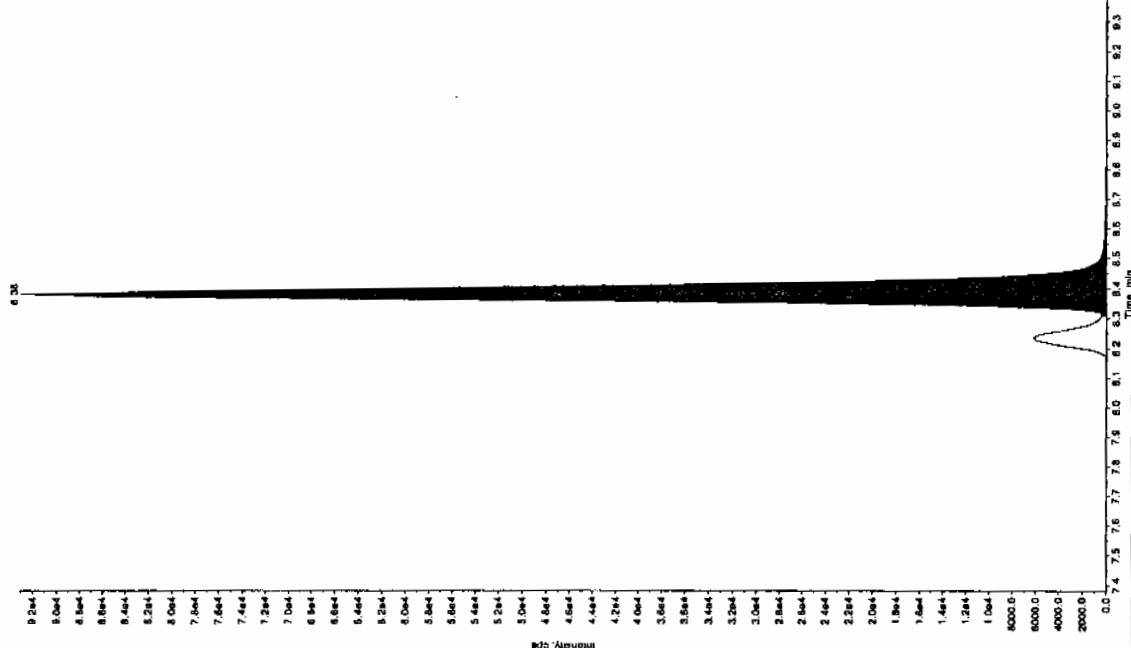
Sample Name: WXX100224-270R1 Sample ID: 111ER File: EX502240013.wif
 Peak Name: 26-Diamino-4-nitrofluorene Mass(es): 166.046.0 amu
 Comment: LCMSEXP_C Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 99.0 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:06:29 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 5.01 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 1.15e+005 counts
 Height: 27872.238 cps
 Start Time: 4.94 min
 End Time: 5.31 min



Sample Name: WXX100224-270R1 Sample ID: 111ER File: EX502240013.wif
 Peak Name: 34-Dinitrofluorene Mass(es): 182.1151.9 amu
 Comment: LCMSEXP_C Annotation: "

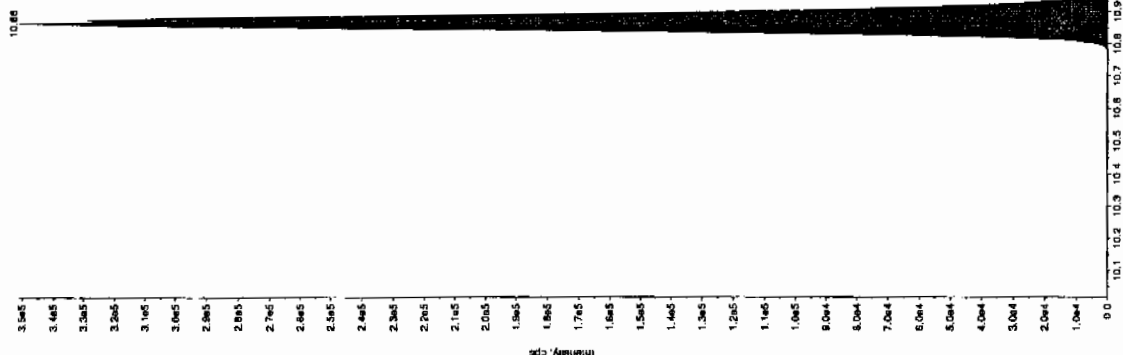
Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 46.6 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:06:29 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1400.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.38 min
 Area: 3.19e+005 counts
 Height: 92954.025 cps
 Start Time: 8.31 min
 End Time: 8.69 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

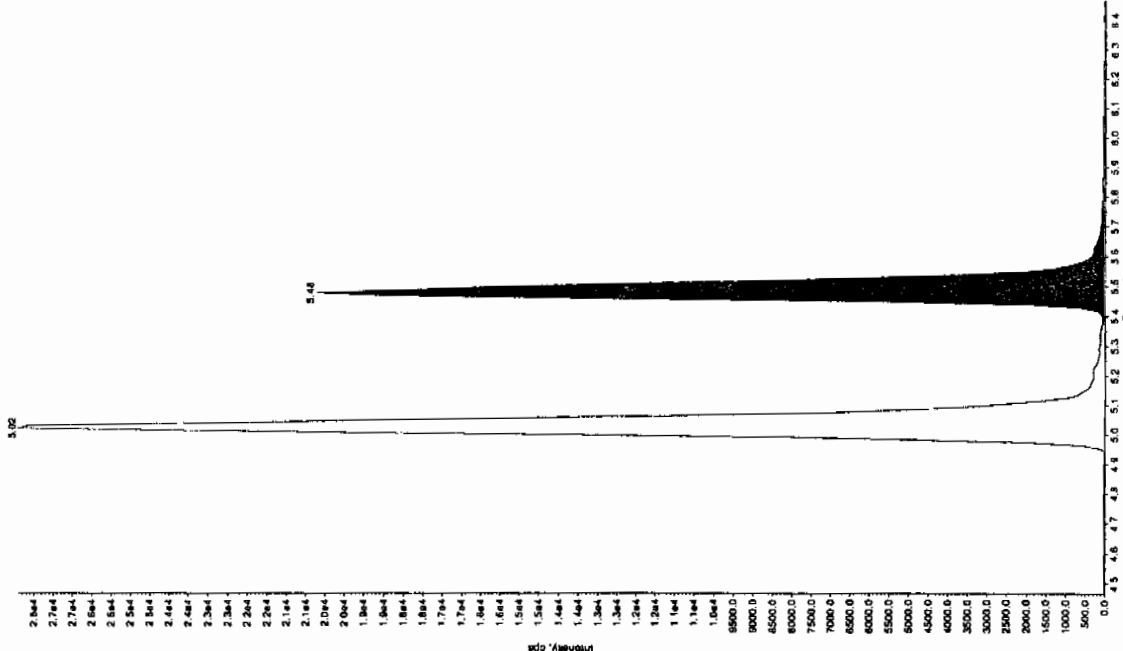
Sample Name: 'WXX100224-2701' Sample ID: 'J1LER' File: 'EXS02240013.will'
 Peak Name: '115(0-crasy) phosphate' Mass(es): 369.1/91.0 amu
 Comment: 'LCMSEXP_C' Annotation: ''

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 98.6 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:06:29 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Retention RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.27e+006 counts
 Height: 350758.728 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: 'WXX100224-2701' Sample ID: 'J1LER' File: 'EXS02240013.will'
 Peak Name: '24-Damino-5-nitrotoluene' Mass(es): 166.0/45.0 amu
 Comment: 'LCMSEXP_C' Annotation: ''

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 91.3 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 1:06:29 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 30.0 points
 Retention RT: 5.43 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.43 min
 Area: 8.15e+004 counts
 Height: 20185.297 cps
 Start Time: 5.38 min
 End Time: 5.82 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02240024.wiff

Analysis Date: 24-FEB-10 15:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	508	102	
2,6-Diamino-4-nitrotoluene	500	460	92	
3,4-Dinitrotoluene	250	241	96	
3,5-Dinitroaniline	500	465	93	
TATB	500	489	98	
tris(o-cresyl) phosphate	500	498	100	

Recovery Limits:

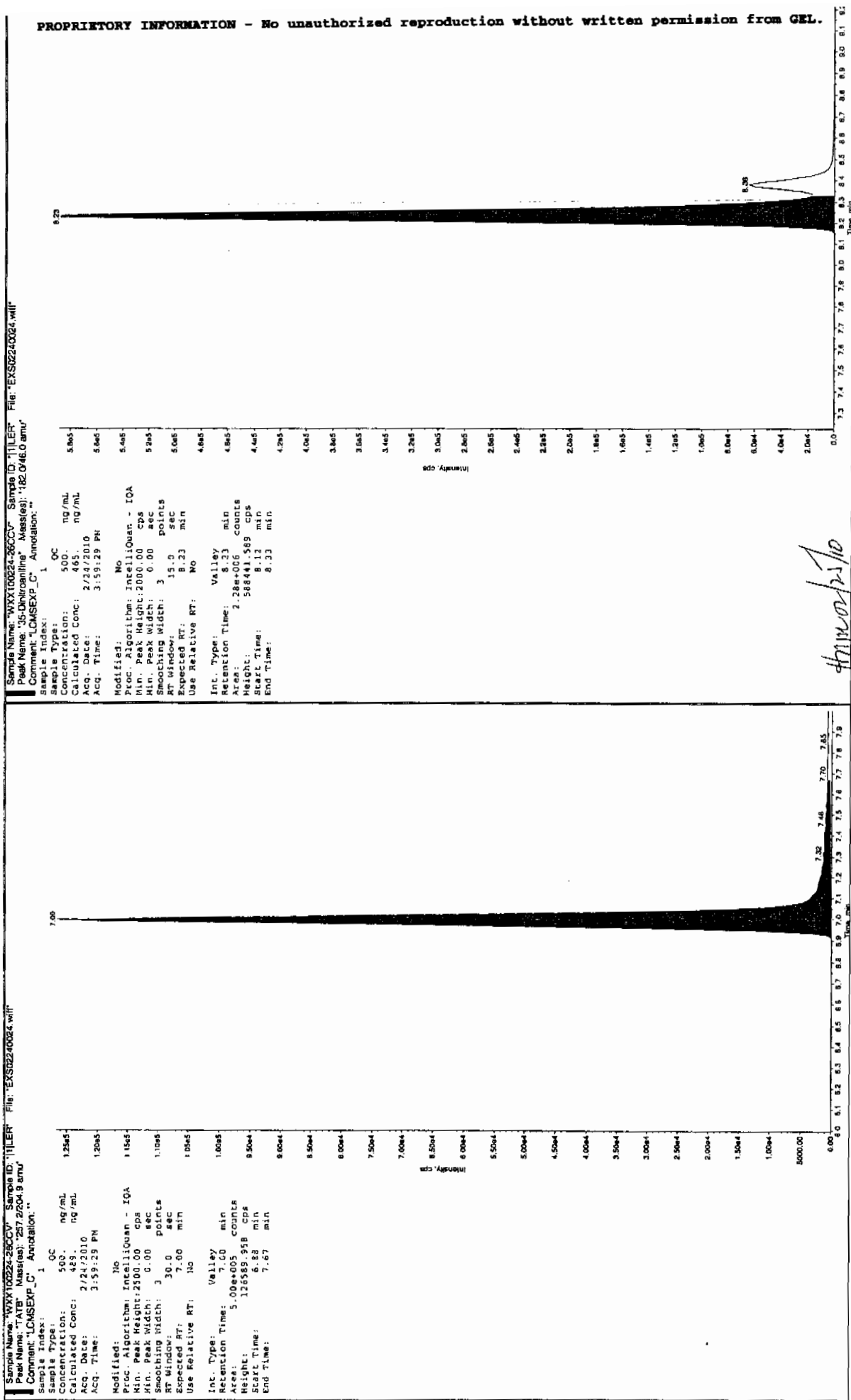
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 2/20/10

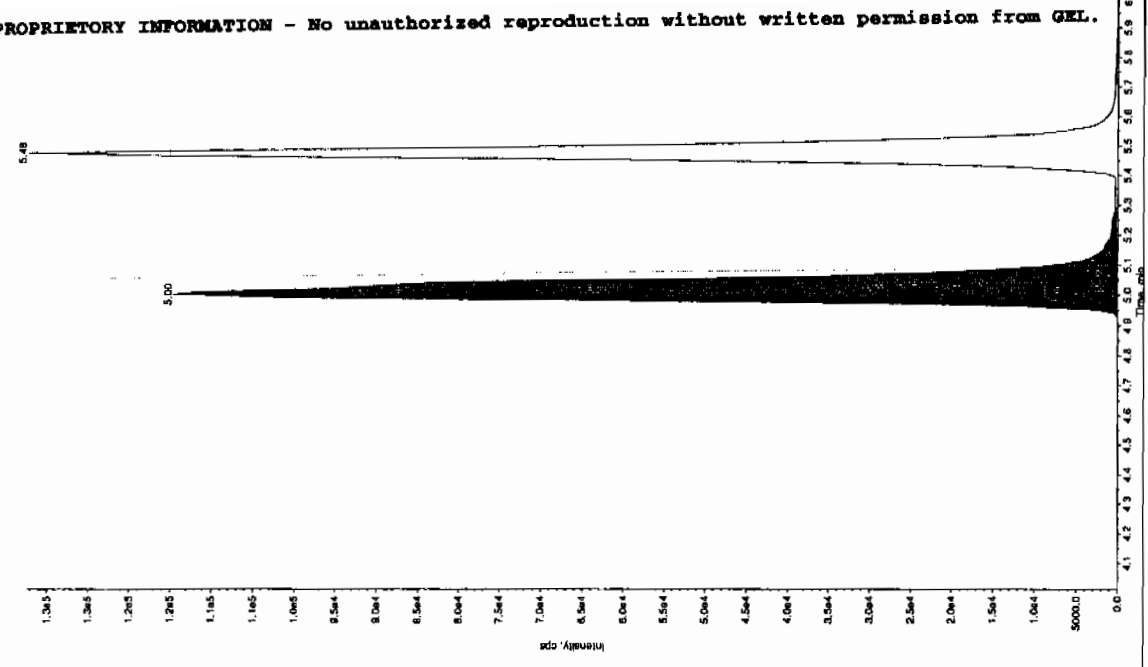


4/10/2010

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

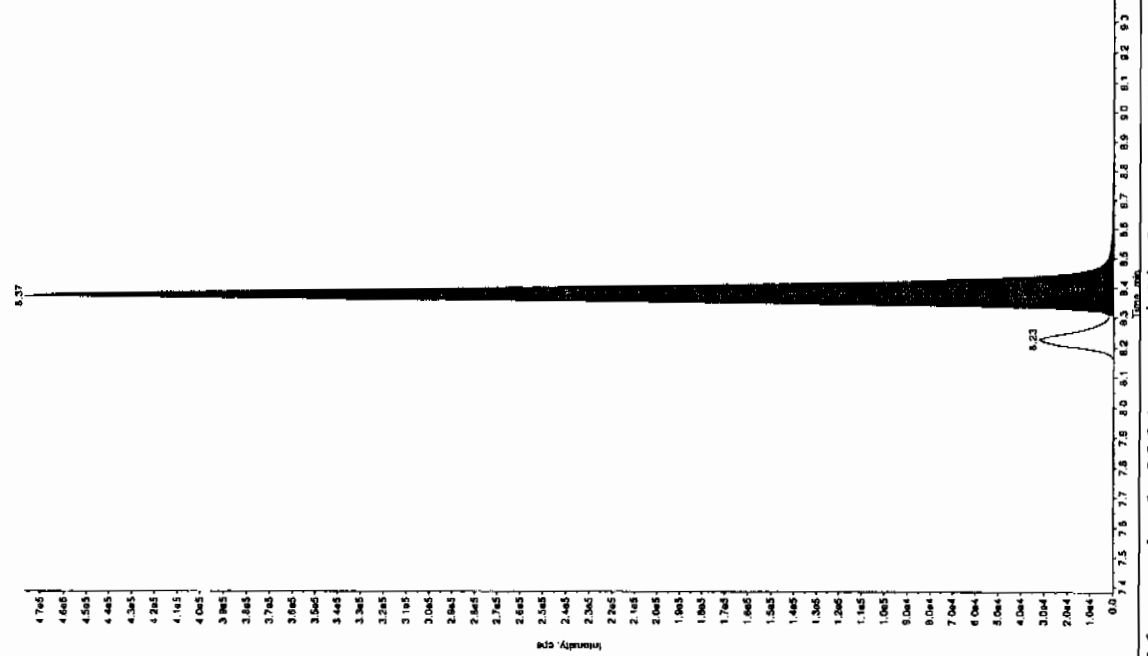
Sample Name: WXX100224-260V Sample ID: 111ER File: EX02240024.wif
Peak Name: 26-Diamino-4-nitrobenzene Mass(es): 186.045.0 amu
Comment: LCMSEXP_C Anolition:

Sample Index: 1
Sample Type: OC
Concentration: 500 ng/mL
Calculated Conc: 460 ng/mL
Acq. Date: 2/24/2010
Acq. Time: 3:59:29 PM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 450.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 5.01 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 5.00 min
Area: 3.39e+005 counts
Height: 11452725 cps
Start Time: 4.32 min
End Time: 5.29 min



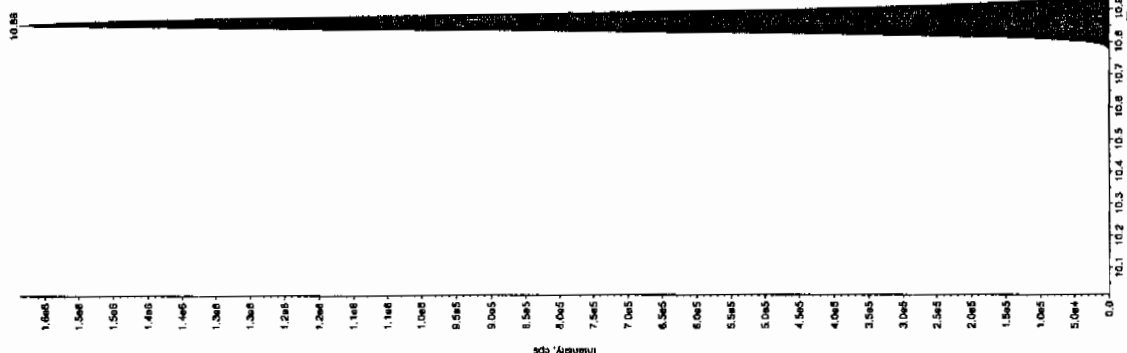
Sample Name: WXX100224-260V Sample ID: 111ER File: EX02240024.wif
Peak Name: 26-Diamino-4-nitrobenzene Mass(es): 186.045.0 amu
Comment: LCMSEXP_C Anolition:

Sample Index: 1
Sample Type: OC
Concentration: 250 ng/mL
Calculated Conc: 241 ng/mL
Acq. Date: 2/24/2010
Acq. Time: 3:59:29 PM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1460.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.38 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.37 min
Area: 1.62e+006 counts
Height: 47696693 cps
Start Time: 8.31 min
End Time: 8.71 min



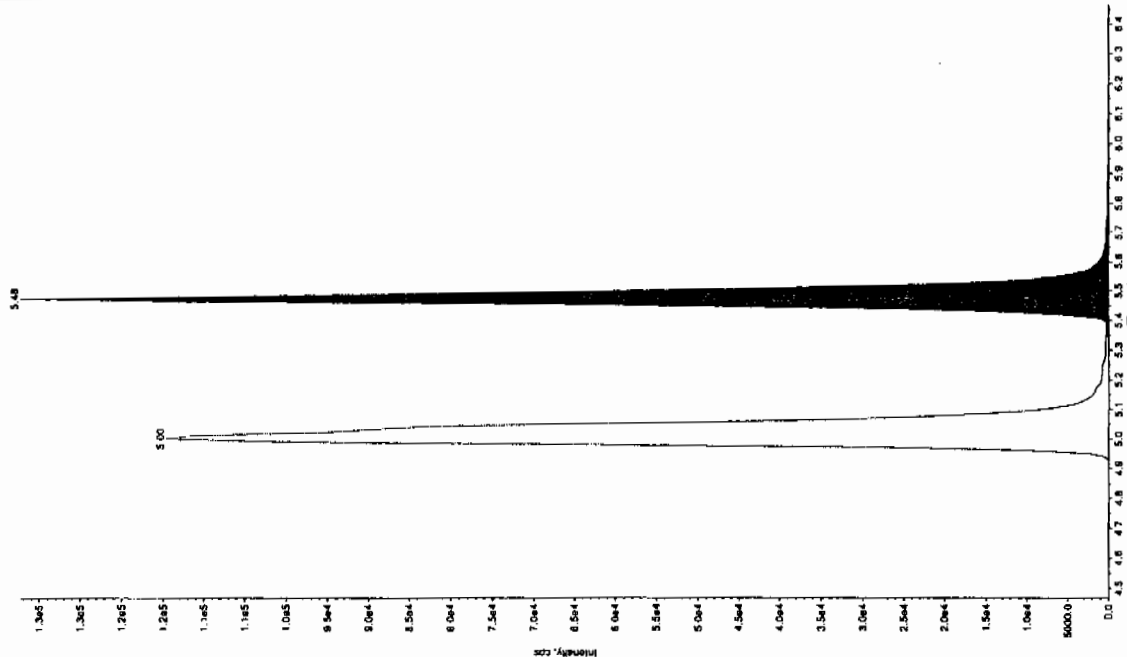
Sample Name: "WXX100224-260CV" Sample ID: "11LER" File: "EXS02240024.wif"
 Peak Name: "166.046.0 amu" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 498. ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 3:59:29 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.03e+006 counts
 Height: 158728.031 cps
 Start Time: 10.7 min
 End Time: 11.2 min



Sample Name: "WXX100224-260CV" Sample ID: "11LER" File: "EXS02240024.wif"
 Peak Name: "26-Diamino-6-nitroindene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 532. ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 3:59:29 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 1 point
 RT Window: 30.0 sec
 Expected RT: 5.47 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.48 min
 Area: 4.37e+005 counts
 Height: 132291.260 cps
 Start Time: 5.36 min
 End Time: 5.93 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02240026.wiff

Analysis Date: 24-FEB-10 16:31

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	112	112	
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	48.5	97	
3,5-Dinitroaniline	100	104	104	
TATB	100	98.9	99	
tris(o-cresyl) phosphate	100	100	100	

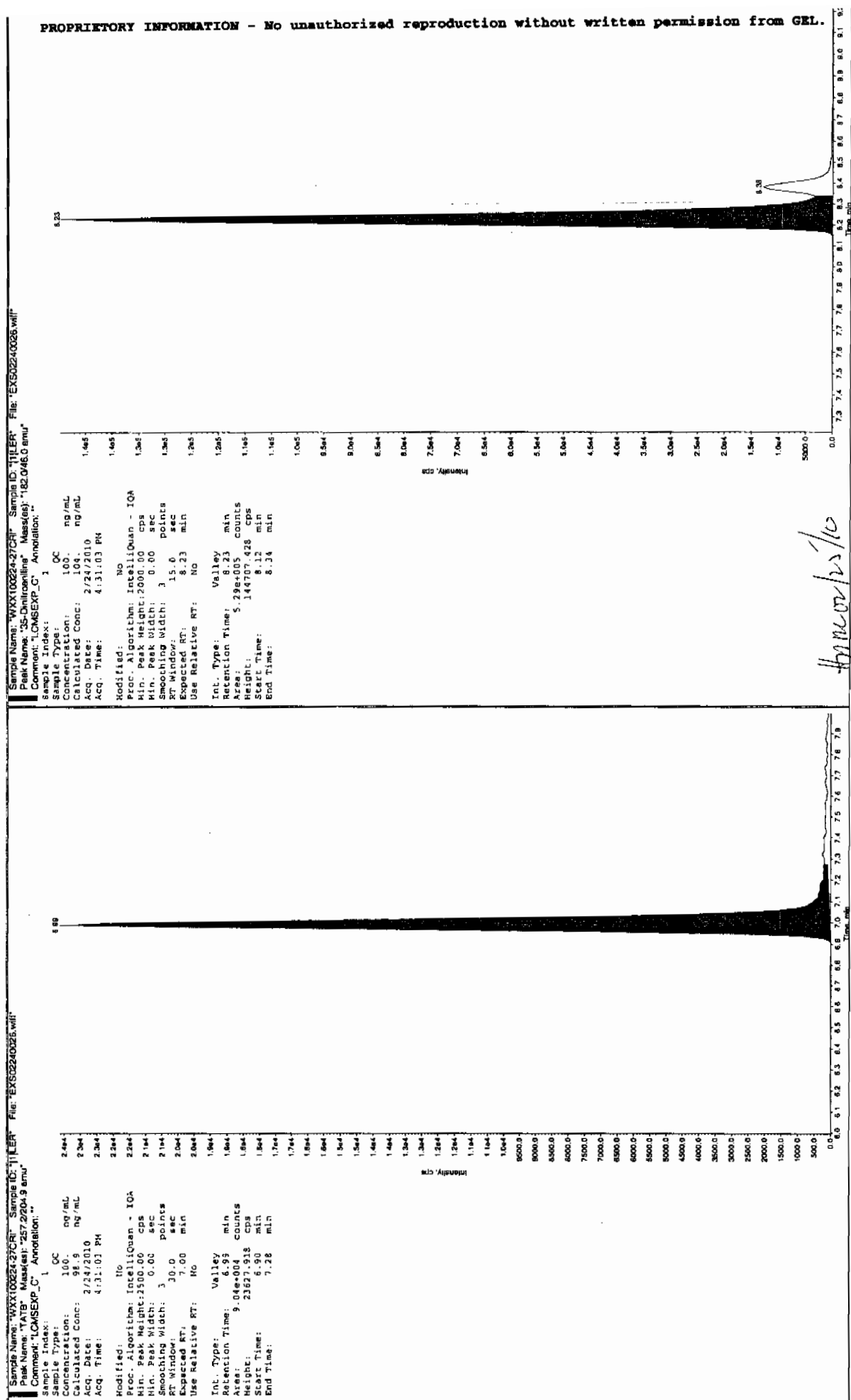
Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

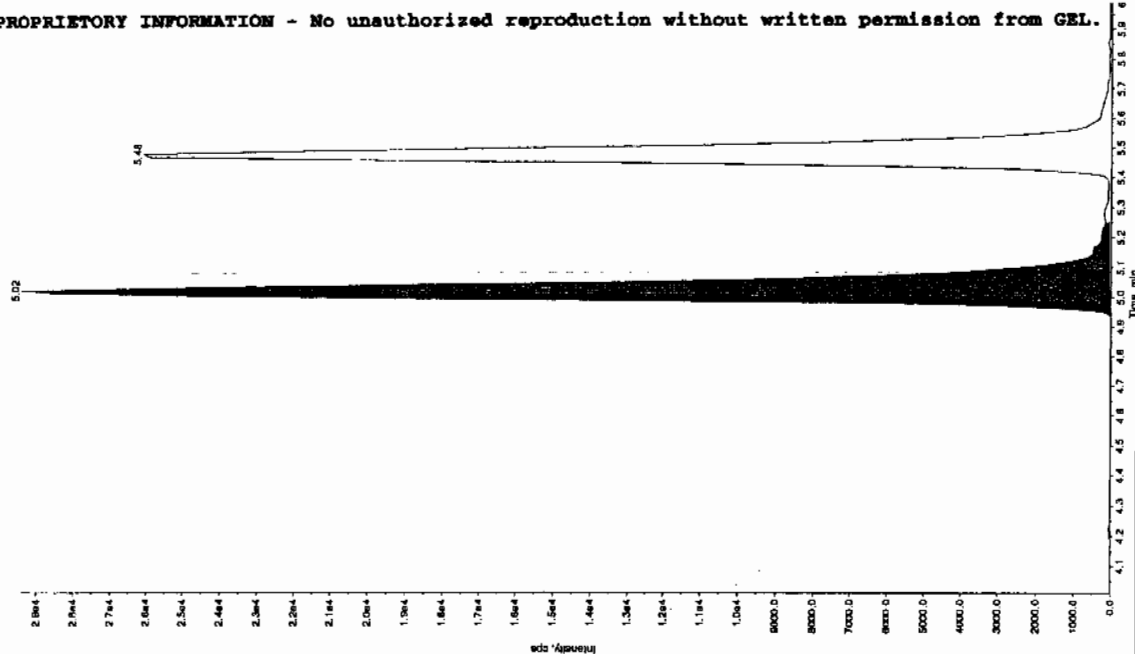
* Value outside of Recovery Limits



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

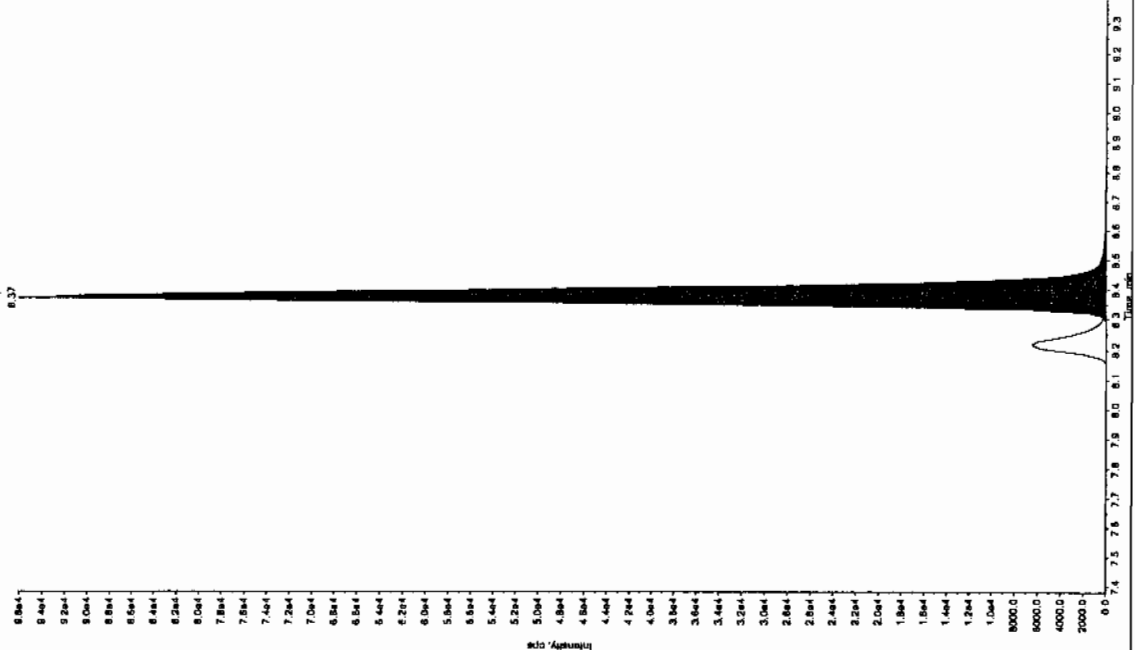
Sample Name: WXX100224-27CR1 Sample ID: 111ER File: EXS02240026.wif
Peak Name: 26-Diancino-4-nitrofluene Mass(es): 166.046.0 amu
Comment: LCMSEXP_C Annotation: -

Sample Index: 1
Sample Type: 100C
Concentration: 106 ng/mL
Calculated Conc: 106 ng/mL
Acq. Date: 2/24/2010
Acq. Time: 4:31:03 PM
Modified: No
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 450.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 5.01 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 5.02 min
Area: 1.23e+007 counts
Height: 29377.720 cps
Start Time: 4.93 min
End Time: 5.25 min



Sample Name: WXX100224-27CR1 Sample ID: 111ER File: EXS02240026.wif
Peak Name: 26-Diancino-4-nitrofluene Mass(es): 162.115.1.9 amu
Comment: LCMSEXP_C Annotation: -

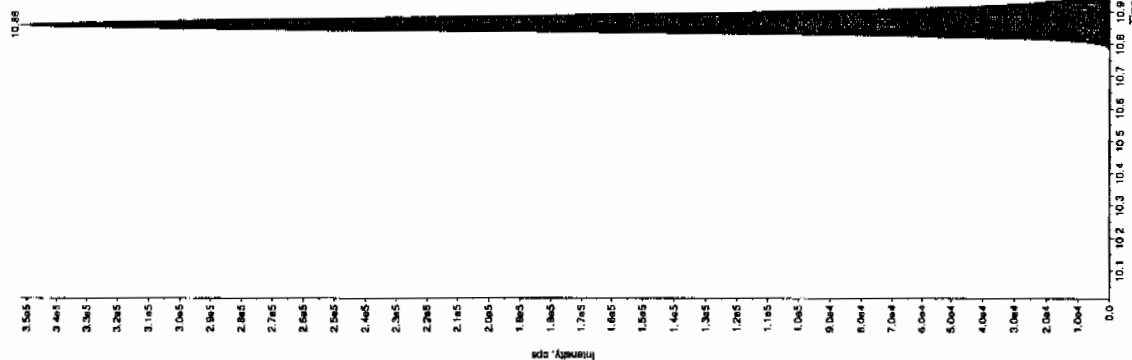
Sample Index: 1
Sample Type: 100C
Concentration: 50.0 ng/mL
Calculated Conc: 48.5 ng/mL
Acq. Date: 2/24/2010
Acq. Time: 4:31:03 PM
Modified: No
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 1450.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.38 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.37 min
Area: 3.11e+005 counts
Height: 95104.195 cps
Start Time: 8.30 min
End Time: 8.67 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

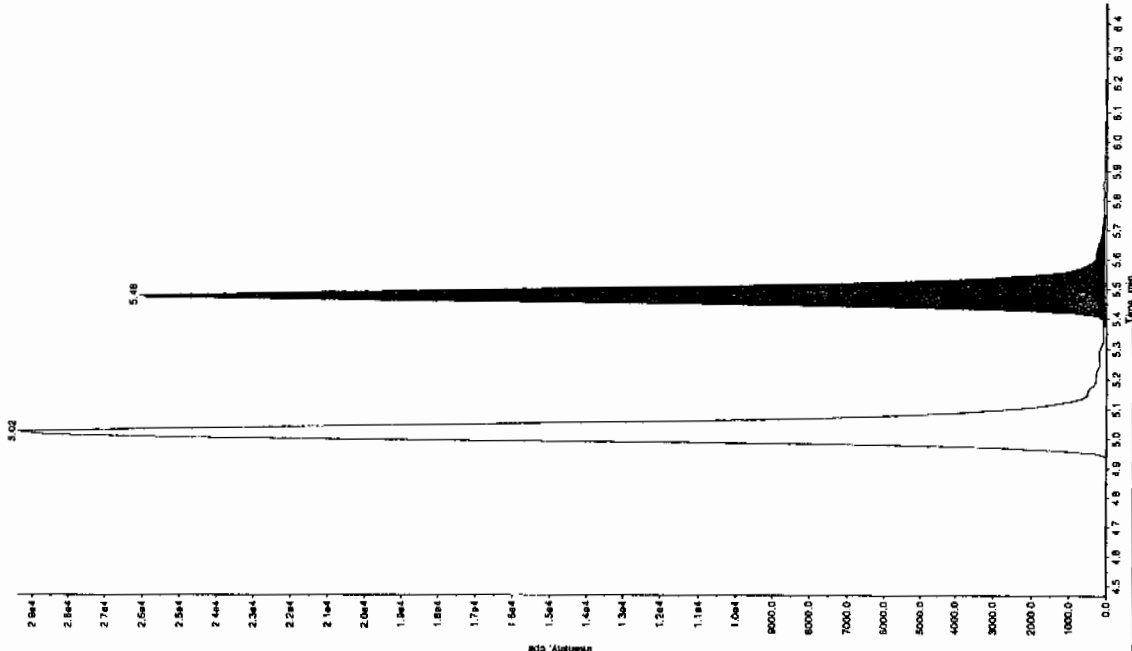
Sample Name: "WXX100224-27CR1" Sample ID: "11LER" File: "EXS02240026.wif"
 Peak Name: "Tri(n-butyl) phosphite" Mass(es): "389.1/91.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 100. ng/mL
 Acq. Date: 2/21/2010
 Acq. Time: 4:31:03 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.5 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.5 min
 Area: 1.29e+008 counts
 Height: 351786.591 cps
 Start Time: 10.7 min
 End Time: 11.1 min



Sample Name: "WXX100224-27CR1" Sample ID: "11LER" File: "EXS02240026.wif"
 Peak Name: "24-Diamino-6-nitroouano" Mass(es): "166.0/46.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 100. ng/mL
 Acq. Date: 2/21/2010
 Acq. Time: 4:31:03 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.47 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.43 min
 Area: 1.00e+009 counts
 Height: 288100.009 cps
 Start Time: 5.35 min
 End Time: 5.76 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS02240031.wiff

Analysis Date: 24-FEB-10 17:49

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	479	96	
2,6-Diamino-4-nitrotoluene	500	468	94	
3,4-Dinitrotoluene	250	267	107	
3,5-Dinitroaniline	500	583	117	
TATB	500	519	104	
tris(o-cresyl) phosphate	500	499	100	

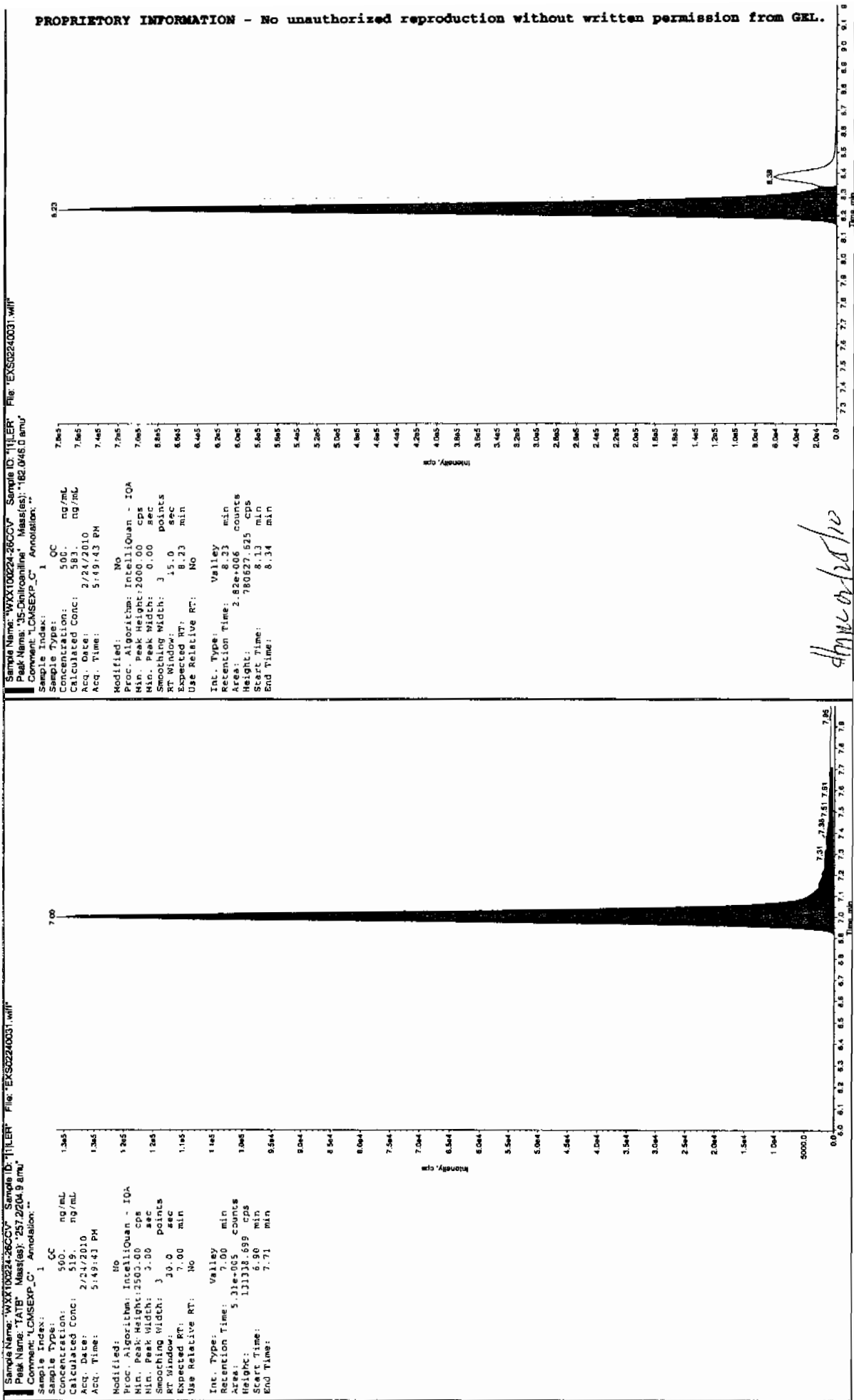
Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

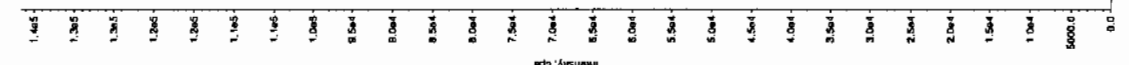
* Value outside of Recovery Limits



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

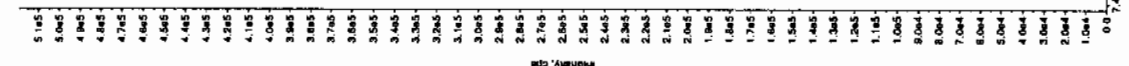
Sample Name: "WXX100224-28CCV" Sample ID: "1111ER" File: "EXS02240031.wif"
 Peak Name: "28-Diamino-4-nitrotoluene" Mass(es): "186.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 489.310 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:49:43 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.01 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 5.50e+005 counts
 Height: 136590.093 cps
 Start Time: 4.92 min
 End Time: 5.31 min



Sample Name: "WXX100224-28CCV" Sample ID: "1111ER" File: "EXS02240031.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

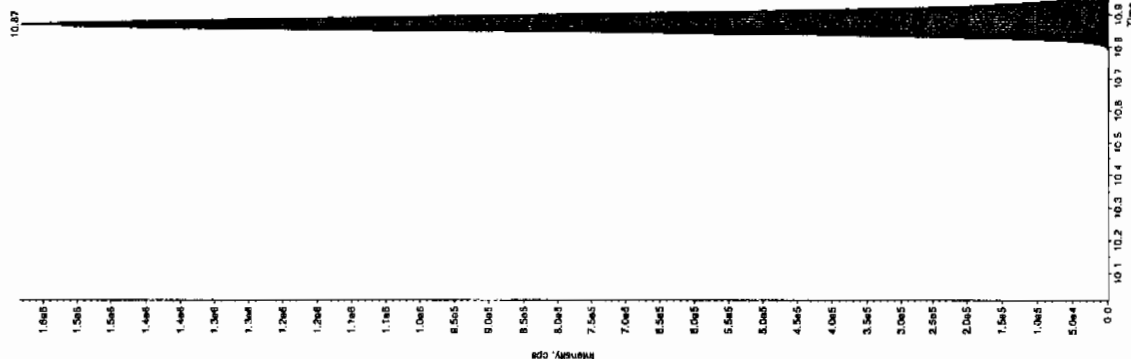
Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 237. ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 5:49:43 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.38 min
 Area: 1.79e+006 counts
 Height: 519306.313 cps
 Start Time: 8.31 min
 End Time: 8.71 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

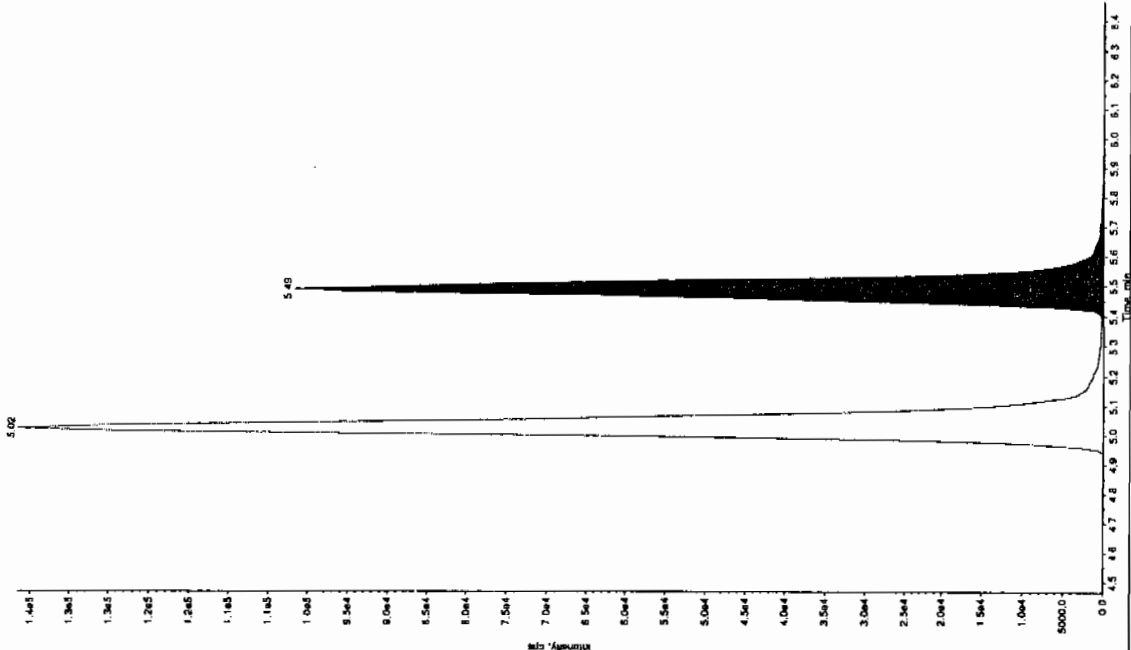
Sample Name: WXX100224-26CCV Sample ID: 111ER File: EX02240031.wif
 Peak Name: tri(o-cresyl) phosphate Mass(es): 369.1/91.0 amu
 Comment: LCMSEXP_C Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 500 ng/mL
 Calculated Conc: 2/24/2010 ng/mL
 Acq. Date: 5:43:43 PM
 Acq. Time: 5:43:43 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 6.05e+006 counts
 Height: 1584779.307 cps
 Start Time: 10.9 min
 End Time: 11.2 min



Sample Name: WXX100224-26CCV Sample ID: 111ER File: EX02240031.wif
 Peak Name: 24-Diamino-6-hydroquinone Mass(es): 166.0/66.0 amu
 Comment: LCMSEXP_C Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 500 ng/mL
 Calculated Conc: 2/24/2010 ng/mL
 Acq. Date: 5:43:43 PM
 Acq. Time: 5:43:43 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.47 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.47 min
 Area: 4.13e+005 counts
 Height: 101684.902 cps
 Start Time: 5.38 min
 End Time: 5.58 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B

Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1514

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS02240033.wiff

Analysis Date: 24-FEB-10 18:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	53.1	106	
3,5-Dinitroaniline	100	104	104	
TATB	100	110	110	
tris(o-cresyl) phosphate	100	101	101	
2,4-Diamino-6-nitrotoluene	100	110	110	
2,6-Diamino-4-nitrotoluene	100	110	110	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

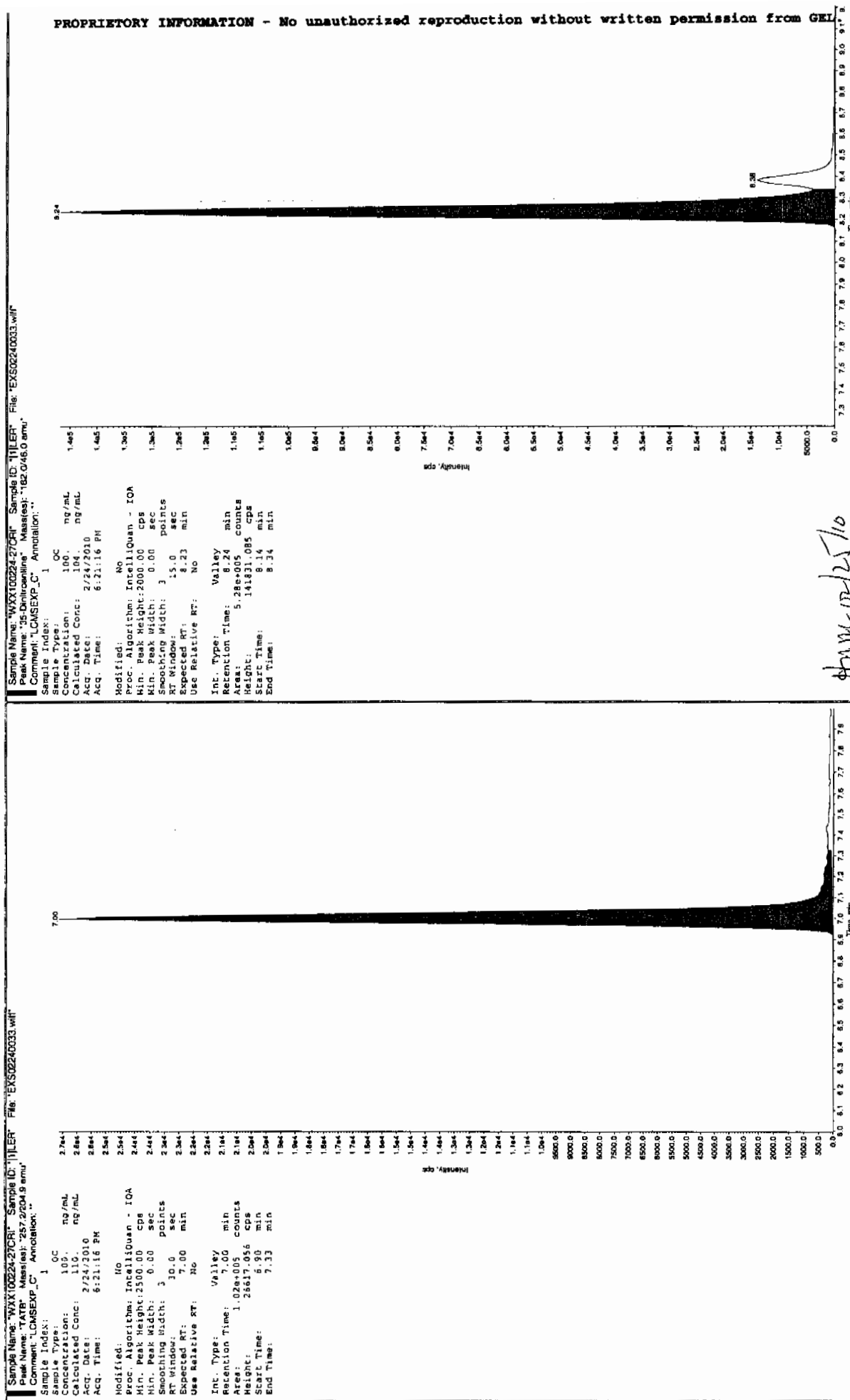
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

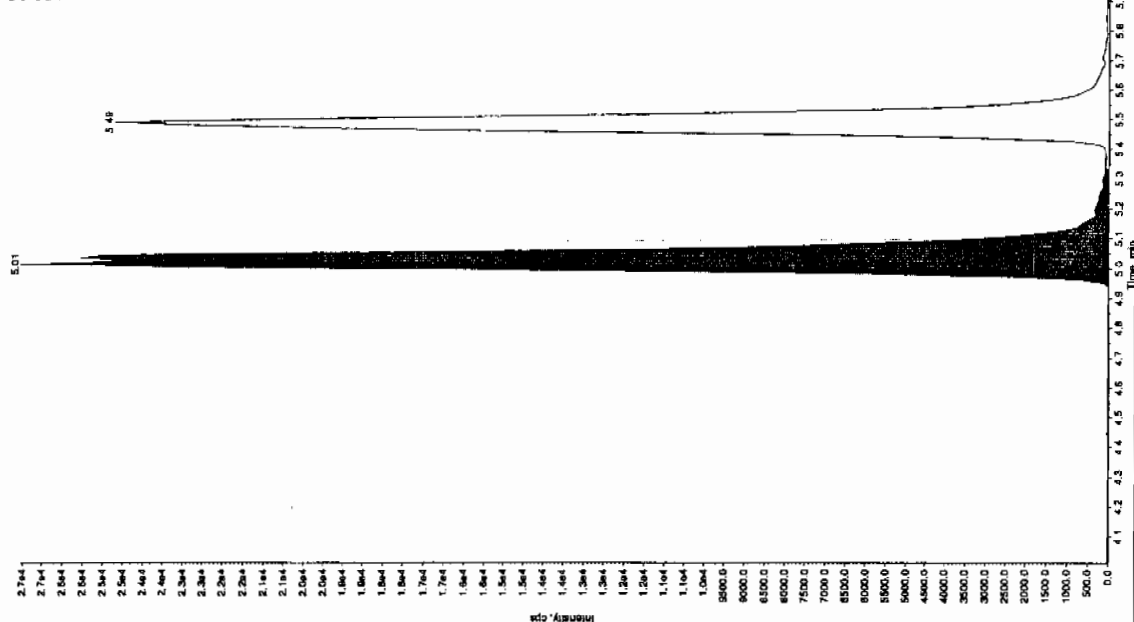
Den 2/25/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

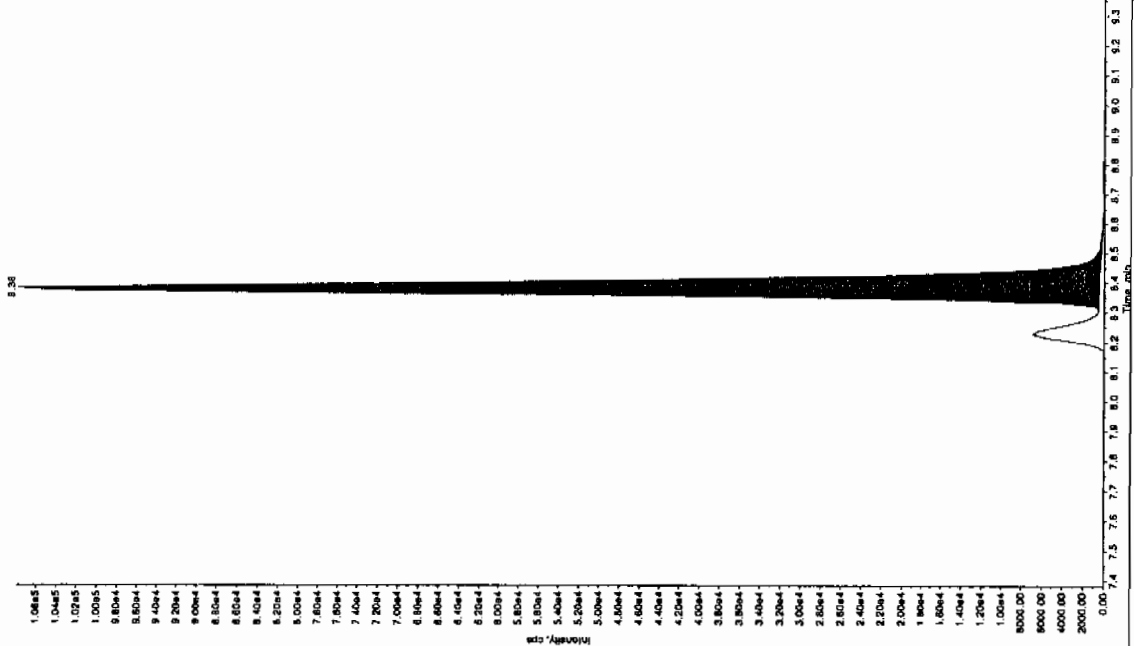
Sample Name: "WXX100224-27CR" Sample ID: "ILLER" File: "EXS02240033.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 100 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 6:21:16 PM
 Acq. Time: 6:21:16 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.01 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.01 min
 Area: 1.27e+005 counts
 Height: 27035 cps
 Start Time: 4.32 min
 End Time: 5.33 min



Sample Name: "WXX100224-27CR" Sample ID: "ILLER" File: "EXS02240033.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "162.151.3 amu"
 Comment: "LCMSEXP_C" Annotation: "

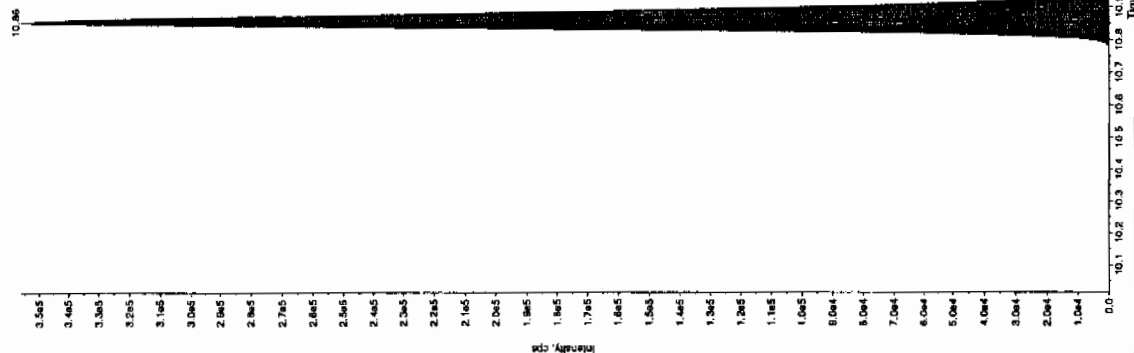
Sample Index: 1
 Sample Type: OC
 Concentration: 50.0 ng/mL
 Calculated Conc: 53.1 ng/mL
 Acq. Date: 2/24/2010
 Acq. Time: 6:21:16 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.38 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.38 min
 Area: 3.63e+005 counts
 Height: 107514.549 cps
 Start Time: 8.31 min
 End Time: 8.63 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100224-270P" Sample ID: "111E" File: "EVS02240033.wif"
 Peak Name: "24-Dimino-6-micodane" Mask(s): "166.045.0 and
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 100 ng/mL
 Concentration: 101 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 6:21:16 PM
 Acq. Time: 6:21:16 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Peak Width: 10.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.30e+006 counts
 Weight: 356035 400 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX100224-270P" Sample ID: "111E" File: "EVS02240033.wif"
 Peak Name: "24-Dimino-6-micodane" Mask(s): "166.045.0 and
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 100 ng/mL
 Concentration: 110 ng/mL
 Calculated Conc: 2/24/2010
 Acq. Date: 6:21:16 PM
 Acq. Time: 6:21:16 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Peak Width: 5.47 min
 Expected RT: 5.47 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.49 min
 Area: 9.81e+004 counts
 Weight: 24663.463 cps
 Start Time: 5.37 min
 End Time: 5.79 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

QUALITY CONTROL DATA

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 948576

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 1202032105

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301046a

Date Analyzed: 02-MAR-10 13:47

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301046a

Date: 02-Mar-2010

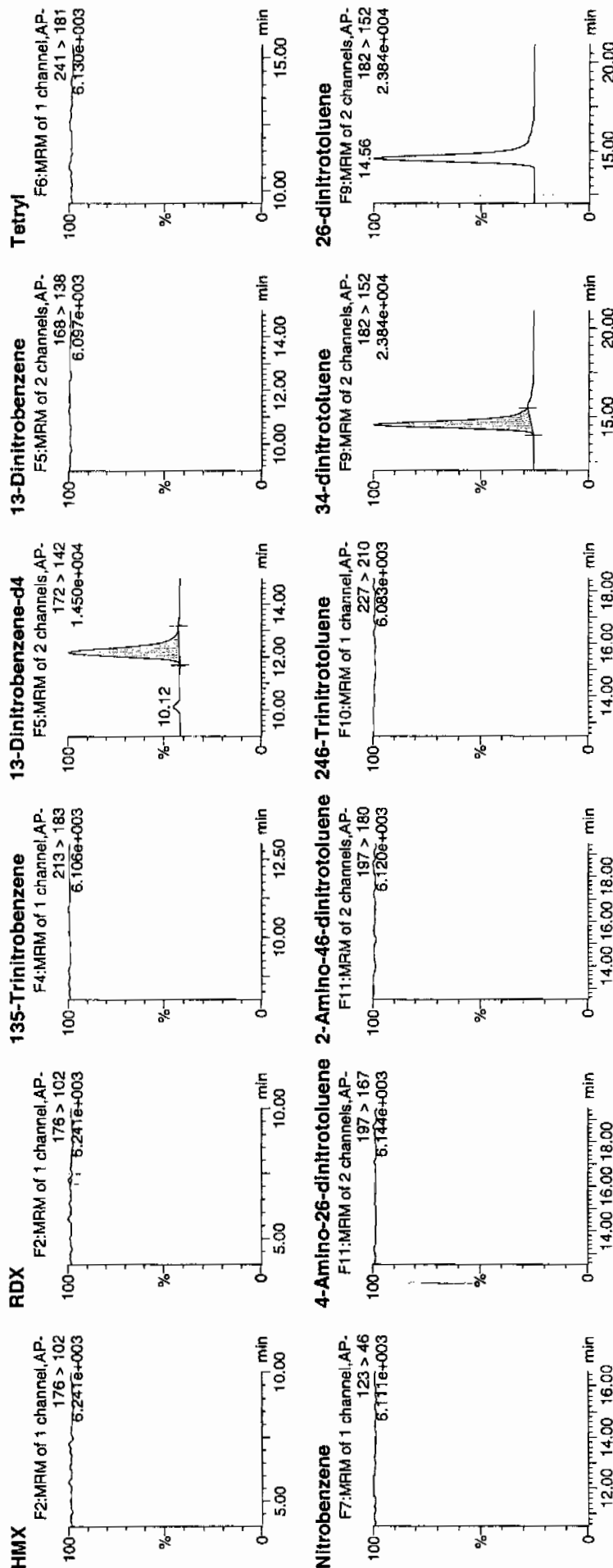
Time: 13:47:39

ID: 1202032105

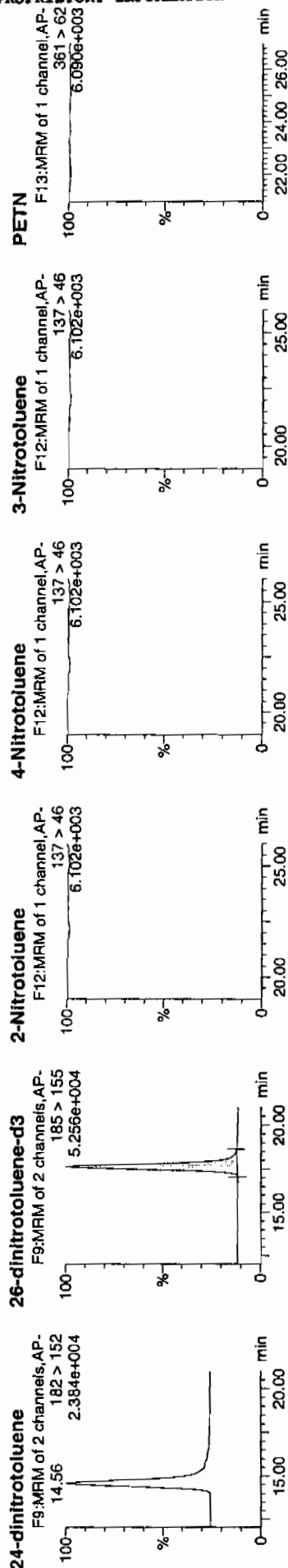
Vial: 2:5,A

Anti
3/3/10

1948577 / 8022 / MS / 2 /



Anti
03/04/10

[illegible]

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 948576

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 1202032105

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220044.wiff

Date Analyzed: 23-FEB-10 04:18

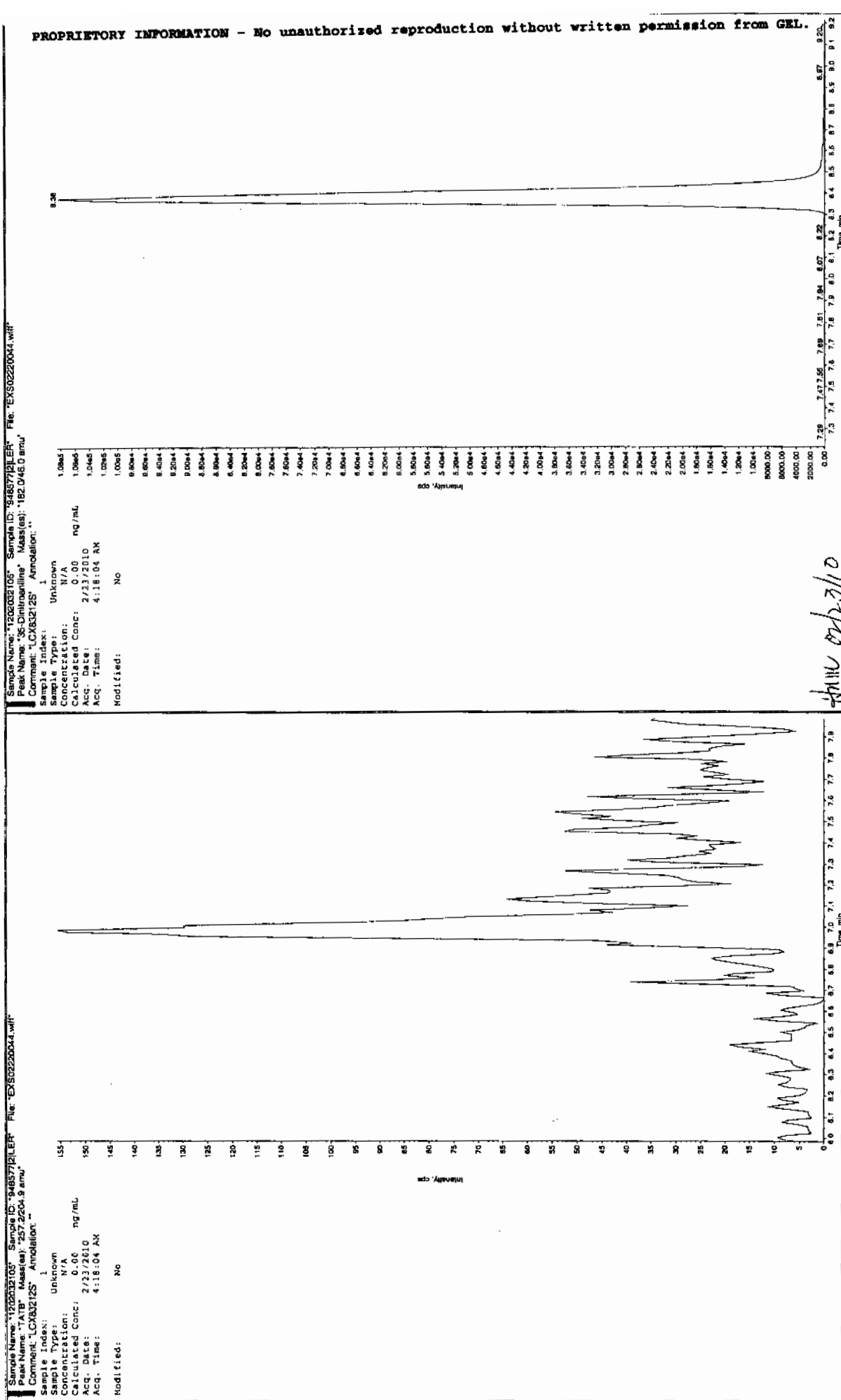
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Gen 2/23/10

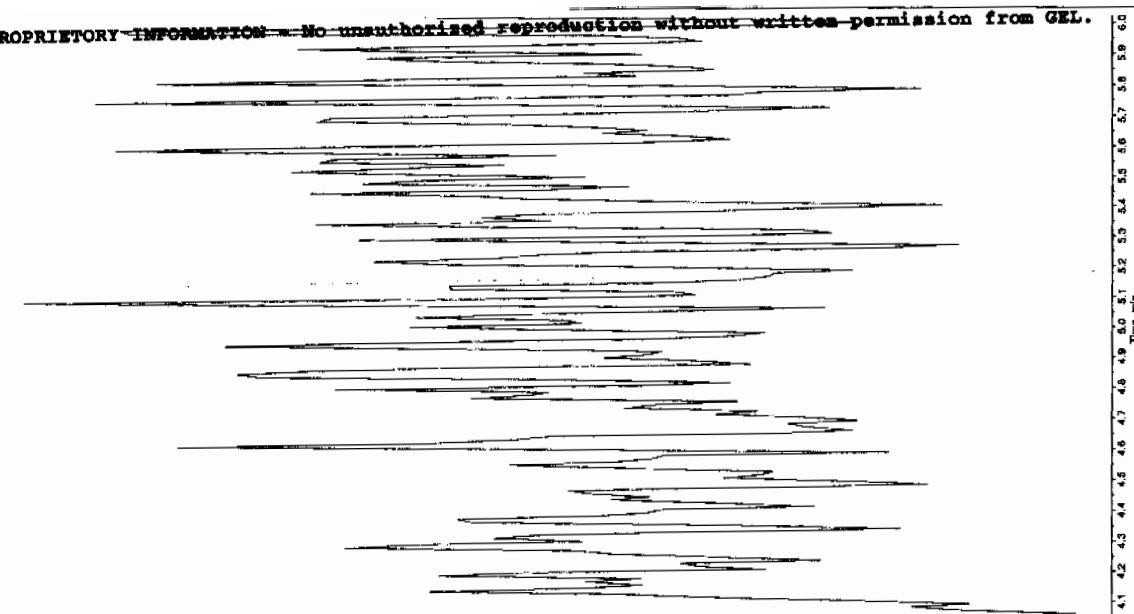


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202032105" Sample ID: "94857201ER" File: "EXS02220044.wit"
 Peak Name: "28-Dimino-4-nitrobenz" Mass(es): 166.046.0 amu
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 4:18:04 AM
 Modified: No

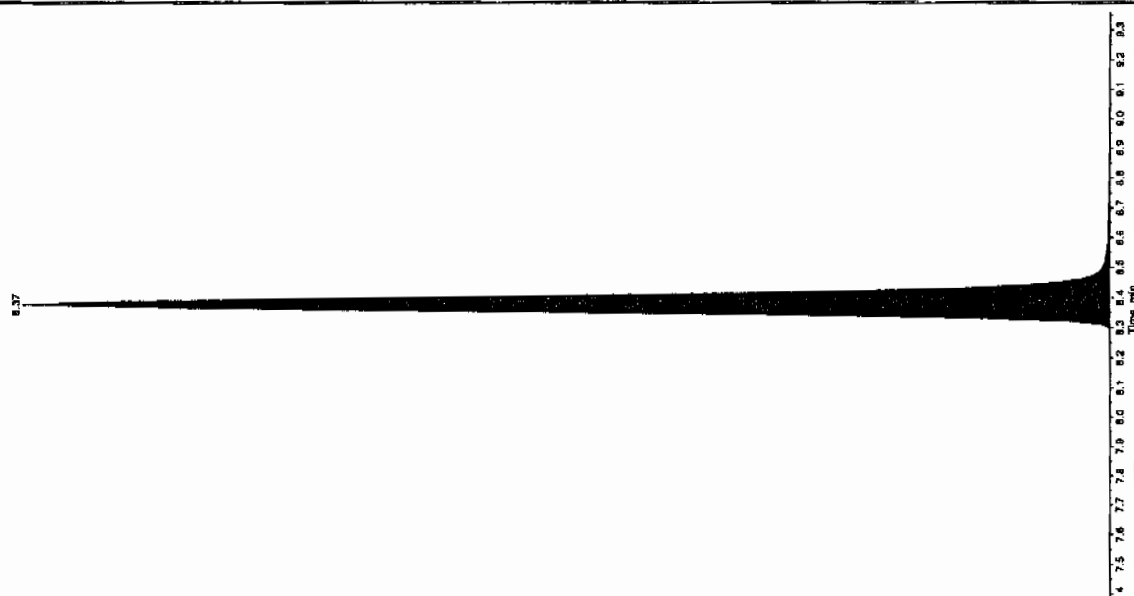
Intensity, cps



Sample Name: "1202032105" Sample ID: "94857201ER" File: "EXS02220044.wit"
 Peak Name: "34-Dinitrobenz" Mass(es): 182.07151.9 amu
 Comment: "LCX83212S" Annotation: "

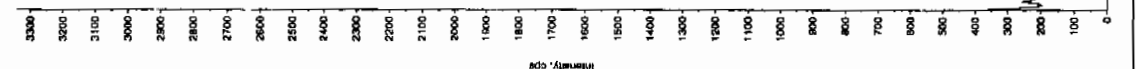
Sample Index: 1
 Sample Type: Unknown
 Concentration: 320. ng/mL
 Calculated Conc: 320. ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 4:18:04 AM
 Modified: No
 Proc. Algorithm: IntellQuan - IQA
 Min. Peak Height: 1850.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3.0 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 4.21e+006 counts
 Height: 1087066.895 cps
 Start Time: 8.28 min
 End Time: 8.51 min

Intensity, cps



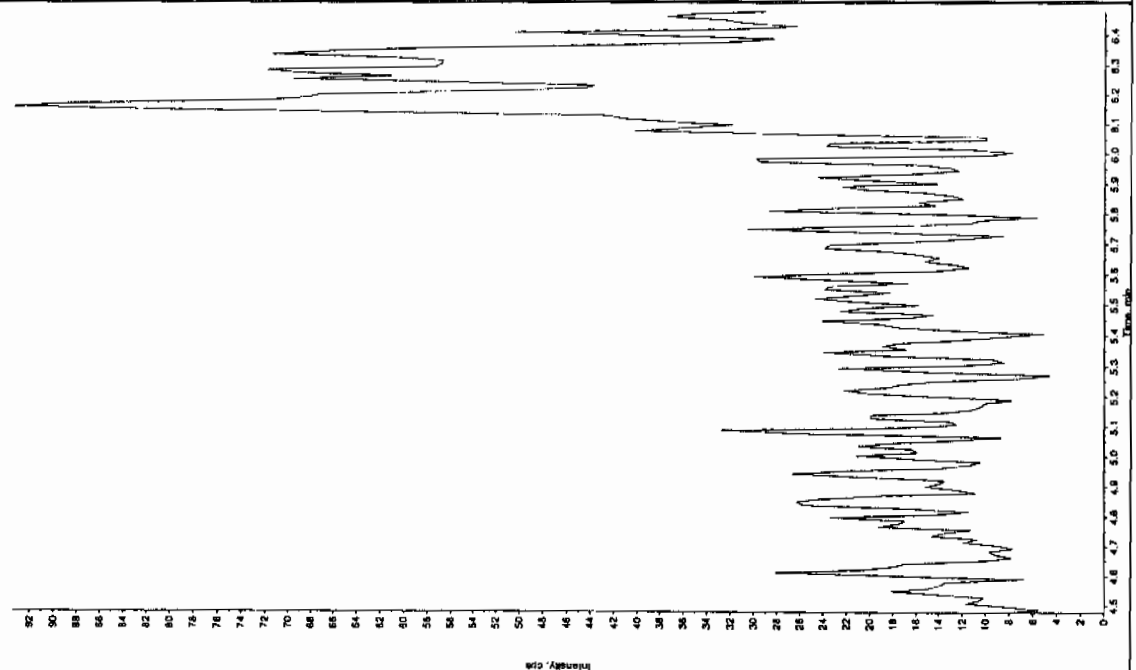
Sample Name: "120003105" Sample ID: "948577011.ER" File: "EXS0220044.wif"
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 4:18:04 AM
 Modified: No



Sample Name: "120003105" Sample ID: "948577011.ER" File: "EXS0220044.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 4:18:04 AM
 Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 948576

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 1202032106

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301047a

Date Analyzed: 02-MAR-10 14:17

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5340	
121-14-2	2,4-Dinitrotoluene	5420	
121-82-4	RDX	5030	
19406-51-0	4-Amino-2,6-dinitrotoluene	5020	
2691-41-0	HMX	4650	
35572-78-2	2-Amino-4,6-dinitrotoluene	5490	
479-45-8	Tetryl	2230	
606-20-2	2,6-Dinitrotoluene	4930	
78-11-5	PETN	4150	
88-72-2	o-Nitrotoluene	4300	
98-95-3	Nitrobenzene	4670	
99-08-1	m-Nitrotoluene	4120	
99-35-4	1,3,5-Trinitrobenzene	4400	
99-65-0	m-Dinitrobenzene	4750	
99-99-0	p-Nitrotoluene	4590	

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0301047a

Date: 02-Mar-2010

Time: 14:17:13

ID: 1202032106

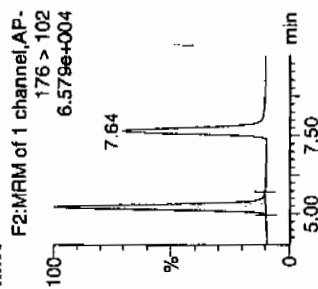
Vial: 2:5,B

WAV 943577 / 8000 / CS 121

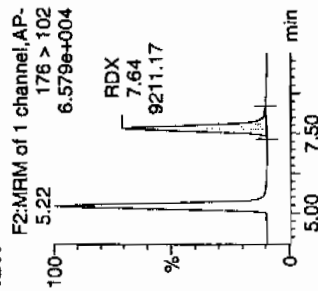
μs 171
3/3/CS

↓ Tetryl

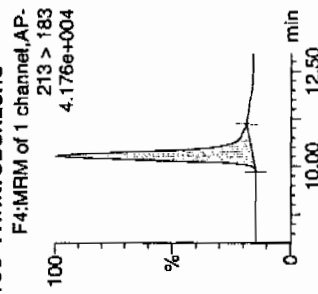
HMX



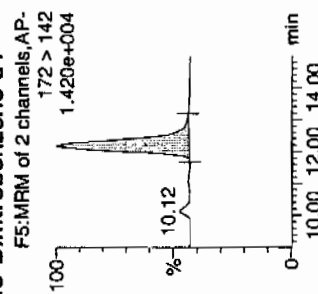
RDX



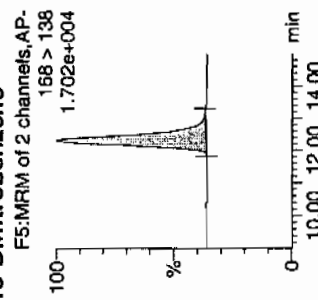
135-Trinitrobenzene



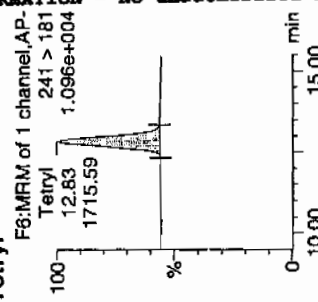
13-Dinitrobenzene-d4



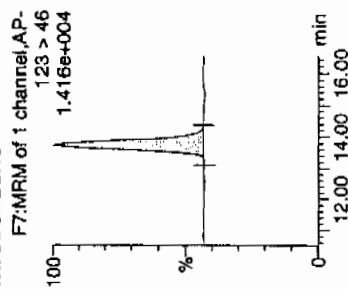
13-Dinitrobenzene



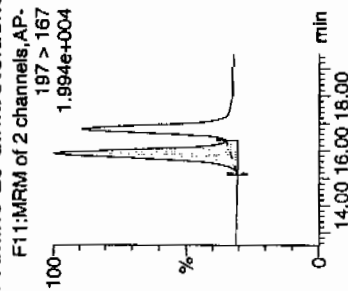
Tetryl



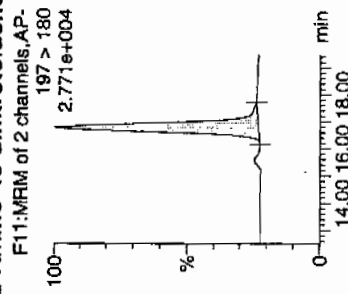
Nitrobenzene



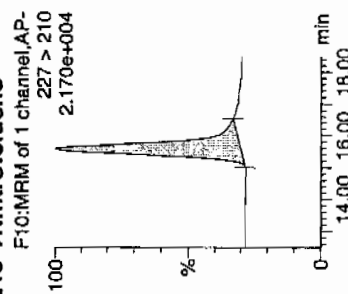
4-Amino-26-dinitrotoluene



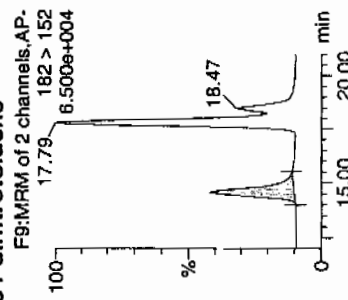
2-Amino-46-dinitrotoluene



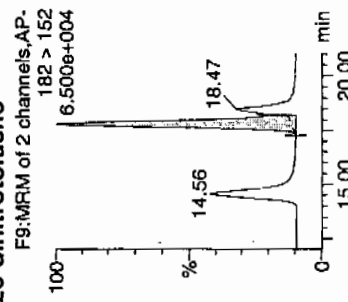
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



Handwritten signature and date: 03/04/10

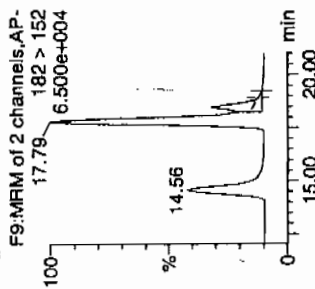
Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

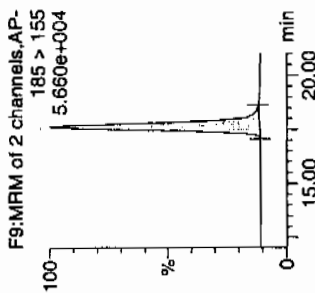
Printed: Wed Mar 03 09:10:52 2010, Page 30 of 103

Dataset: C:\MASSLYNX\New_Exp_PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

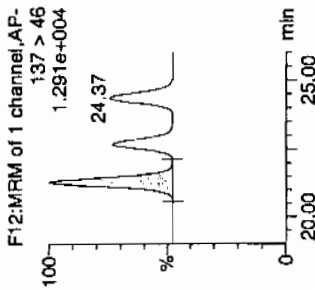
24-dinitrotoluene



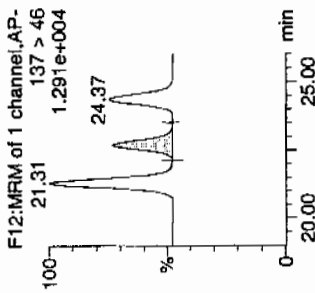
26-dinitrotoluene-d3



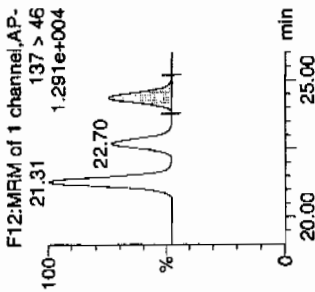
2-Nitrotoluene



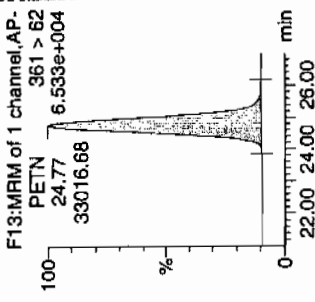
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Conc:ng/ml	%Rec	%Dev	S/N
1202032106	HMX	176 > 102	5.22	11820.963	3334.796	11820.963	1772.367	bb			464.6000	92.9	-7.1	1684.9
1202032106	RDX	176 > 102	7.64	9211.172	3334.796	9211.172	1381.070	bb			503.1921	100.6	0.6	1124.0
1202032106	135-Trinitrobenzene	213 > 183	10.27	10094.581	3334.796	10094.581	1513.523	bb			439.5873	87.9	-12.1	1106.5
1202032106	13-Dinitrobenzene-d4	172 > 142	12.18	3334.796	3334.796	3334.796	3334.796	bb			575.3465	115.1	15.1	112.1
1202032106	13-Dinitrobenzene	168 > 138	12.32	4159.718	3334.796	4159.718	623.684	bb			475.4172	95.1	-4.9	186.1
1202032106	Tetryl	241 > 161	12.83	1715.589	3334.796	1715.589	257.225	bb			223.2607	44.7	-55.3	186.0
1202032106	Nitrobenzene	123 > 46	13.72	2769.294	3334.796	2769.294	415.212	bb			467.0906	93.4	-6.6	267.6
1202032106	4-Amino-26-dinitrotoluene	197 > 167	15.86	5648.021	19940.838	5648.021	141.619	MM	03-Mar-10	08:45:34	501.7179	100.3	0.3	339.4
1202032106	2-Amino-46-dinitrotoluene	197 > 180	16.78	8253.852	19940.838	8253.852	206.959	bb			548.9333	109.8	9.8	1159.8
1202032106	246-Trinitrotoluene	227 > 210	15.58	6712.454	19940.838	6712.454	168.309	bb			534.0097	106.8	6.8	193.0
1202032106	34-dinitrotoluene	182 > 152	14.56	9877.526	19940.838	9877.526	247.671	bb			250.0043	100.0	0.0	396.5
1202032106	26-dinitrotoluene	182 > 152	17.79	22187.010	19940.838	22187.010	556.321	MM	03-Mar-10	08:56:25	493.0887	98.6	-1.4	1115.6
1202032106	24-dinitrotoluene	182 > 152	18.47	5432.706	19940.838	5432.706	136.221	MM	03-Mar-10	08:57:22	541.5450	108.3	8.3	262.3
1202032106	26-dinitrotoluene-d3	185 > 155	17.64	19940.838	19940.838	19940.838	19940.838	bb			619.8651	124.0	24.0	2010.2
1202032106	2-Nitrotoluene	137 > 46	21.31	2847.084	19940.838	2847.084	71.388	bb			430.3550	86.1	-13.9	346.9
1202032106	4-Nitrotoluene	137 > 46	22.70	1450.649	19940.838	1450.649	36.374	bb			458.9777	91.8	-8.2	171.2
1202032106	3-Nitrotoluene	137 > 46	24.37	1612.349	19940.838	1612.349	40.428	bb			411.6378	82.3	-17.7	179.8
1202032106	PETN	361 > 62	24.77	33016.684	19940.838	33016.684	827.866	bb			415.2816	83.1	-16.9	3514.3

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 948576

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 1202032106

Sample Amount 2

Moisture:

Amount Units g

Date Received: 03-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220045.wiff

Date Analyzed: 23-FEB-10 04:33

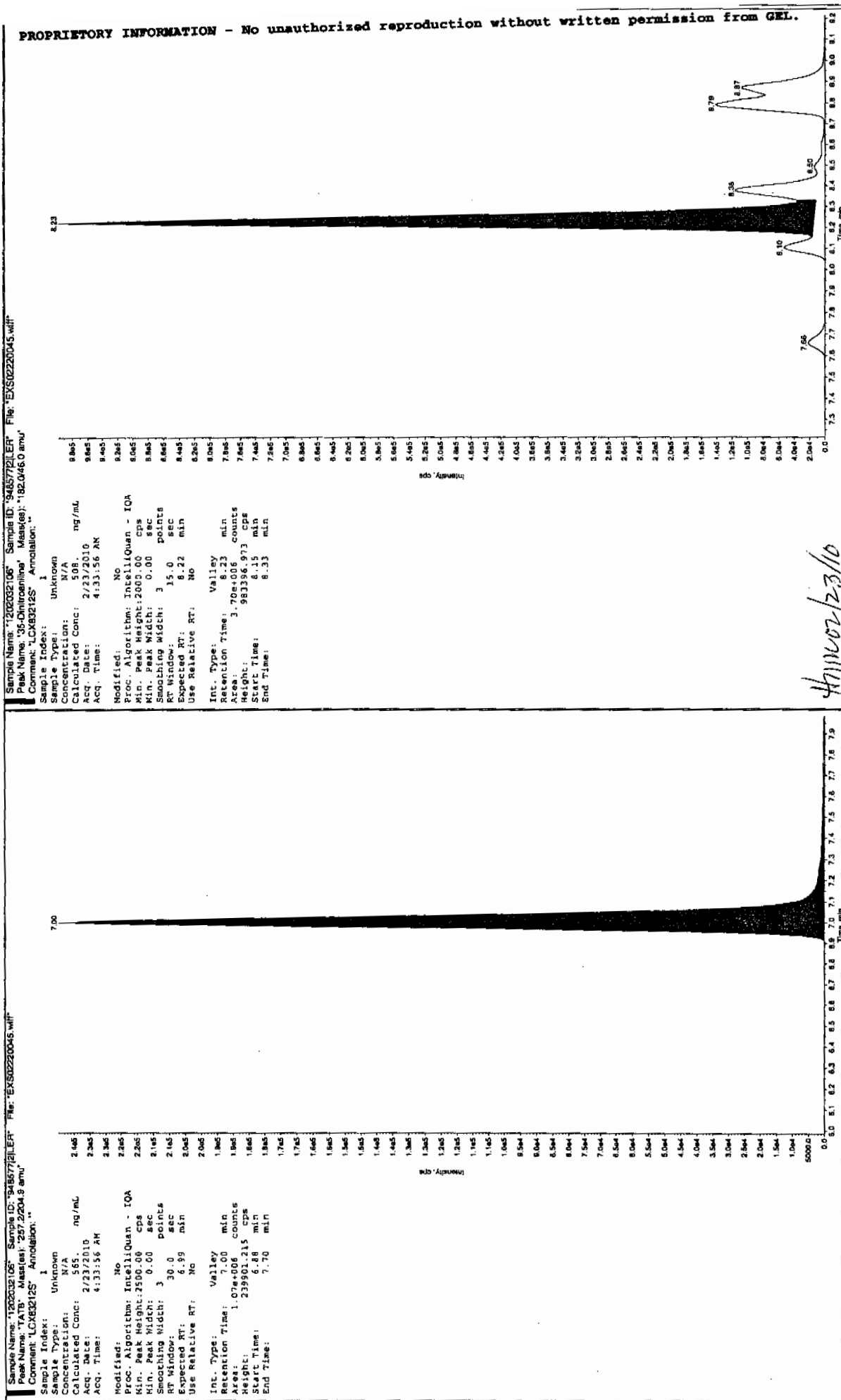
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5650	
59229-75-3	2,6-Diamino-4-nitrotoluene	7050	
618-87-1	3,5-Dinitroaniline	5250	
6629-29-4	2,4-Diamino-6-nitrotoluene	5570	
78-30-8	tris(o-cresyl) phosphate	5100	

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Before Jan 21/23/10



After Jan 23/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

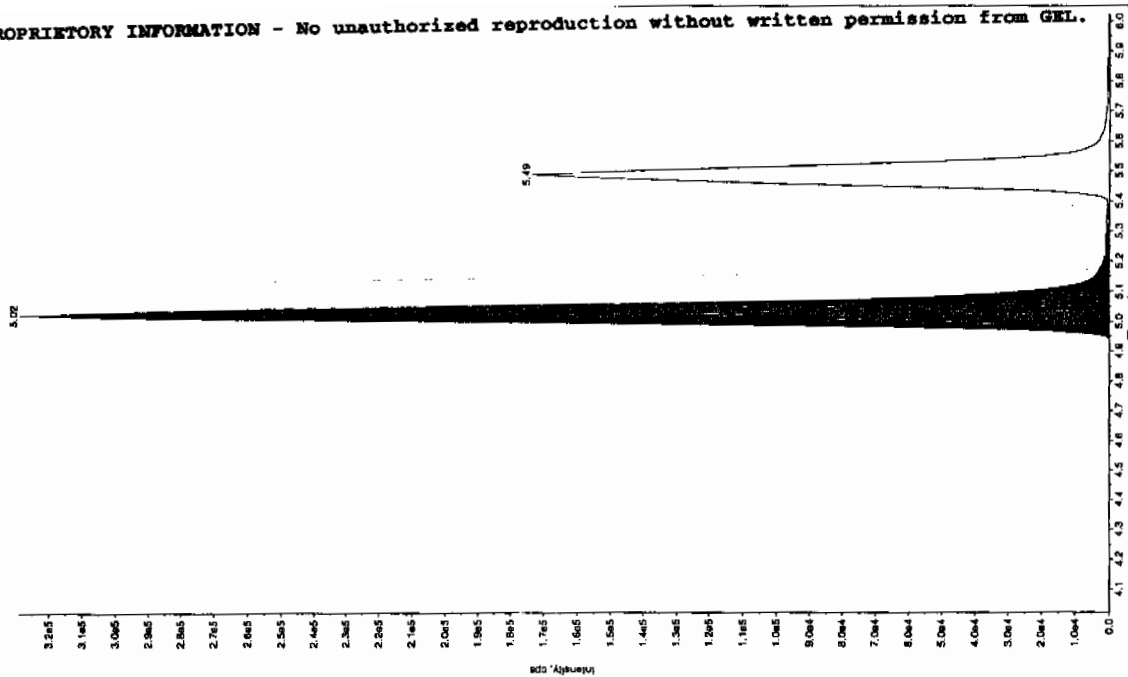
after Jan 2/23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

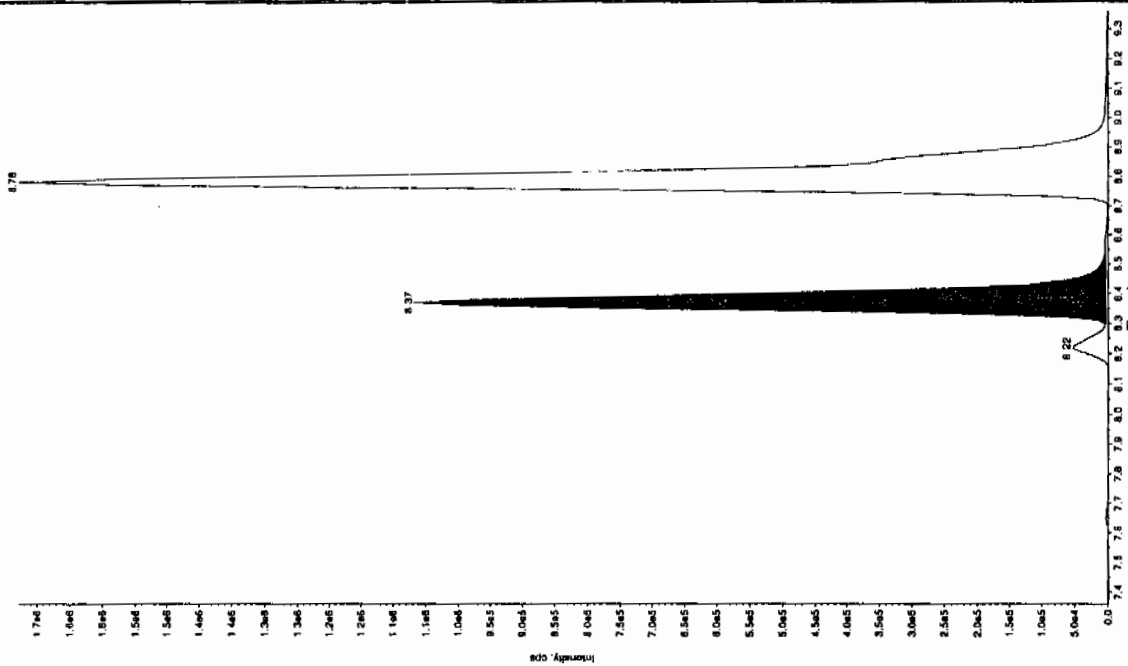
Sample Name: "1206032106" Sample ID: "94857721ER" File: "EX502220045.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17/151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 314 ng/mL
 Calculated Conc: 2/23/2010
 Acq. Date: 4:33:56 AM
 Acq. Time: 4:33:56 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 1.34e+006 counts
 Height: 32884332 cps
 Start Time: 4.93 min
 End Time: 5.32 min



Sample Name: "1206032106" Sample ID: "94857721ER" File: "EX502220045.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.17/151.9 amu"
 Comment: "LCX832125" Annotation: ""

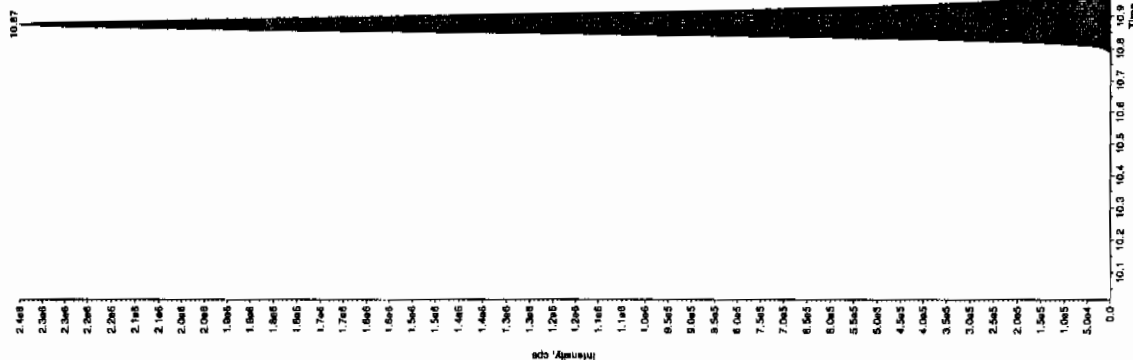
Sample Index: 1
 Sample Type: Unknown
 Concentration: 314 ng/mL
 Calculated Conc: 2/23/2010
 Acq. Date: 4:33:56 AM
 Acq. Time: 4:33:56 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 4.13e+006 counts
 Height: 106317381 cps
 Start Time: 8.20 min
 End Time: 8.59 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

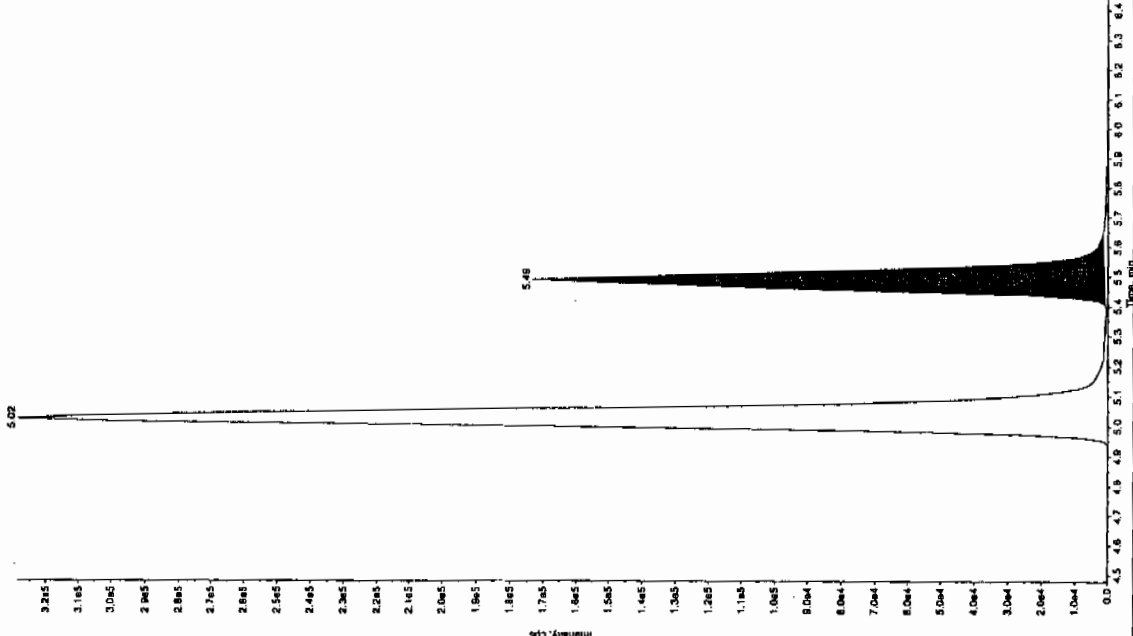
Sample Name: "1202032105" Sample ID: "948577121ER" File: "EXS02220045.wif"
 Peak Name: "Iris(O-cresyl) phosphate" Mass(es): "369.191.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/23/2010 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 4:33:56 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.5 min
 Area: 1.02e+007 counts
 Height: 2351313.965 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "1202032105" Sample ID: "948577121ER" File: "EXS02220045.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/23/2010 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 4:33:56 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.49 min
 Area: 6.97e+005 counts
 Height: 172341.171 cps
 Start Time: 5.41 min
 End Time: 5.64 min



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980(245979001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 1202032107

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301049a

Date Analyzed: 02-MAR-10 15:16

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	6040	
121-14-2	2,4-Dinitrotoluene	5400	
121-82-4	RDX	4200	
19406-51-0	4-Amino-2,6-dinitrotoluene	5560	
2691-41-0	HMX	4410	
35572-78-2	2-Amino-4,6-dinitrotoluene	5930	
479-45-8	Tetryl	3550	
606-20-2	2,6-Dinitrotoluene	5240	
78-11-5	PETN	4680	
88-72-2	o-Nitrotoluene	4660	
98-95-3	Nitrobenzene	4390	
99-08-1	m-Nitrotoluene	4590	
99-35-4	1,3,5-Trinitrobenzene	4810	
99-65-0	m-Dinitrobenzene	4930	
99-99-0	p-Nitrotoluene	5010	

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301049a

Date: 02-Mar-2010

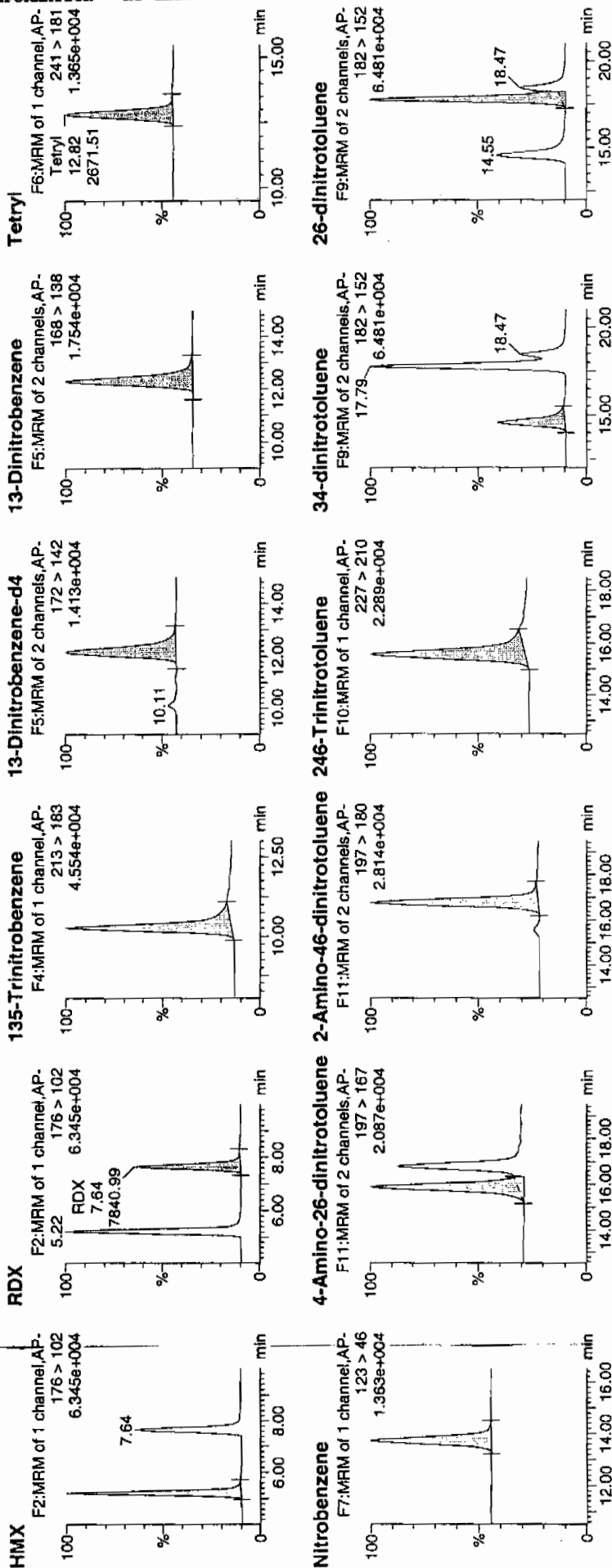
Time: 15:16:12

ID: 1202032107

Vial: 2:5,D

1577
3/3/10

LABU 948577 / 8033 / 245929001049 / 2 /



4/11/10
03/04/10

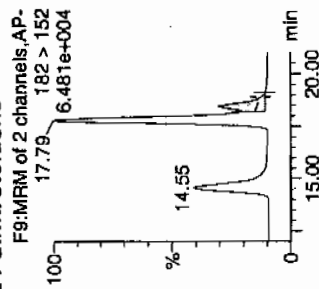
Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

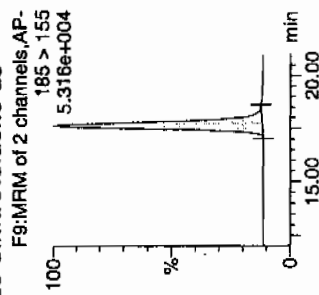
Printed: Wed Mar 03 09:10:52 2010, Page 34 of 103

Dataset: C:\MASSLYNX\New_Exp\PRO030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

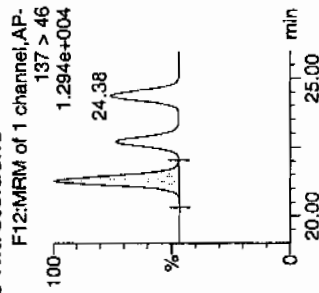
24-dinitrotoluene



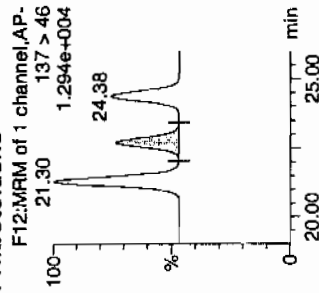
26-dinitrotoluene-d3



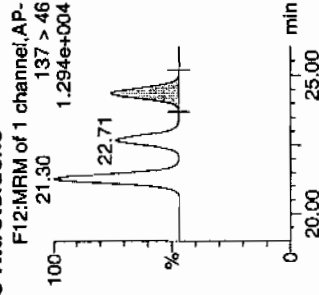
2-Nitrotoluene



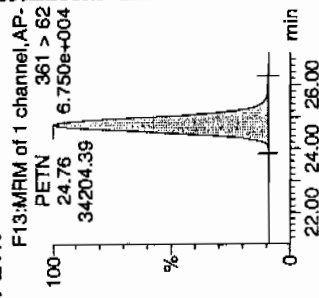
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Conc	% Rec	% Day	SN
1202032107	HMX	176 > 102	5.22	11457.475	3403.859	11457.475	1683.013	bb			441.1771	88.2	-11.8	971.7
1202032107	RDX	176 > 102	7.64	7840.993	3403.859	7840.993	1151.780	bb			419.6505	83.9	-16.1	587.9
1202032107	135-Trinitrobenzene	213 > 183	10.26	11278.645	3403.859	11278.645	1656.744	bb			481.1843	96.2	-3.8	422.2
1202032107	13-Dinitrobenzene-d4	172 > 142	12.17	3403.859	3403.859	3403.859	3403.859	bb			587.2618	117.5	17.5	383.5
1202032107	13-Dinitrobenzene	168 > 138	12.31	4401.990	3403.859	4401.990	646.618	bb			482.8988	98.6	-1.4	310.3
1202032107	Tetryl	241 > 181	12.82	2671.509	3403.859	2671.509	392.424	bb			355.2132	71.0	-29.0	297.2
1202032107	Nitrobenzene	123 > 46	13.71	2656.004	3403.859	2656.004	390.146	bb	03-Mar-10	08:45:45	438.8928	87.8	-12.2	202.2
1202032107	4-Amino-26-dinitrotoluene	197 > 167	15.89	5905.417	18800.855	5905.417	157.052	MM			556.3905	111.3	11.3	185.4
1202032107	2-Amino-46-dinitrotoluene	197 > 180	16.78	8399.995	18800.855	8399.995	223.394	bb			592.5265	118.5	18.5	119.8
1202032107	246-Trinitrotoluene	227 > 210	15.57	7156.731	18800.855	7156.731	190.330	bb			603.8768	120.8	20.8	88.1
1202032107	34-dinitrotoluene	182 > 152	14.55	9718.135	18800.855	9718.135	258.449	bb			260.8843	104.4	4.4	676.7
1202032107	26-dinitrotoluene	182 > 152	17.79	22250.047	18800.855	22250.047	591.730	MM	03-Mar-10	08:56:11	524.4729	104.9	4.9	1966.6
1202032107	24-dinitrotoluene	182 > 152	18.47	5111.846	18800.855	5111.846	135.947	MM	03-Mar-10	08:57:35	540.4579	108.1	8.1	428.0
1202032107	26-dinitrotoluene-d3	185 > 155	17.62	18800.855	18800.855	18800.855	18800.855	bb			584.4285	116.9	16.9	2745.9
1202032107	2-Nitrotoluene	137 > 46	21.30	2905.254	18800.855	2905.254	77.264	bb			465.7753	93.2	-6.8	736.9
1202032107	4-Nitrotoluene	137 > 46	22.71	1493.083	18800.855	1493.083	39.708	bb			501.0477	100.2	0.2	367.4
1202032107	3-Nitrotoluene	137 > 46	24.38	1696.149	18800.855	1696.149	45.108	bb			459.2890	91.9	-8.1	398.6
1202032107	PETN	361 > 62	24.76	34204.395	18800.855	34204.395	909.650	bb			468.2236	93.6	-6.4	6130.4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980(245979001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 1202032107

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220047.wiff

Date Analyzed: 23-FEB-10 05:05

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5150	
59229-75-3	2,6-Diamino-4-nitrotoluene	6740	
618-87-1	3,5-Dinitroaniline	5310	
6629-29-4	2,4-Diamino-6-nitrotoluene	6800	
78-30-8	tris(o-cresyl) phosphate	5100	

*Concentration =

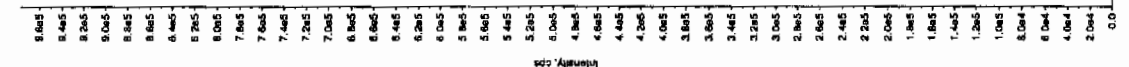
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

01/02/23/10

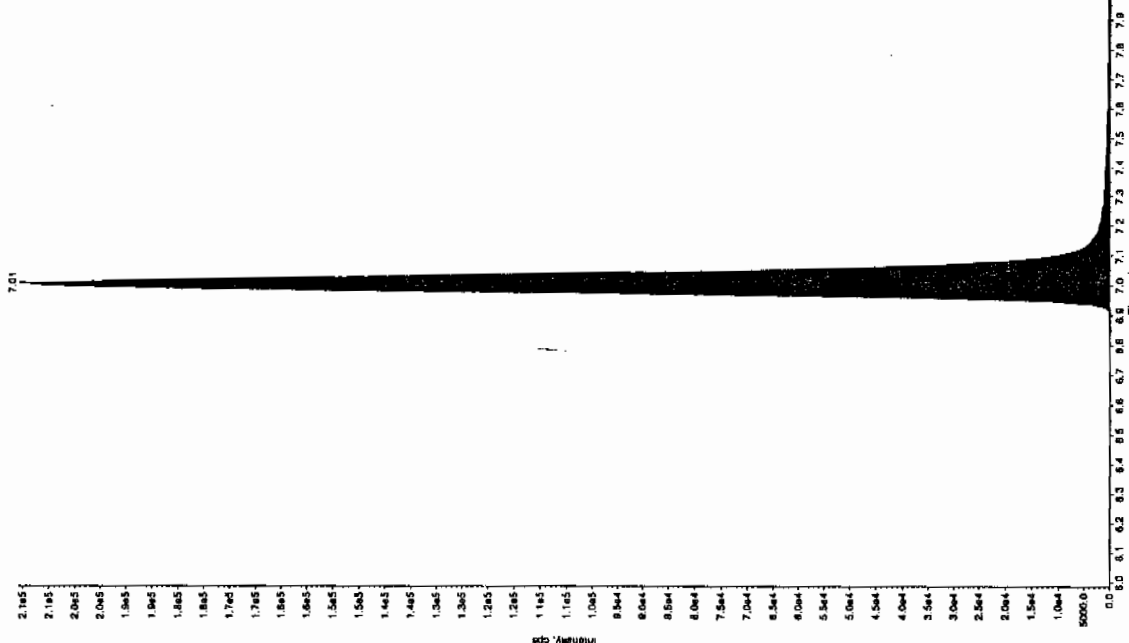
Sample Name: 1202032107 Sample ID: 94857121ER File: EX50220047.wif
 Peak Name: 35-Dinitroaniline Mass(es): 192.046.0 amu
 Comment: LCX832125 Annotation: *

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 2/23/2010 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 5:05:22 AM
 Modified: Yes
 RT Window: 15.0 sec
 Expected RT: 8.22 min
 Use Relative RT: No
 Int. Type: Manual
 Retention Time: 8.23 min
 Area: 3.86e+006 counts
 Height: 985113.841 cps
 Start Time: 8.16 min
 End Time: 8.33 min



Sample Name: 1202032107 Sample ID: 94857121ER File: EX50220047.wif
 Peak Name: 17A13 Mass(es): 237.2204.9 amu
 Comment: LCX832125 Annotation: *

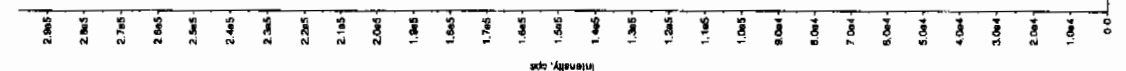
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 515 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 5:05:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.99 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 7.01 min
 Area: 9.80e+005 counts
 Height: 210826.41 cps
 Start Time: 6.95 min
 End Time: 7.05 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

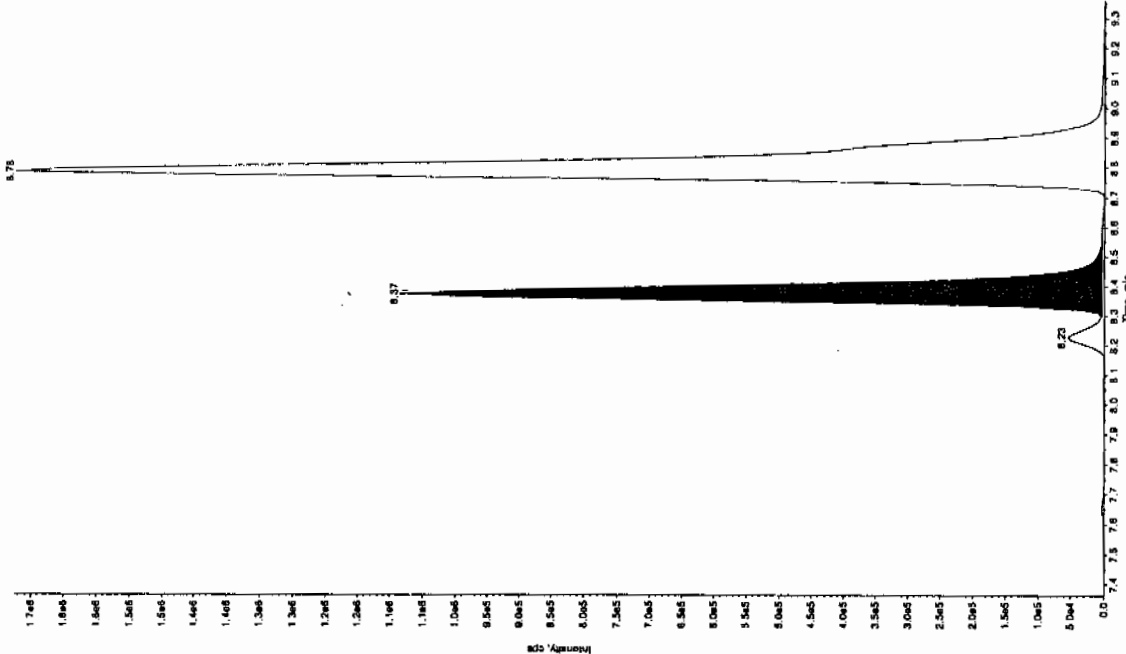
Sample Name: "120202107" Sample ID: "94857701ER" File: "EXS0220047.wif"
 Peak Name: "26-Diamino-4-nitrobutene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 674 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 5:05:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.03 min
 Area: 1.28e+06 counts
 Height: 29787399 cps
 Start Time: 4.92 min
 End Time: 5.28 min



Sample Name: "120202107" Sample ID: "94857701ER" File: "EXS0220047.wif"
 Peak Name: "26-Diamino-4-nitrobutene" Mass(es): "182.1151.9 amu"
 Comment: "LCX83212S" Annotation: ""

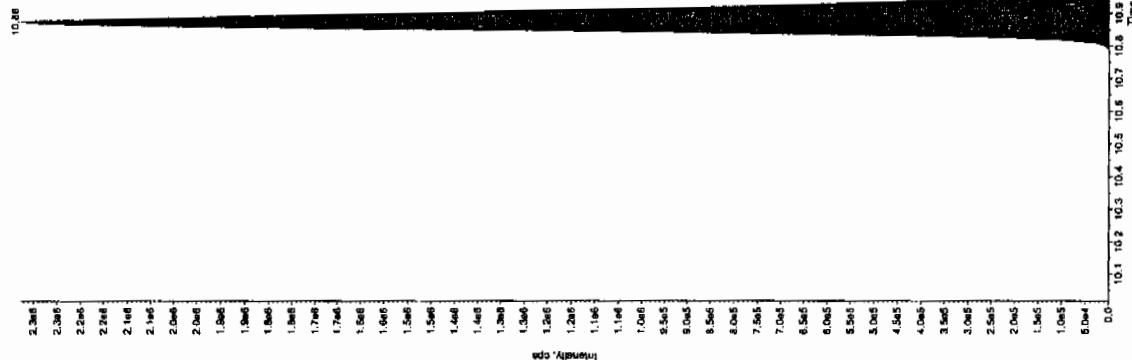
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 309 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 5:05:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 180.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 4.07e+06 counts
 Height: 1081032349 cps
 Start Time: 8.30 min
 End Time: 8.58 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

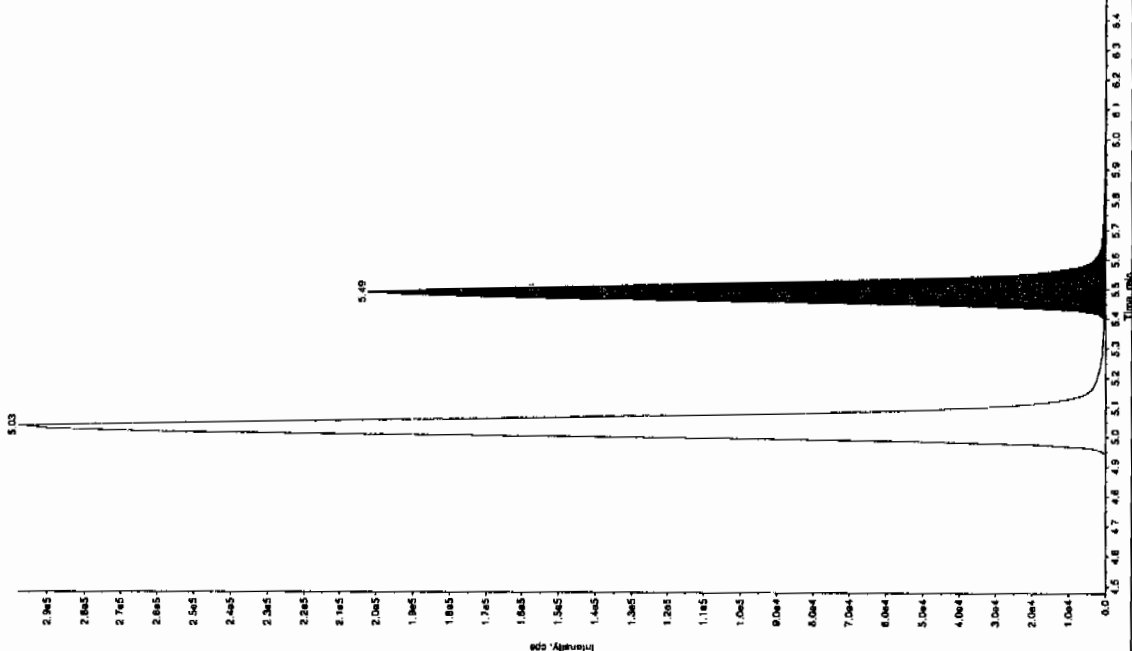
Sample Name: "120202107" Sample ID: "948577101" File: "EXS02220047.wif"
 Peak Name: "166.046.0 amu" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 510. ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 5:05:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.02e+007 counts
 Height: 2325568.604 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "120202107" Sample ID: "948577101" File: "EXS02220047.wif"
 Peak Name: "24-Diamino-6-nitroguanine" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 686. ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 5:05:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.49 min
 Area: 8.58e+005 counts
 Height: 202103.546 cps
 Start Time: 5.36 min
 End Time: 5.87 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980(245979001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 1202032108

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0301050a

Date Analyzed: 02-MAR-10 15:45

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5600	
121-14-2	2,4-Dinitrotoluene	5170	
121-82-4	RDX	5200	
19406-51-0	4-Amino-2,6-dinitrotoluene	5320	
2691-41-0	HMX	5430	
35572-78-2	2-Amino-4,6-dinitrotoluene	6090	
479-45-8	Tetryl	3750	
606-20-2	2,6-Dinitrotoluene	5120	
78-11-5	PETN	4660	
88-72-2	o-Nitrotoluene	4190	
98-95-3	Nitrobenzene	4620	
99-08-1	m-Nitrotoluene	4060	
99-35-4	1,3,5-Trinitrobenzene	4820	
99-65-0	m-Dinitrobenzene	4950	
99-99-0	p-Nitrotoluene	4470	

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 03 09:10:52 2010, Page 35 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0301050a

Date: 02-Mar-2010

Time: 15:45:42

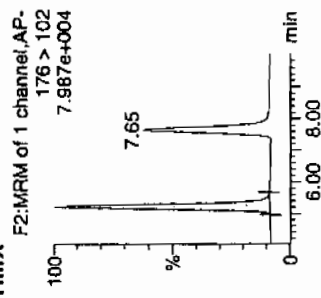
ID: 1202032108

Vial: 2:5,E

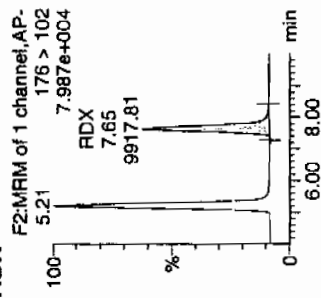
LLOTT
3/3/10

LAW 940577 / 2002 / 24597900 / MS / 21

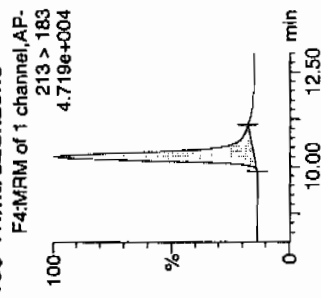
HMX



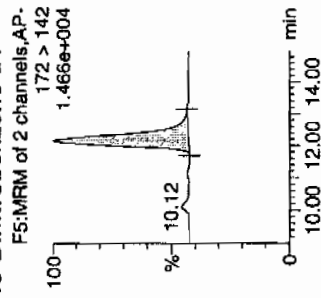
RDX



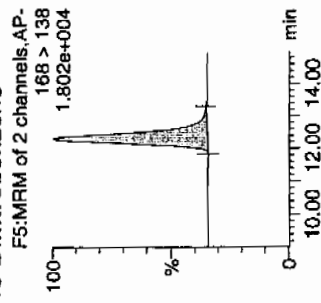
135-Trinitrobenzene



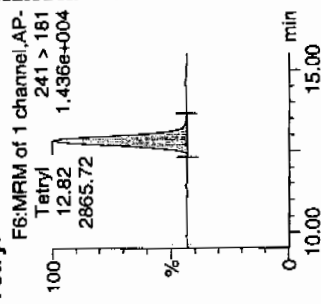
13-Dinitrobenzene-d4



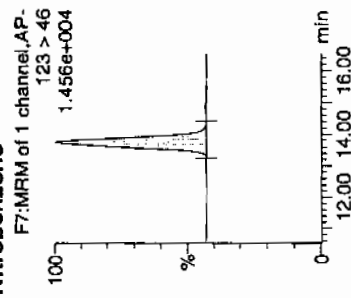
13-Dinitrobenzene



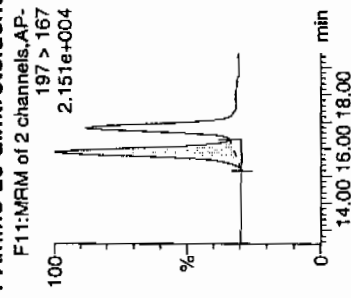
Tetryl



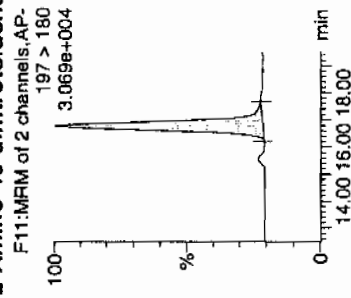
Nitrobenzene



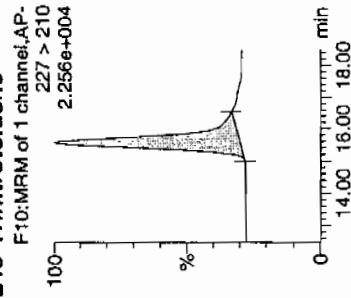
4-Amino-26-dinitrotoluene



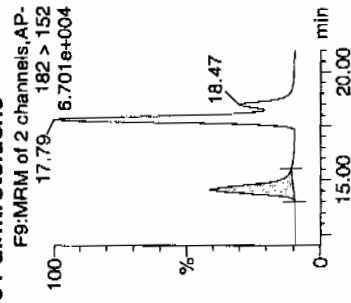
2-Amino-46-dinitrotoluene



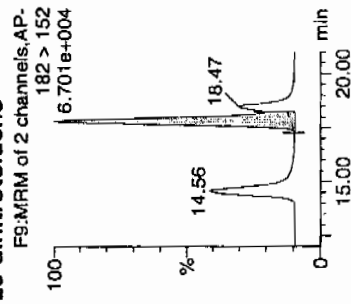
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

HMX
03/04/10

Dataset: C:\MASSLYNX\New_Exp.PRO\030110expA1.qld, Time: Wed Mar 03 09:00:43 2010

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.														
ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	%SN
1202032108	HMx	176 > 102	5.21	14408.320	3476.883	14408.320	2072.017	bb			543.1489	108.6	8.6	1595.3
1202032108	FDX	176 > 102	7.65	9917.811	3476.883	9917.811	1426.250	bb			519.6536	103.9	3.9	941.7
1202032108	135-Trinitrobenzene	213 > 183	10.27	11530.993	3476.883	11530.993	1658.237	bb			481.6180	96.3	-3.7	842.4
1202032108	13-Dinitrobenzene-d4	172 > 142	12.17	3476.883		3476.883	3476.883	bb			599.8605	120.0	20.0	326.7
1202032108	13-Dinitrobenzene	168 > 138	12.31	4517.083	3476.883	4517.083	649.588	bb			495.1631	98.0	-1.0	273.5
1202032108	Tetryl	241 > 181	12.82	2865.716	3476.883	2865.716	412.110	bb			375.3626	75.1	-24.9	269.2
1202032108	Nitrobenzene	123 > 46	13.71	2853.806	3476.883	2853.806	410.397	bb			461.6743	92.3	-7.7	151.7
1202032108	4-Amino-26-dinitrobenzene	197 > 167	15.89	5996.734	19982.016	5996.734	150.053	MM	03-Mar-10	08:45:51	531.5966	106.3	6.3	291.9
1202032108	2-Amino-46-dinitrobenzene	197 > 180	16.79	9175.179	19982.016	9175.179	229.586	bb			608.9499	121.8	21.8	847.6
1202032108	246-Trinitrobenzene	227 > 210	15.58	7054.812	19982.016	7054.812	176.529	bb			560.0894	112.0	12.0	149.5
1202032108	34-dinitrobenzene	182 > 152	14.56	9913.565	19982.016	9913.565	248.062	bb			250.3994	100.2	0.2	637.8
1202032108	26-dinitrobenzene	182 > 152	17.79	23063.344	19982.016	23063.344	577.103	MM	03-Mar-10	08:56:03	511.5083	102.3	2.3	1839.5
1202032108	24-dinitrobenzene	182 > 152	18.47	5198.064	19982.016	5198.064	130.069	MM	03-Mar-10	08:57:45	517.0875	103.4	3.4	397.3
1202032108	26-dinitrobenzene-d3	185 > 155	17.62	19982.016	19982.016	19982.016	19982.016	bb			621.1451	124.2	-24.2	2236.4
1202032108	2-Nitrobenzene	137 > 46	21.29	2775.083	19982.016	2775.083	69.440	bb			418.6072	83.7	-16.3	371.2
1202032108	4-Nitrobenzene	137 > 46	22.71	1414.398	19982.016	1414.398	35.392	bb			446.5859	89.3	-10.7	183.6
1202032108	3-Nitrobenzene	137 > 46	24.38	1593.798	19982.016	1593.798	39.881	bb			406.0632	81.2	-18.8	201.7
1202032108	PETN	361 > 62	24.76	36215.969	19982.016	36215.969	906.214	bb			485.9341	93.2	-6.8	7163.7

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7980(245979001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1514

Matrix: SOIL

GEL Sample ID: 1202032108

Sample Amount 2

Moisture: 4.6

Amount Units g

Date Received: 02-FEB-10

Extraction Type Sonication

Extraction Batch ID: 948576

Concentrated Extract Volume (mL) 10

Date Extracted: 09-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS02220048.wiff

Date Analyzed: 23-FEB-10 05:21

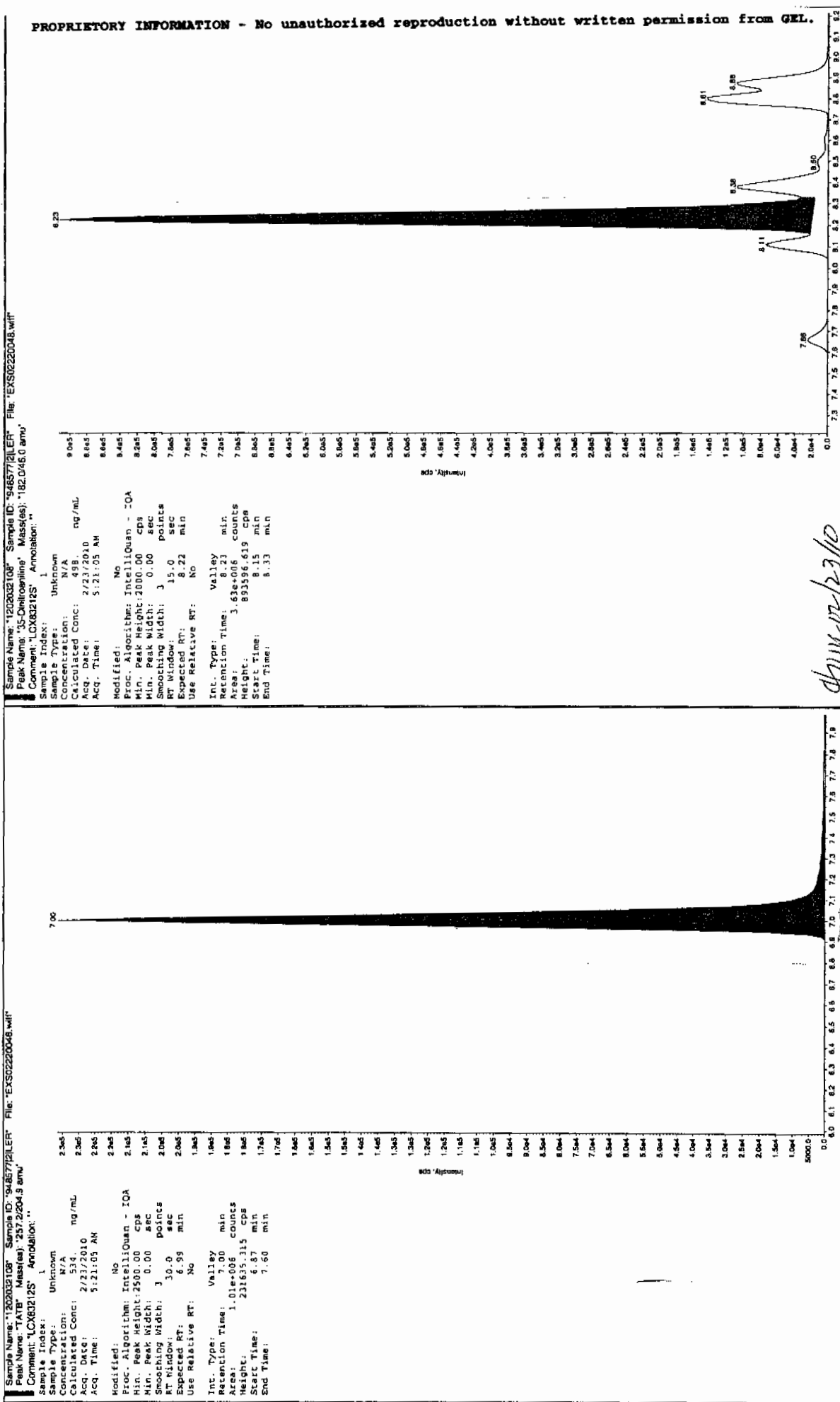
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5340	
59229-75-3	2,6-Diamino-4-nitrotoluene	6440	
618-87-1	3,5-Dinitroaniline	5230	
6629-29-4	2,4-Diamino-6-nitrotoluene	6320	
78-30-8	tris(o-cresyl) phosphate	5080	

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

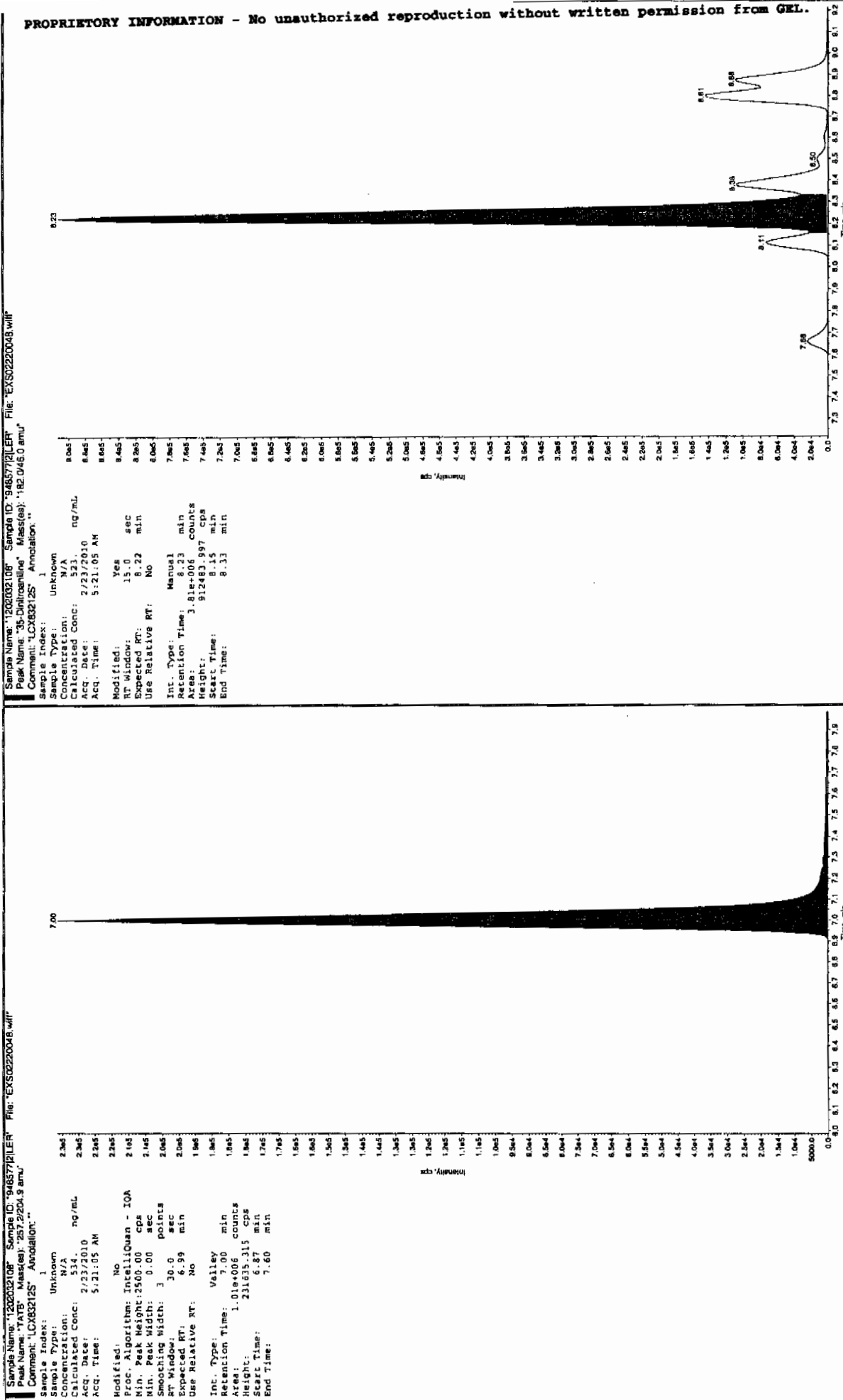
Before Jan 23/10



After Jan 23/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

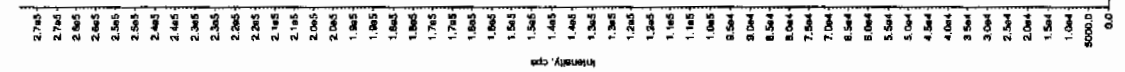
after Jan 21/23/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

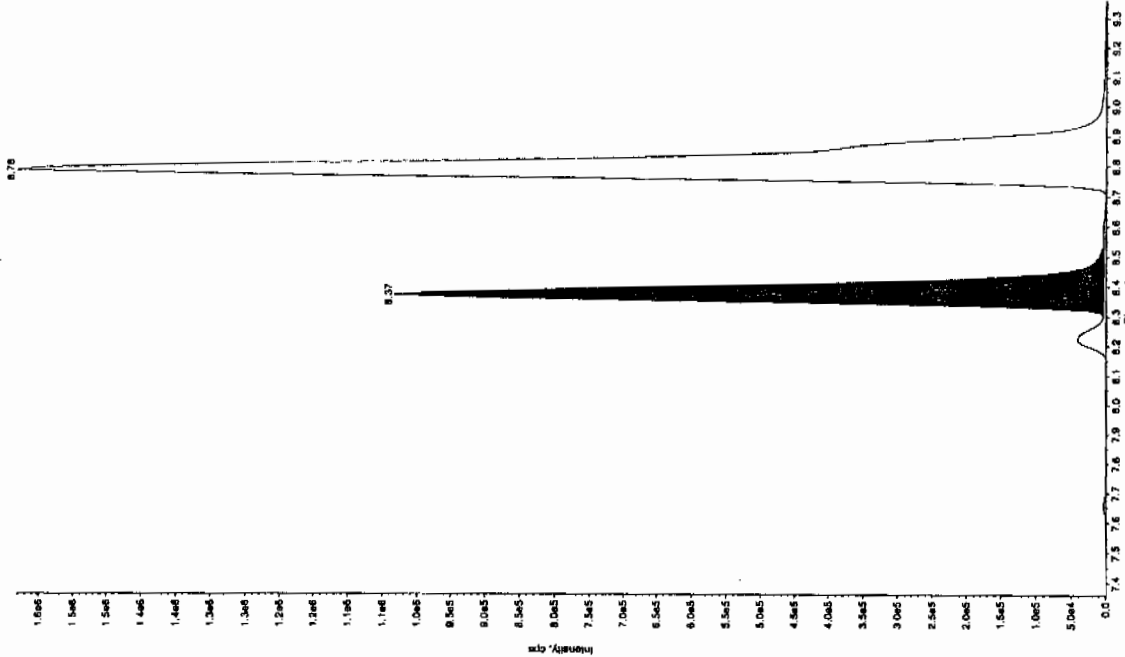
Sample Name: 1202032108 Sample ID: 94857121ER File: EXS0220048.wif
 Peak Name: 26-Diamino-4-Nitrofluorene Mass(es): 186.0450 amu
 Comment: LCX83212S Annotation: *

Sample Index: 1
 Sample Type: Unknown
 Concentration: 101. ng/mL
 Calculated Conc: 2/21/2010
 Acq. Date: 5:21:05 AM
 Acq. Time: 5:21:05 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.01 min
 Area: 1.22e+006 counts
 Weight: 274337.886 cps
 Start Time: 4.92 min
 End Time: 5.31 min



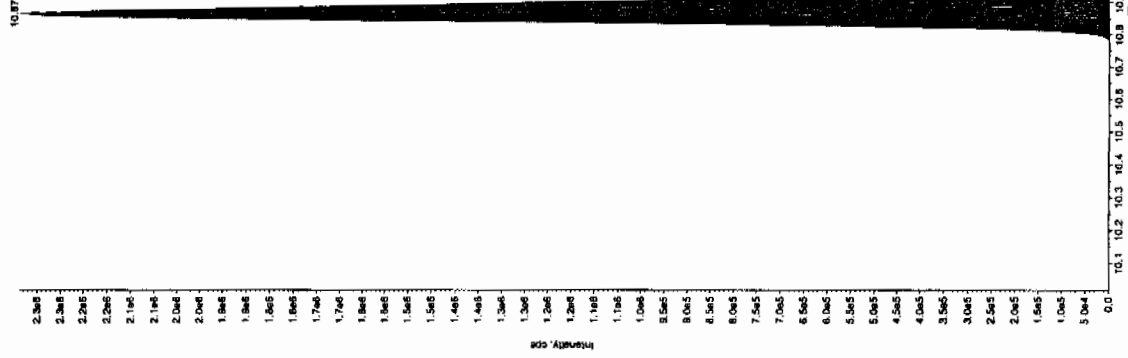
Sample Name: 1202032108 Sample ID: 94857121ER File: EXS0220048.wif
 Peak Name: 26-Diamino-4-Nitrofluorene Mass(es): 182.11315 amu
 Comment: LCX83212S Annotation: *

Sample Index: 1
 Sample Type: Unknown
 Concentration: 301. ng/mL
 Calculated Conc: 2/21/2010
 Acq. Date: 5:21:05 AM
 Acq. Time: 5:21:05 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 3.97e+006 counts
 Weight: 1038906.375 cps
 Start Time: 8.30 min
 End Time: 8.60 min



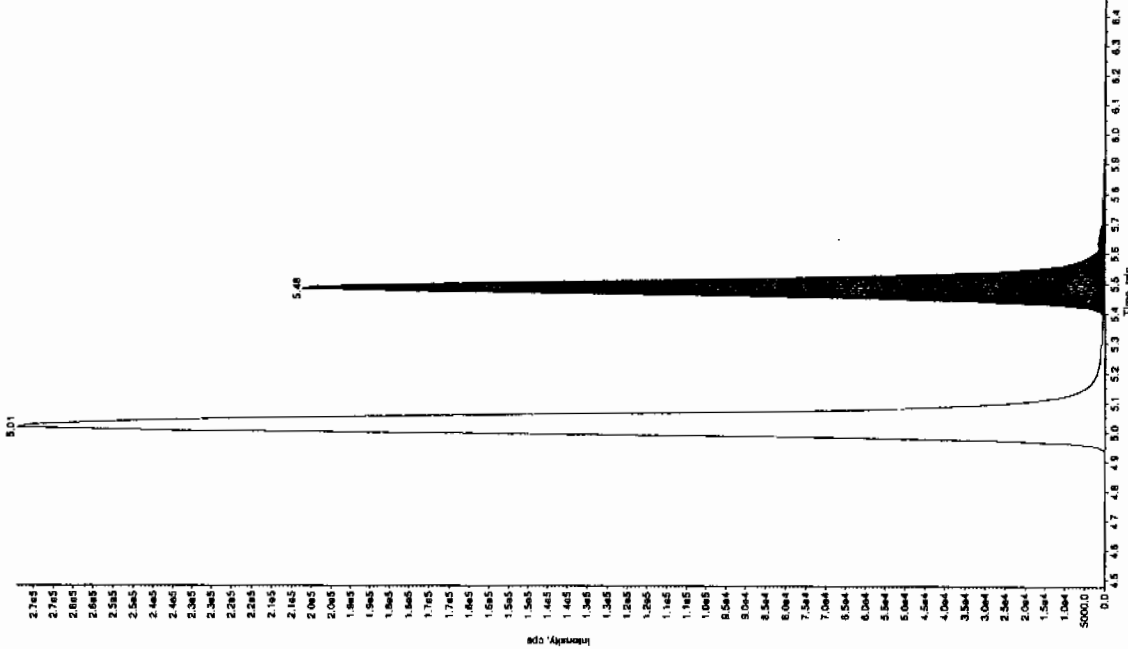
Sample Name: '1202032108' Sample ID: '948577121ER' File: 'EXS02220048.wif'
 Peak Name: '1202032108' Peak Height: 8000.00 cps
 Comment: 'LOX83212S' Annotation: 'Mass(es): 369.191.0 amu'

Sample Index: 1
 Sample Type: Unknown
 Concentration: 508 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 5:21:05 AM
 Modified: NO
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 8000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: NO
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.01e+007 counts
 Height: 2336919.922 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: '1202032108' Sample ID: '948577121ER' File: 'EXS02220048.wif'
 Peak Name: '1202032108' Peak Height: 8000.00 cps
 Comment: 'LOX83212S' Annotation: 'Mass(es): 160.046.0 amu'

Sample Index: 1
 Sample Type: Unknown
 Concentration: 632 ng/mL
 Acq. Date: 2/23/2010
 Acq. Time: 5:21:05 AM
 Modified: NO
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: NO
 Int. Type: Valley
 Retention Time: 5.48 min
 Area: 7.96e+005 counts
 Height: 202256.088 cps
 Start Time: 5.38 min
 End Time: 5.57 min



MISCELLANEOUS DATA

Prep Logbook

Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 948576 Verified by: _____
 Analyst: Sirena White
 Method: SW846 8330 PREP
 Lab SOP: GL-OA-E-033 REV# 17
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202032105 MB	09-FEB-2010 18:31:00	2	10	5
1202032106 LCS	09-FEB-2010 18:31:00	2	10	5
245979001	09-FEB-2010 18:31:00	2	10	5
1202032107 MS (2459790001)	09-FEB-2010 18:31:00	2	10	5
1202032108 MSD (245979001)	09-FEB-2010 18:31:00	2	10	5
245979002	09-FEB-2010 18:31:00	2	10	5
245979003	09-FEB-2010 18:31:00	2	10	5
245979004	09-FEB-2010 18:31:00	2	10	5
245979005	09-FEB-2010 18:31:00	2	10	5
245979006	09-FEB-2010 18:31:00	2	10	5
245979007	09-FEB-2010 18:31:00	2	10	5
245979008	09-FEB-2010 18:31:00	2	10	5
245979009	09-FEB-2010 18:31:00	2	10	5
245979010	09-FEB-2010 18:31:00	2	10	5
245979011	09-FEB-2010 18:31:00	2	10	5
245979012	09-FEB-2010 18:31:00	2	10	5
245979013	09-FEB-2010 18:31:00	2	10	5
245979014	09-FEB-2010 18:31:00	2	10	5
245979015	09-FEB-2010 18:31:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202032106	8321 Explosives LCS	DXX100125-03	.1	mL	Final Solvent: ACN
LCS	1202032106	8321 LANL Explosives Mix 10mg/L	UXX100122-01.2	1	mL	
MS	1202032107	8321 Explosives LCS	DXX100125-03	.1	mL	
MS	1202032107	8321 LANL Explosives Mix 10mg/L	UXX100122-01.2	1	mL	
MSD	1202032108	8321 Explosives LCS	DXX100125-03	.1	mL	
MSD	1202032108	8321 LANL Explosives Mix 10mg/L	UXX100122-01.2	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXP100204-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 03/01/10
 Extr. Injection Volume: 50µL
 Sequence Number: 030110expA
 Initial Calibration Date: 03/01/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX1000220-01
 Mobile Phase Lot#: 1277087, 1268566
 Standard-Samp Reagent Lot#: 1274562, 1271949
 Reviewed BY: LANL
 Date: 03/04/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100301-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0301001a	XIBLK01	MAP	3/1/10 15:33			1		USE	B
EXP0301002a	XIBLK01	MAP	3/1/10 16:02			1		USE	B
EXP0301003a	WXXICAL-01	MAP	3/1/10 16:32			1		USE	I
EXP0301004a	WXXICAL-02	MAP	3/1/10 17:01			1		USE	I
EXP0301005a	WXXICAL-03	MAP	3/1/10 17:31			1		USE	I
EXP0301006a	WXXICAL-04	MAP	3/1/10 18:00			1		USE	I
EXP0301007a	WXXICAL-05	MAP	3/1/10 18:30			1		USE	I
EXP0301008a	WXXICAL-06	MAP	3/1/10 18:59			1		USE	I
EXP0301009a	XIBLK02	MAP	3/1/10 19:28			1		USE	B
EXP0301010a	WXXICV	MAP	3/1/10 19:58			1		USE	C
EXP0301011a	XIBLK03	MAP	3/1/10 20:27			1		USE	B
EXP0301012a	WXXCRI	MAP	3/1/10 20:57			1		USE	C
EXP0301013a	1202035702	MAP	3/1/10 21:26	950093	10-1637	2	LANL	USE	S
EXP0301014a	1202035703	MAP	3/1/10 21:56	950093	10-1637	2	LANL	USE	S
EXP0301015a	246469004	MAP	3/1/10 22:25	950093	10-1637	2	LANL	USE	S
EXP0301016a	246469009	MAP	3/1/10 22:55	950093	10-1637	2	LANL	USE	S
EXP0301017a	WXXCCV	MAP	3/1/10 23:24			1		USE	C
EXP0301018a	XIBLK04	MAP	3/1/10 23:54			1		USE	B
EXP0301019a	WXXCRI	MAP	3/2/10 0:23			1		USE	C
EXP0301020a	1202032101	MAP	3/2/10 0:53	948575	10-1512	2	LANL	USE	S
EXP0301021a	1202032102	MAP	3/2/10 1:22	948575	10-1512	2	LANL	USE	S
EXP0301022a	245969001	MAP	3/2/10 1:52	948575	10-1512	2	LANL	USE	S
EXP0301023a	1202032103	MAP	3/2/10 2:21	948575	10-1512	2	LANL	USE	S
EXP0301024a	1202032104	MAP	3/2/10 2:51	948575	10-1512	2	LANL	USE	S
EXP0301025a	245969002	MAP	3/2/10 3:20	948575	10-1512	2	LANL	USE	S
EXP0301026a	245969003	MAP	3/2/10 3:50	948575	10-1512	2	LANL	USE	S
EXP0301027a	245969004	MAP	3/2/10 4:19	948575	10-1512	2	LANL	USE	S
EXP0301028a	245969005	MAP	3/2/10 4:49	948575	10-1512	2	LANL	USE	S
EXP0301029a	245969006	MAP	3/2/10 5:18	948575	10-1512	2	LANL	USE	S

EXP0301030a	WXXCCV	MAP	3/2/10 5:48					1		USE	C
EXP0301031a	XIBLK05	MAP	3/2/10 6:17					1		USE	B
EXP0301032a	WXXCRI	MAP	3/2/10 6:47					1		USE	C
EXP0301033a	245969007	MAP	3/2/10 7:16	948575	10-1512			2	LANL	USE	S
EXP0301034a	245969008	MAP	3/2/10 7:46	948575	10-1512			2	LANL	USE	S
EXP0301035a	245969009	MAP	3/2/10 8:15	948575	10-1512			2	LANL	USE	S
EXP0301036a	245969010	MAP	3/2/10 8:45	948575	10-1512			2	LANL	DUSE-RA	S
EXP0301037a	245969011	MAP	3/2/10 9:14	948575	10-1512			2	LANL	DUSE-RA	S
EXP0301038a	245969012	MAP	3/2/10 9:44	948575	10-1512			2	LANL	USE	S
EXP0301039a	245969013	MAP	3/2/10 10:13	948575	10-1512			2	LANL	USE	S
EXP0301040a	245969014	MAP	3/2/10 10:42	948575	10-1512			2	LANL	USE	S
EXP0301041a	245969015	MAP	3/2/10 11:12	948575	10-1512			2	LANL	USE	S
EXP0301042a	245969007	MAP	3/2/10 11:42	948575	10-1512			10	LANL	USE	S
EXP0301043a	WXXCCV	MAP	3/2/10 12:12					1		USE	C
EXP0301044a	XIBLK06	MAP	3/2/10 12:41					1		USE	B
EXP0301045a	WXXCRI	MAP	3/2/10 13:11					1		USE	C
EXP0301046a	1202032105	MAP	3/2/10 13:47	948577	10-1514			2	LANL	USE	S
EXP0301047a	1202032106	MAP	3/2/10 14:17	948577	10-1514			2	LANL	USE	S
EXP0301048a	245979001	MAP	3/2/10 14:46	948577	10-1514			2	LANL	USE	S
EXP0301049a	1202032107	MAP	3/2/10 15:16	948577	10-1514			2	LANL	USE	S
EXP0301050a	1202032108	MAP	3/2/10 15:45	948577	10-1514			2	LANL	USE	S
EXP0301051a	245979002	MAP	3/2/10 16:15	948577	10-1514			2	LANL	USE	S
EXP0301052a	245979003	MAP	3/2/10 16:44	948577	10-1514			2	LANL	USE	S
EXP0301053a	245979004	MAP	3/2/10 17:14	948577	10-1514			2	LANL	USE	S
EXP0301054a	245979005	MAP	3/2/10 17:43	948577	10-1514			2	LANL	USE	S
EXP0301055a	245979006	MAP	3/2/10 18:13	948577	10-1514			2	LANL	USE	S
EXP0301056a	WXXCCV	MAP	3/2/10 18:42	948577	10-1514			2	LANL	USE	S
EXP0301057a	XIBLK07	MAP	3/2/10 19:12					1		USE	C
EXP0301058a	WXXCRI	MAP	3/2/10 19:41					1		USE	B
EXP0301059a	245979007	MAP	3/2/10 20:11	948577	10-1514			2	LANL	USE	C
EXP0301060a	245979008	MAP	3/2/10 20:40	948577	10-1514			2	LANL	USE	S
EXP0301061a	245979009	MAP	3/2/10 21:10	948577	10-1514			2	LANL	USE	S
EXP0301062a	245979010	MAP	3/2/10 21:39	948577	10-1514			2	LANL	USE	S
EXP0301063a	245979011	MAP	3/2/10 22:09	948577	10-1514			2	LANL	USE	S
EXP0301064a	245979012	MAP	3/2/10 22:38	948577	10-1514			2	LANL	USE	S
EXP0301065a	245979013	MAP	3/2/10 23:08	948577	10-1514			2	LANL	USE	S
EXP0301066a	245979014	MAP	3/2/10 23:37	948577	10-1514			2	LANL	USE	S

EXP0301067a	245979015	MAP	3/3/10 0:07	948577	10-1514	2	LANL	DUSE-RA	S
EXP0301068a	WXCCV	MAP	3/3/10 0:36			1		USE	C
EXP0301069a	XIBLK08	MAP	3/3/10 1:06			1		USE	B
EXP0301070a	WXCCRI	MAP	3/3/10 1:35			1		USE	C
EXP0301071a	245969010	MAP	3/3/10 2:05	948575	10-1512	2	LANL	USE	S
EXP0301072a	245969011	MAP	3/3/10 2:34	948575	10-1512	2	LANL	USE	S
EXP0301073a	1202032038	MAP	3/3/10 3:04	948558	Various	2	LANL	USE	S
EXP0301074a	1202032039	MAP	3/3/10 3:33	948558	Various	2	LANL	DUSE-RA	S
EXP0301075a	1202032154	MAP	3/3/10 4:03	948558	Various	2	LANL	USE	S
EXP0301076a	245928018	MAP	3/3/10 4:32	948558	10-1495	2	LANL	DUSE-RA	S
EXP0301077a	245928025	MAP	3/3/10 5:02	948558	10-1495	2	LANL	DUSE-RA	S
EXP0301078a	245932006	MAP	3/3/10 5:31	948558	10-1501	2	LANL	DUSE-RA	S
EXP0301079a	1202032040	MAP	3/3/10 6:01	948558	10-1501	2	LANL	DUSE-RA	S
EXP0301080a	1202032041	MAP	3/3/10 6:30	948558	10-1501	2	LANL	DUSE-RA	S
EXP0301081a	WXCCV	MAP	3/3/10 7:00			1		USE	C
EXP0301082a	XIBLK09	MAP	3/3/10 7:29			1		USE	B
EXP0301083a	WXCCRI	MAP	3/3/10 7:59			1		USE	C
EXP0301084a	245979013	MAP	3/3/10 8:28	948577	10-1514	2	LANL	DUSE	S
EXP0301085a	245979015	MAP	3/3/10 8:58	948577	10-1514	2	LANL	DUSE	S
EXP0301086a	245979012	MAP	3/3/10 9:27	948577	10-1514	5	LANL	DUSE	S
EXP0301087a	245969010	MAP	3/3/10 9:57	948575	10-1512	2	LANL	DUSE	S
EXP0301088a	245969011	MAP	3/3/10 10:26	948575	10-1512	2	LANL	DUSE	S
EXP0301089a	1202032039	MAP	3/3/10 10:56	948558	Various	2	LANL	DUSE	S
EXP0301090a	XIBLK10	MAP	3/3/10 11:26			1		USE	B
EXP0301091a	245979013	MAP	3/3/10 11:56	948577	10-1514	2	LANL	DUSE	S
EXP0301092a	WXCCV	MAP	3/3/10 12:25			1		DUSE	C
EXP0301093a	XIBLK11	MAP	3/3/10 12:55			1		USE	B
EXP0301094a	WXCCRI	MAP	3/3/10 13:24			1		DUSE	C
EXP0301095a	245928018	MAP	3/3/10 13:54	948558	10-1495	2	LANL	DUSE	S
EXP0301096a	WXCCV	MAP	3/3/10 14:23			1		USE	C
EXP0301097a	XIBLK12	MAP	3/3/10 14:53			1		USE	B
EXP0301098a	WXCCRI	MAP	3/3/10 15:22			1		USE	C
EXP0301099a	245979015	MAP	3/3/10 15:52	948577	10-1514	2	LANL	USE	S
EXP0301100a	245979012	MAP	3/3/10 16:21	948577	10-1514	5	LANL	USE	S
EXP0301101a	1202032039	MAP	3/3/10 16:51	948558	Various	2	LANL	USE	S
EXP0301102a	245928018	MAP	3/3/10 17:21	948558	10-1495	2	LANL	USE	S
EXP0301103a	245928025	MAP	3/3/10 17:50	948558	10-1495	2	LANL	USE	S

EXP0301104a	245932006	MAP	3/3/10 18:20	948558	10-1501	2	LANL	USE	S
EXP0301105a	1202032040	MAP	3/3/10 18:49	948558	10-1501	2	LANL	USE	S
EXP0301106a	1202032041	MAP	3/3/10 19:19	948558	10-1501	2	LANL	USE	S
EXP0301107a	XIBLK13	MAP	3/3/10 19:48			1		USE	B
EXP0301108a	WXXCCV	MAP	3/3/10 20:17			1		USE	C
EXP0301109a	XIBLK14	MAP	3/3/10 20:47			1		USE	B
EXP0301110a	WXXCRI	MAP	3/3/10 21:16			1		USE	C
EXP0301111a	1202038795	MAP	3/3/10 21:46	951357	Various	2	LANL	DUSE-RA	S
EXP0301112a	1202038796	MAP	3/3/10 22:16	951357	Various	2	LANL	DUSE-RA	S
EXP0301113a	246661001	MAP	3/3/10 22:45	951357	10-1701	2	LANL	DUSE-RA	S
EXP0301114a	1202038797	MAP	3/3/10 23:15	951357	10-1701	2	LANL	DUSE-RA	S
EXP0301115a	1202038798	MAP	3/3/10 23:44	951357	10-1701	2	LANL	DUSE-RA	S
EXP0301116a	246661002	MAP	3/4/10 0:14	951357	10-1701	2	LANL	DUSE-RA	S
EXP0301117a	246661003	MAP	3/4/10 0:43	951357	10-1701	2	LANL	DUSE-RA	S
EXP0301118a	246611001	MAP	3/4/10 1:13	951357	10-1702	2	LANL	DUSE-RA	S
EXP0301119a	246611002	MAP	3/4/10 1:42	951357	10-1702	2	LANL	DUSE-RA	S
EXP0301120a	246611003	MAP	3/4/10 2:12	951357	10-1702	2	LANL	DUSE-RA	S
EXP0301121a	WXXCCV	MAP	3/4/10 2:41			1		DUSE	C
EXP0301122a	XIBLK15	MAP	3/4/10 3:11			1		DUSE	B
EXP0301123a	WXXCRI	MAP	3/4/10 3:40			1		DUSE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 02/22/10
 Exir. Injection Volume: 10uL
 Sequence Number: 022210exs
 Initial Calibration Date: 022210
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1263794, 1258141
 Standard-Samp Reagent Lot#: 1260901, 1261217
 Reviewed By: *hnp*
 Date: 02/23/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100222-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS02220001.wiff	XIBLK01	LER	2/22/2010 17:01			1		USE	B
EXS02220002.wiff	XIBLK01	LER	2/22/2010 17:17			1		USE	B
EXS02220003.wiff	WXXICAL-19	LER	2/22/2010 17:33			1		USE	I
EXS02220004.wiff	WXXICAL-20	LER	2/22/2010 17:49			1		USE	I
EXS02220005.wiff	WXXICAL-21	LER	2/22/2010 18:04			1		USE	I
EXS02220006.wiff	WXXICAL-22	LER	2/22/2010 18:20			1		USE	I
EXS02220007.wiff	WXXICAL-23	LER	2/22/2010 18:36			1		USE	I
EXS02220008.wiff	WXXICAL-24	LER	2/22/2010 18:51			1		USE	I
EXS02220009.wiff	WXXICAL-25	LER	2/22/2010 19:07			1		USE	I
EXS02220010.wiff	XIBLK02	LER	2/22/2010 19:23			1		USE	B
EXS02220011.wiff	WXXICV	LER	2/22/2010 19:38			1		USE	C
EXS02220012.wiff	XIBLK03	LER	2/22/2010 19:54			1		USE	B
EXS02220013.wiff	WXXICR1	LER	2/22/2010 20:10			1		USE	C
EXS02220014.wiff	246469007	LER	2/22/2010 20:26	950093	10-1637	2	LANL	USE	S
EXS02220015.wiff	246469008	LER	2/22/2010 20:41	950093	10-1637	2	LANL	USE	S
EXS02220016.wiff	246469009	LER	2/22/2010 20:57	950093	10-1637	2	LANL	USE	S
EXS02220017.wiff	XIBLK04	LER	2/22/2010 21:13			1		USE	B
EXS02220018.wiff	1202032101	LER	2/22/2010 21:28	948575	10-1512	2	LANL	USE	S
EXS02220019.wiff	1202032102	LER	2/22/2010 21:44	948575	10-1512	2	LANL	USE	S
EXS02220020.wiff	245969001	LER	2/22/2010 22:00	948575	10-1512	2	LANL	USE	S
EXS02220021.wiff	1202032103	LER	2/22/2010 22:16	948575	10-1512	2	LANL	USE	S
EXS02220022.wiff	1202032104	LER	2/22/2010 22:31	948575	10-1512	2	LANL	USE	S
EXS02220023.wiff	245969002	LER	2/22/2010 22:47	948575	10-1512	2	LANL	USE	S
EXS02220024.wiff	WXXCCV	LER	2/22/2010 23:03			1		USE	C
EXS02220025.wiff	XIBLK05	LER	2/22/2010 23:19			1		USE	B
EXS02220026.wiff	WXXICR1	LER	2/22/2010 23:34			1		USE	C
EXS02220027.wiff	245969003	LER	2/22/2010 23:50	948575	10-1512	2	LANL	USE	S
EXS02220028.wiff	245969004	LER	2/23/2010 0:06	948575	10-1512	2	LANL	USE	S
EXS02220029.wiff	245969005	LER	2/23/2010 0:22	948575	10-1512	2	LANL	USE	S
EXS02220030.wiff	245969006	LER	2/23/2010 0:37	948575	10-1512	2	LANL	USE	S

EXS02220031.wiff	245969007	LER	2/23/2010 0:53	948575	10-1512	2	LANL	USE	S
EXS02220032.wiff	245969008	LER	2/23/2010 1:09	948575	10-1512	2	LANL	USE	S
EXS02220033.wiff	245969009	LER	2/23/2010 1:24	948575	10-1512	2	LANL	USE	S
EXS02220034.wiff	245969010	LER	2/23/2010 1:40	948575	10-1512	2	LANL	USE	S
EXS02220035.wiff	245969011	LER	2/23/2010 1:56	948575	10-1512	2	LANL	USE	S
EXS02220036.wiff	245969012	LER	2/23/2010 2:11	948575	10-1512	2	LANL	USE	S
EXS02220037.wiff	WXXCCV	LER	2/23/2010 2:27			1		USE	C
EXS02220038.wiff	XIBLK06	LER	2/23/2010 2:43			1		USE	B
EXS02220039.wiff	WXXCRI	LER	2/23/2010 2:59			1		USE	C
EXS02220040.wiff	245969013	LER	2/23/2010 3:14	948575	10-1512	2	LANL	USE	S
EXS02220041.wiff	245969014	LER	2/23/2010 3:30	948575	10-1512	2	LANL	USE	S
EXS02220042.wiff	245969015	LER	2/23/2010 3:46	948575	10-1512	2	LANL	USE	S
EXS02220043.wiff	XIBLK07	LER	2/23/2010 4:02			1		USE	B
EXS02220044.wiff	1202032105	LER	2/23/2010 4:18	948577	10-1514	2	LANL	USE	S
EXS02220045.wiff	1202032106	LER	2/23/2010 4:33	948577	10-1514	2	LANL	USE	S
EXS02220046.wiff	245979001	LER	2/23/2010 4:49	948577	10-1514	2	LANL	USE	S
EXS02220047.wiff	1202032107	LER	2/23/2010 5:05	948577	10-1514	2	LANL	USE	S
EXS02220048.wiff	1202032108	LER	2/23/2010 5:21	948577	10-1514	2	LANL	USE	S
EXS02220049.wiff	245979002	LER	2/23/2010 5:36	948577	10-1514	2	LANL	USE	S
EXS02220050.wiff	WXXCCV	LER	2/23/2010 5:52			1		USE	C
EXS02220051.wiff	XIBLK08	LER	2/23/2010 6:08			1		USE	B
EXS02220052.wiff	WXXCRI	LER	2/23/2010 6:24			1		USE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 02/24/10
 Extr. Injection Volume: 10uL
 Sequence Number: 022410exs
 Initial Calibration Date: 022410
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1263794, 1258141
 Standard-Samp Reagent Lot#: 1260901, 1261217
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100224-26

Reviewed By: *[Signature]*
 Date: 02/24/10

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS02240001.wiff	XIBLK01	LER	2/24/2010 9:58			1		USE	B
EXS02240002.wiff	XIBLK01	LER	2/24/2010 10:13			1		USE	B
EXS02240003.wiff	WXXICAL-19	LER	2/24/2010 10:29			1		USE	I
EXS02240004.wiff	WXXICAL-20	LER	2/24/2010 10:45			1		USE	I
EXS02240005.wiff	WXXICAL-21	LER	2/24/2010 11:00			1		USE	I
EXS02240006.wiff	WXXICAL-22	LER	2/24/2010 11:16			1		USE	I
EXS02240007.wiff	WXXICAL-23	LER	2/24/2010 11:32			1		USE	I
EXS02240008.wiff	WXXICAL-24	LER	2/24/2010 11:48			1		USE	I
EXS02240009.wiff	WXXICAL-25	LER	2/24/2010 12:03			1		USE	I
EXS02240010.wiff	XIBLK02	LER	2/24/2010 12:19			1		USE	B
EXS02240011.wiff	WXXICV	LER	2/24/2010 12:35			1		USE	C
EXS02240012.wiff	XIBLK03	LER	2/24/2010 12:50			1		USE	B
EXS02240013.wiff	WXXCRI	LER	2/24/2010 13:06			1		USE	C
EXS02240014.wiff	245979003	LER	2/24/2010 13:22	948577	10-1514	2	LANL	USE	S
EXS02240015.wiff	245979004	LER	2/24/2010 13:38	948577	10-1514	2	LANL	USE	S
EXS02240016.wiff	245979005	LER	2/24/2010 13:53	948577	10-1514	2	LANL	USE	S
EXS02240017.wiff	245979006	LER	2/24/2010 14:09	948577	10-1514	2	LANL	USE	S
EXS02240018.wiff	245979007	LER	2/24/2010 14:25	948577	10-1514	2	LANL	USE	S
EXS02240019.wiff	245979008	LER	2/24/2010 14:40	948577	10-1514	2	LANL	USE	S
EXS02240020.wiff	245979009	LER	2/24/2010 14:56	948577	10-1514	2	LANL	USE	S
EXS02240021.wiff	245979010	LER	2/24/2010 15:12	948577	10-1514	2	LANL	USE	S
EXS02240022.wiff	245979011	LER	2/24/2010 15:28	948577	10-1514	2	LANL	USE	S
EXS02240023.wiff	245979012	LER	2/24/2010 15:43	948577	10-1514	2	LANL	USE	S
EXS02240024.wiff	WXXCCV	LER	2/24/2010 15:59			1		USE	C
EXS02240025.wiff	XIBLK04	LER	2/24/2010 16:15			1		USE	B
EXS02240026.wiff	WXXCRI	LER	2/24/2010 16:31			1		USE	C
EXS02240027.wiff	245979013	LER	2/24/2010 16:46	948577	10-1514	2	LANL	USE	S
EXS02240028.wiff	245979014	LER	2/24/2010 17:02	948577	10-1514	2	LANL	USE	S
EXS02240029.wiff	245979015	LER	2/24/2010 17:18	948577	10-1514	2	LANL	USE	S
EXS02240030.wiff	245969002	LER	2/24/2010 17:34	948575	10-1512	2	LANL	USE	S

EXS02240068.wiff	246610003	LER	2/25/2010 3:32	951357	10-1701	2	LANL	DUSE-RA	S
EXS02240069.wiff	246611001	LER	2/25/2010 3:47	951357	10-1702	2	LANL	DUSE-RA	S
EXS02240070.wiff	WXXCCV	LER	2/25/2010 4:03			1		DUSE-RA	C
EXS02240071.wiff	XIBLK09	LER	2/25/2010 4:19			1		DUSE-RA	B
EXS02240072.wiff	WXXCRI	LER	2/25/2010 4:35			1		DUSE-RA	C
EXS02240073.wiff	246611002	LER	2/25/2010 4:50	951357	10-1702	2	LANL	DUSE-RA	S
EXS02240074.wiff	246611003	LER	2/25/2010 5:06	951357	10-1702	2	LANL	DUSE-RA	S
EXS02240075.wiff	UXX100210-02.2	LER	2/25/2010 5:22	SCREEN	SOILID	2	O2SI	DUSE-RA	S
EXS02240076.wiff	WXXCCV	LER	2/25/2010 5:37			1		DUSE-RA	C
EXS02240077.wiff	XIBLK10	LER	2/25/2010 5:53			1		DUSE-RA	B
EXS02240078.wiff	WXXCRI	LER	2/25/2010 6:09			1		DUSE-RA	C

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 799292

Revision No.: 1

DATA EXCEPTION REPORT

Mo.Day Yr. 04-MAR-10	Division: Federal	Quality Criteria: Specifications	Type: Process
Instrument Type: LC-MS/MS	Test / Method: SW846 8321A Modified	Matrix Type: Solid	Client Code: LANL
Batch ID: 948577	Sample Numbers: 1202032106, 1202032107		
Potentially affected work order(s)(SDG): 245979(10-1514) Application Issues: Failed Recovery for LCS/LCSD Failed Recovery for MS/PS			
Specification and Requirements Exception Description:		DER Disposition:	
1. The Laboratory Control Sample (1202032106) did not meet spike recovery limits for Tetra at 44.7% with recovery limits of 51-112% and 2,6-Diamino-4-nitrotoluene at 141% with recovery limits of 64-122%. 2. The Matrix Spike (1202032107) did not meet spike recovery limits for 2,4-Diamino-6-nitrotoluene at 136% with recovery limits of 34-135% and 2,6-Diamino-4-nitrotoluene at 135% with recovery limits of 55-130%.		1. & 2. Since there were no target analytes detected that exhibited a high bias in the associated samples, the data are reported with the appropriate DER. The discrepancies are noted in the case narrative.	

Originator's Name:

Michael Penny 04-MAR-10

Data Validator/Group Leader:

Herbert Maier 04-MAR-10

GC
SEMIVOLATILE
PCB
ANALYSIS

**PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1514**

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 951299
Prep Batch Number: 951296

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
245979013	RE15-10-8061
245979014	RE15-10-8063
245979015	RE15-10-8062
1202038652	Method Blank (MB)
1202038653	Laboratory Control Sample (LCS)
1202038654	245994001(RE15-10-8122) Matrix Spike (MS)
1202038655	245994001(RE15-10-8122) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 15.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inverted in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been

independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

Sample 245979013 (RE15-10-8061) did not meet the surrogate recovery acceptance criteria with a positive bias for Decachlorobiphenyl (DCB) due to co-elution of DCB with one of Aroclor-1268 peaks. See DER #790207 located in the Miscellaneous Data section.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

A LANL sample of similar matrix associated with another SDG (#10-1516) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data Exception Report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. DER # 790207 was generated for this SDG. A copy is included in the Miscellaneous Data section of this package.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII's will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEI requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmy Cao

Date: 3/1/10

Roadmap for LANL 10-1514 PCB

This roadmap was analyzed by yip00818 on 02-12-2010, 13:12.

This roadmap was reviewed by rob01090 on 02-16-2010, 16:25.

This roadmap was packaged by yml on 02-26-2010, 17:04.

This roadmap was validated by jim01140 on 03-01-2010, 09:42.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/055f5501.d	245979013	sample	11-FEB-2010	16:47	10-1514.sub	RE15-10-8061	1.00000	951299	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/056f5601.d	245979014	sample	11-FEB-2010	17:00	10-1514.sub	RE15-10-8063	1.00000	951299	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/057f5701.d	245979015	sample	11-FEB-2010	17:13	10-1514.sub	RE15-10-8062	1.00000	951299	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/055f5501.d	245979013	sample	11-FEB-2010	16:47	10-1514.sub	RE15-10-8061	1.00000	951299	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/056f5601.d	245979014	sample	11-FEB-2010	17:00	10-1514.sub	RE15-10-8063	1.00000	951299	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/057f5701.d	245979015	sample	11-FEB-2010	17:13	10-1514.sub	RE15-10-8062	1.00000	951299	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/043f4301-1.d	1202038652	mb	11-FEB-2010	14:20	10-1514.sub	PBLK01	1.00000	951299	
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/044f4401-1.d	1202038653	lcs	11-FEB-2010	14:33	10-1514.sub	PBLK01LCS	1.00000	951299	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/043f4301-1.d	1202038652	mb	11-FEB-2010	14:20	10-1514.sub	PBLK01	1.00000	951299	
<input type="checkbox"/>	N	/chem/ecd1a.i/021110.b/044f4401-1.d	1202038653	lcs	11-FEB-2010	14:33	245514.sub	PBLK01LCS	1.00000	951299	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number:	10-1514	Date Collected:	01/27/2010 12:00	Matrix:	R
Lab Sample ID:	245979013	Date Received:	02/02/2010 09:10	%Moisture:	14.7
Client ID:	RE15-10-8061	Client:	LANL010	Project:	LANL01004
Batch ID:	951299	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	02/11/2010 16:47	Inst:	ECD1A.I	Dilution:	1
Prep Date:	02/10/2010 21:22	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	055f5501.d	Aliquot:	30.13 g	Final Volume:	1 mL
	055b5501.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.89	ug/kg	1.30	3.89	1
11104-28-2	Aroclor-1221	U	3.89	ug/kg	1.30	3.89	1
11141-16-5	Aroclor-1232	U	3.89	ug/kg	1.30	3.89	1
53469-21-9	Aroclor-1242	U	3.89	ug/kg	1.30	3.89	1
12672-29-6	Aroclor-1248	U	3.89	ug/kg	1.30	3.89	1
11097-69-1	Aroclor-1254		23.2	ug/kg	1.30	3.89	1
11096-82-5	Aroclor-1260		34.6	ug/kg	1.30	3.89	2
11100-14-4	Aroclor-1268		97.3	ug/kg	1.30	3.89	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1514
Lab Sample ID: 245979015

Date Collected: 01/27/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 9.5
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor 1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1514
Lab Sample ID: 245979014Date Collected: 01/27/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YSJ
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 18.5
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.09	ug/kg	1.36	4.09	1
11104-28-2	Aroclor-1221	U	4.09	ug/kg	1.36	4.09	1
11141-16-5	Aroclor-1232	U	4.09	ug/kg	1.36	4.09	1
53469-21-9	Aroclor-1242	U	4.09	ug/kg	1.36	4.09	1
12672-29-6	Aroclor-1248	U	4.09	ug/kg	1.36	4.09	1
11097-69-1	Aroclor-1254	P	4.10	ug/kg	1.36	4.09	1
11096-82-5	Aroclor-1260	U	4.09	ug/kg	1.36	4.09	1

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1514

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1202038652	MB for batch 951296	66	65	74	72
1202038653	LCS for batch 951296	64	62	70	69
245979013	RE15-10-8061	49	46	143 *	143 *
245979014	RE15-10-8063	68	67	73	68
245979015	RE15-10-8062	48	46	52	51

Surrogate**Acceptance Limits**

4CMX = 4cmx

(32%-120%)

DCB = Decachlorobiphenyl

(30%-116%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

**Quality Control Summary
Spike Recovery Report**

SDG Number: 10-1514

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 951296

Matrix: SOIL

Lab Sample ID:1202038653

Instrument: ECD1A.I

Analysis Date: 02/11/2010 14:33

Dilution: 1

Analyst: YS1

Pre Batch ID 951296

Inj. Vol: 1 uL

Batch ID: 951299

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	21.9	66	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	25.8	77	45-118

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1516

Sample Type: Matrix Spike

Client ID: RE15-10-8122MS

Matrix: R

Lab Sample ID: 1202038654

%Moisture: 14.9

Instrument: ECD1A.I

Analysis Date: 02/11/2010 17:38

Dilution: 1

Analyst: YS1

Prep Batch ID: 951296

Inj. Vol: 1 uL

Batch ID: 951299

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	39.1	0.00	U 24.3	62	23-119
11096-82-5	MS Aroclor-1260	39.1	0.00	U 29.9	77	28-124

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1516

Client ID: RE15-10-8122MSD

Lab Sample ID: 1202038655

Instrument: ECD1A.I

Analyst: YS1

Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 14.9

Analysis Date: 02/11/2010 17:51

Dilution: 1

Pre Batch ID: 951296

Batch ID: 951299

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	39.1	0.00 U	22.5	57	23-119	8	0-28
11096-82-5	MSD Aroclor-1260	39.1	0.00 U	26.9	69	28-124	11	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1514	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 951296	Instrument ID:	ECD1AJ_2	Data File:	043b4301-1.d
Lab Sample ID:	1202038652		ECD1AJ_1		043f4301-1.d
Column:	CLP2	Prep Date:	02/10/2010 21:22	Analyzed:	02/11/10 14:20
	CLP1	Level:	LOW		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 951296	1202038653	044f4401-1.d 044b4401-1.d	02/11/10	1433
02 RE15-10-8061	245979013	055f5501.d 055b5501.d	02/11/10	1647
03 RE15-10-8063	245979014	056f5601.d 056b5601.d	02/11/10	1700
04 RE15-10-8062	245979015	057f5701.d 057b5701.d	02/11/10	1713

SAMPLE DATA

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1514
Lab Sample ID: 245979013Date Collected: 01/27/2010 12:00
Date Received: 02/02/2010 09:10Matrix: R
% Moisture: 14.7

Client ID: RE15-10-8061

Client: LANL010

Project: LANL01004

Batch ID: 951299

Method: SW846 8082

SOP Ref: GL-OA-E-040

Run Date: 02/11/2010 16:47

Inst: ECD1A.I

Dilution: 1

Prep Date: 02/10/2010 21:22

Analyst: YS1

Inj. Vol: 1 uL

Data File: 055f5501.d

Aliquot: 30.13 g

Final Volume: 1 mL

Column: 1 CLP1

Level: LOW

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.89	ug/kg	1.30	3.89	1
11104-28-2	Aroclor-1221	U	3.89	ug/kg	1.30	3.89	1
11141-16-5	Aroclor-1232	U	3.89	ug/kg	1.30	3.89	1
53469-21-9	Aroclor-1242	U	3.89	ug/kg	1.30	3.89	1
12672-29-6	Aroclor-1248	U	3.89	ug/kg	1.30	3.89	1
11097-69-1	Aroclor-1254		23.2	ug/kg	1.30	3.89	1
11096-82-5	Aroclor-1260		34.6	ug/kg	1.30	3.89	2
11100-14-4	Aroclor-1268		97.3	ug/kg	1.30	3.89	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/055f5501.d
Lab Smp Id: 245979013 Client Smp ID: RE15-10-8061
Inj Date : 11-FEB-2010 16:47
Operator : YS1 Inst ID: ecdla.i
Smp Info : |245979013|1|
Misc Info : |ECD82P_1S|951299|SVA|LANL|SOIL|RE15-10-8061|||
Comment :
Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
Meth Date : 12-Feb-2010 07:41 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 55
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1514.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1pl

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	14.74470	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8							
1.963	1.962	0.001	43115422	98.6238	3.8 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.275	5.275	0.000	95094647	285.098	11.1 80.00- 120.00	100.00 (R)	

6 Aroclor-1254 CAS #: 11097-69-1							
3.264	3.264	0.000	11787039	746.768	29.1 80.00- 120.00	100.00	
3.419	3.420	-0.001	8479269	397.231	15.5 113.70- 153.70	71.94	
3.658	3.654	0.004	19801001	726.472	28.3 155.79- 195.79	167.99	
3.817	3.817	0.000	3197037	155.039	6.0 112.67- 152.67	27.12	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254 (continued)								
3.924	3.926	-0.002	18599880	949.259	37.0	108.44- 148.44	157.80	
Average of Peak Concentrations =					23.2			

7 Aroclor-1260					CAS #: 11096-82-5			
3.761	3.760	0.001	13272607	697.448	27.2	80.00- 120.00	100.00	
3.924	3.924	0.000	18599880	656.001	25.5	129.97- 169.97	140.14	
4.153	4.154	-0.001	18134667	1063.95	41.4	69.84- 109.84	136.63	
4.294	4.296	-0.002	23861697	1333.64	51.9	74.16- 114.16	179.78	
4.481	4.475	0.006	25798105	664.035	25.8	190.26- 230.26	194.37	
Average of Peak Concentrations =					34.4			

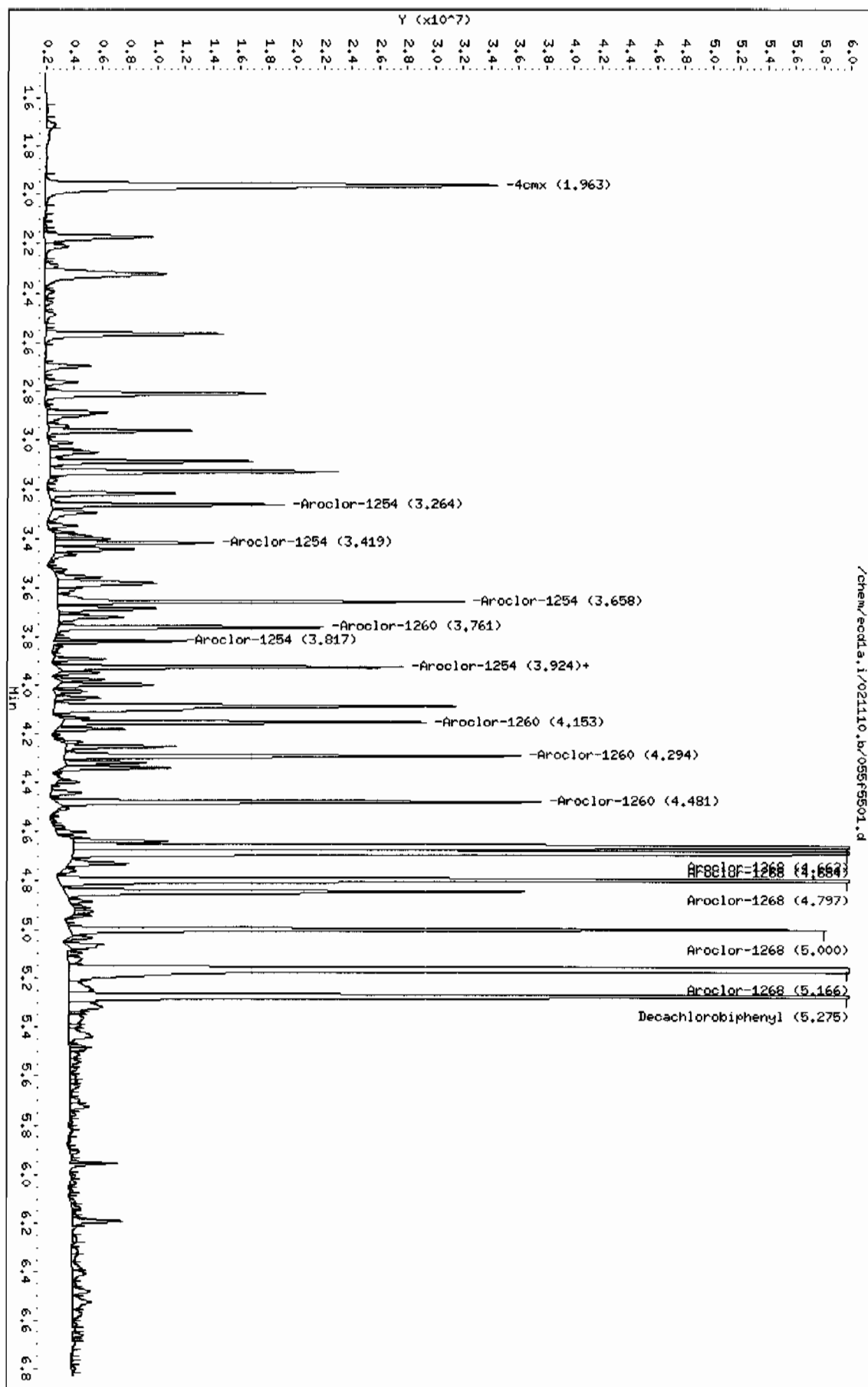
9 Aroclor-1268					CAS #: 11100-14-4			
4.662	4.662	0.000	114093545	2173.83	84.6	80.00- 120.00	100.00	
4.684	4.685	-0.001	108406084	2252.92	87.7	75.88- 115.88	95.02	
4.797	4.797	0.000	88532206	2390.98	93.1	55.36- 95.36	77.60	
5.000	5.001	-0.001	40583927	2490.69	97.0	17.80- 57.80	35.57	
5.166	5.166	0.000	344830635	3184.70	124	219.60- 259.60	302.24	
Average of Peak Concentrations =					97.3			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecdl1.i/021110.b/055f5501.d
 Date: 11-FEB-2010 16:47
 Client ID: RE15-10-8061
 Sample Info: 12457901311
 Volume Injected (uL): 1.0
 Column Phase: CLP1

Instrument: ecdl1.i
 Operator: YS1
 Column diameter: 0.25



Data File: /chem/ecd1a.i/021110.b/055b5501.d
Report Date: 12-Feb-2010 12:50

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecd1a.i/021110.b/055b5501.d
Lab Smp Id: 245979013 Client Smp ID: RE15-10-8061
Inj Date : 11-FEB-2010 16:47
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |245979013|1|
Misc Info : |ECD82P_1S|951299|SVA|LANL|SOIL|RE15-10-8061|||
Comment :
Method : /chem/ecd1a.i/021110.b/ECD1-B-8082-021110.m
Meth Date : 12-Feb-2010 07:41 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 55
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1514.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.13000	Weight of sample extracted (g)
M	14.74470	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE (ug/L)	(ug/Kg)		
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.295	2.294	0.001	26653722	92.8987	3.6 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.940	5.941	-0.001	61480203	285.829	11.1 80.00- 120.00	100.00(R)

6 Aroclor-1254 CAS #: 11097-69-1						
3.399	3.400	-0.001	1563136	235.741	9.2 80.00- 120.00	100.00
3.822	3.822	0.000	7921012	676.829	26.3 159.63- 199.63	506.74
3.938	3.939	-0.001	5847255	453.632	17.6 177.60- 217.60	374.07
4.229	4.215	0.014	11490057	649.763	25.3 255.98- 295.98	735.06

CONCENTRATIONS								
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====		
6 Aroclor-1254 (continued)								
4.351	4.351	0.000	3173251	240.707	9.4 179.01- 219.01	203.01		
Average of Peak Concentrations =				17.6				

7 Aroclor-1260				CAS #: 11096-82-5				
4.331	4.330	0.001	10869873	863.205	33.6 80.00- 120.00	100.00		
4.455	4.455	0.000	7914001	525.252	20.4 102.02- 142.02	72.81		
4.722	4.721	0.001	13956024	1201.25	46.8 72.44- 112.44	128.39		
4.898	4.895	0.003	15783700	1312.02	51.1 75.48- 115.48	145.21		
5.043	5.042	0.001	14103664	546.149	21.3 192.44- 232.44	129.75		
Average of Peak Concentrations =				34.6				

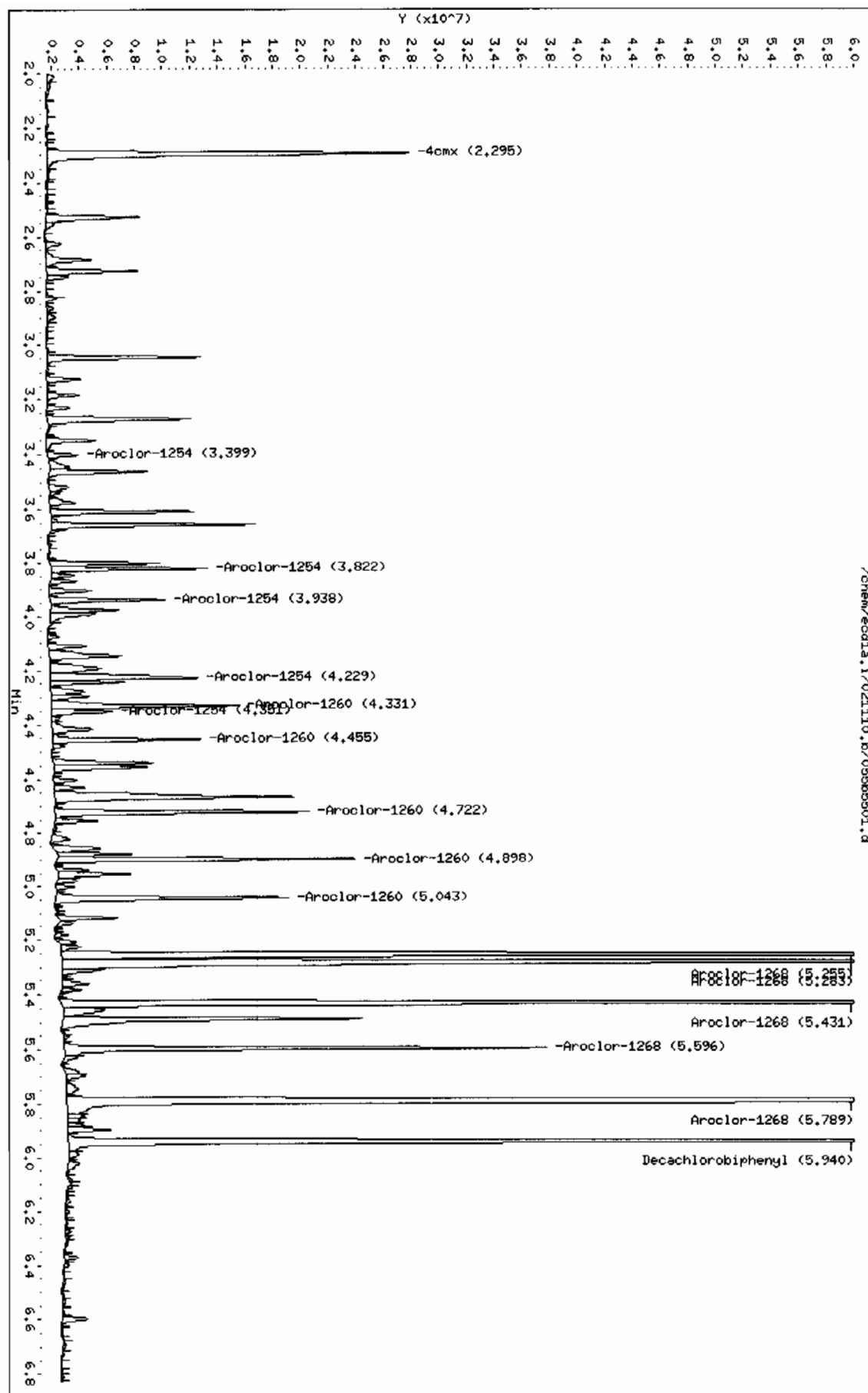
9 Aroclor-1268				CAS #: 11100-14-4				
5.255	5.255	0.000	68253296	1882.56	73.3 80.00- 120.00	100.00		
5.283	5.282	0.001	72774899	2167.04	84.4 75.84- 115.84	106.62		
5.431	5.432	-0.001	57601641	2216.95	86.3 55.20- 95.20	84.39		
5.596	5.597	-0.001	26874563	2368.50	92.2 17.26- 57.26	39.37		
5.789	5.790	-0.001	210706182	3141.30	122 215.50- 255.50	308.71		
Average of Peak Concentrations =				91.6				

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecdia.i/021110.b/05065501.d
Date: 11-FEB-2010 16:47
Client ID: REL5-10-8061
Sample Info: 124597901311
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdia.i
Operator: YSA
Column diameter: 0.25



PCB

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Certificate of Analysis
Sample Summary

SDG Number: 10-1514

Lab Sample ID: 245979015

Client ID: RE15-10-8062

Batch ID: 951299

Run Date: 02/11/2010 17:13

Prep Date: 02/10/2010 21:22

Data File: 057f5701.d

057b5701.d

Date Collected: 01/27/2010 12:00

Date Received: 02/02/2010 09:10

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.19 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 9.5

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.66	ug/kg	1.22	3.66	1
11104-28-2	Aroclor-1221	U	3.66	ug/kg	1.22	3.66	1
11141-16-5	Aroclor-1232	U	3.66	ug/kg	1.22	3.66	1
53469-21-9	Aroclor-1242	U	3.66	ug/kg	1.22	3.66	1
12672-29-6	Aroclor-1248	U	3.66	ug/kg	1.22	3.66	1
11097-69-1	Aroclor-1254	U	3.66	ug/kg	1.22	3.66	1
11096-82-5	Aroclor-1260	U	3.66	ug/kg	1.22	3.66	1

Data File: /chem/ecdla.i/021110.b/057f5701.d
 Report Date: 12-Feb-2010 07:33

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/057f5701.d
 Lab Smp Id: 245979015 Client Smp ID: RE15-10-8062
 Inj Date : 11-FEB-2010 17:13
 Operator : YSl Inst ID: ecdla.i
 Smp Info : |245979015|1|
 Misc Info : |ECD82P_1S|951299|SVA|LANL|SOIL|RE15-10-8062|||
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 12-Feb-2010 07:00 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 57
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1514.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	9.47790	% Moisture

Cpnd Variable Local Compound Variable

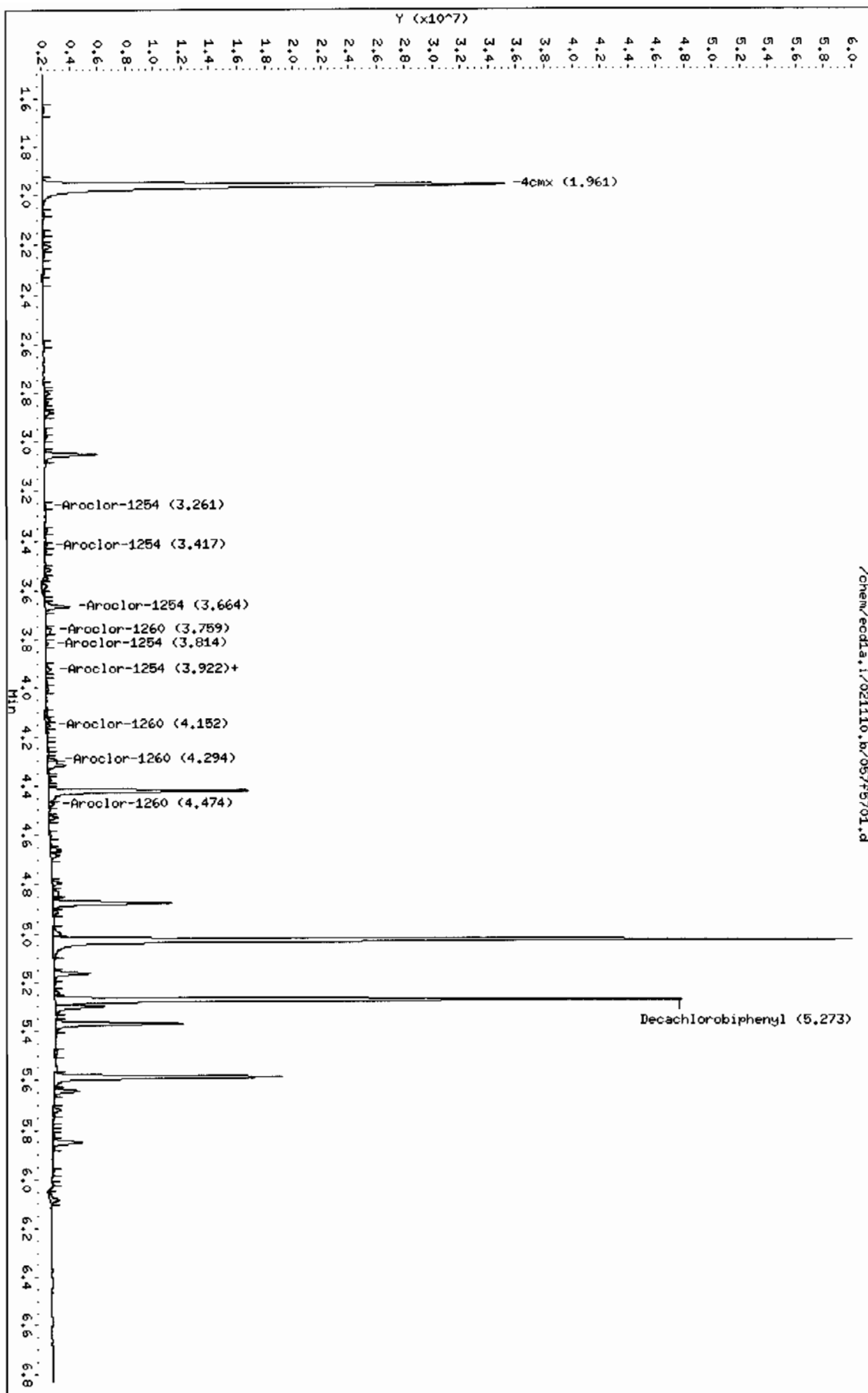
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE (ug/L)	(ug/Kg)		
\$ 11 4cmx					CAS #: 877-09-8	
1.961	1.962	-0.001	41537230 95.0138	3.5	80.00~ 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.273	5.275	-0.002	34522638 103.501	3.8	80.00~ 120.00	100.00

Data File: /chem/ecda.i/021110.b/057f5701.d
Date: 11-FEB-2010 17:13
Client ID: RE15-10-8062
Sample Info: 124597901511
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecda.i
Operator: YSL
Column diameter: 0.25

/chem/ecda.i/021110.b/057f5701.d



Data File: /chem/ecdl1a.i/021110.b/057b5701.d
 Report Date: 12-Feb-2010 07:33

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GEI Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/057b5701.d
 Lab Smp Id: 245979015 Client Smp ID: RE15-10-8062
 Inj Date : 11-FEB-2010 17:13
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |245979015|1|
 Misc Info : |ECD82P_1S|951299|SVA|LANL|SOIL|RE15-10-8062|||
 Comment :
 Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
 Meth Date : 12-Feb-2010 07:00 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 57
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1514.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1pl

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	9.47790	% Moisture

Cpnd Variable Local Compound Variable

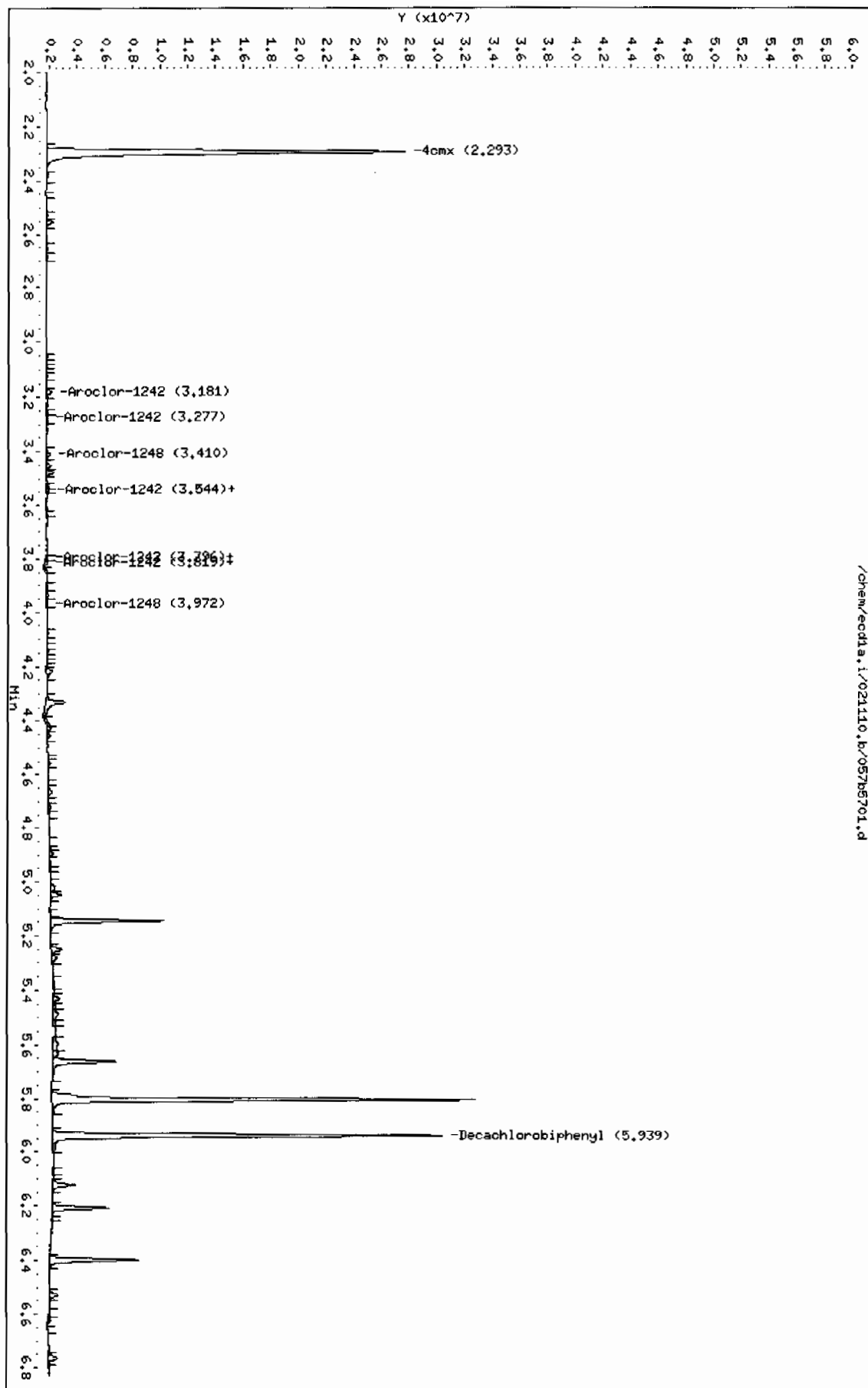
CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE (ug/L)	(ug/Kg)		

\$ 11 4cmx				CAS #: 877-09-8		
2.293	2.294	-0.001	26245496 91.4759	3.3	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.939	5.941	-0.002	21966439 102.125	3.7	80.00- 120.00	100.00

Data File: /chem/ecdl1a.i/021110.b/057b5701.d
Date : 11-FEB-2010 17:13
Client ID: RE15-10-8062
Sample Info: 124697901511
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1514
Lab Sample ID: 245979014

Client ID: RE15-10-8063
Batch ID: 951299
Run Date: 02/11/2010 17:00
Prep Date: 02/10/2010 21:22
Data File: 056f5601.d
056b5601.d

Date Collected: 01/27/2010 12:00
Date Received: 02/02/2010 09:10
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YSI
Aliquot: 30.02 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 18.5
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.09	ug/kg	1.36	4.09	1
11104-28-2	Aroclor-1221	U	4.09	ug/kg	1.36	4.09	1
11141-16-5	Aroclor-1232	U	4.09	ug/kg	1.36	4.09	1
53469-21-9	Aroclor-1242	U	4.09	ug/kg	1.36	4.09	1
12672-29-6	Aroclor-1248	U	4.09	ug/kg	1.36	4.09	1
11097-69-1	Aroclor-1254	P	4.10	ug/kg	1.36	4.09	1
11096-82-5	Aroclor-1260	U	4.09	ug/kg	1.36	4.09	1

Data File: /chem/ecdla.i/021110.b/056f5601.d
Report Date: 12-Feb-2010 07:32

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/056f5601.d
Lab Smp Id: 245979014 Client Smp ID: RE15-10-8063
Inj Date : 11-FEB-2010 17:00
Operator : YS1 Inst ID: ecdla.i
Smp Info : |245979014|1|
Misc Info : |ECD82P_1S|951299|SVA|LANL|SOIL|RE15-10-8063|||
Comment :
Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
Meth Date : 12-Feb-2010 07:00 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 56
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1514.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	18.47730	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
CAS #: 877-09-8							
1.963	1.962	0.001	59878063 136.967	5.6	80.00- 120.00	100.00	
CAS #: 2051-24-3							
5.272	5.275	-0.003	48388827 145.072	5.9	80.00- 120.00	100.00	
CAS #: 11097-69-1							
3.263	3.264	-0.001	633122 40.1115	1.6	80.00- 120.00	100.00	
3.418	3.420	-0.002	1627114 76.2260	3.1	113.70- 153.70	257.00	
3.651	3.654	-0.003	2139514 78.4958	3.2	155.79- 195.79	337.93	
3.815	3.817	-0.002	2806076 136.079	5.6	112.67- 152.67	443.21	

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
---	-----	-----	-----	-----	-----	-----	-----
6 Aroclor-1254 (continued)							
3.922	3.926	-0.004	3361508	171.557	7.0	108.44- 148.44	530.94
Average of Peak Concentrations =					4.1		

Data File: /chem/ecdda.i/021110.b/056f5601.d

Date: 11-FEB-2010 17:00

Client ID: RE15-10-8063

Sample Info: 124597901411

Volume Injected (uL): 1.0

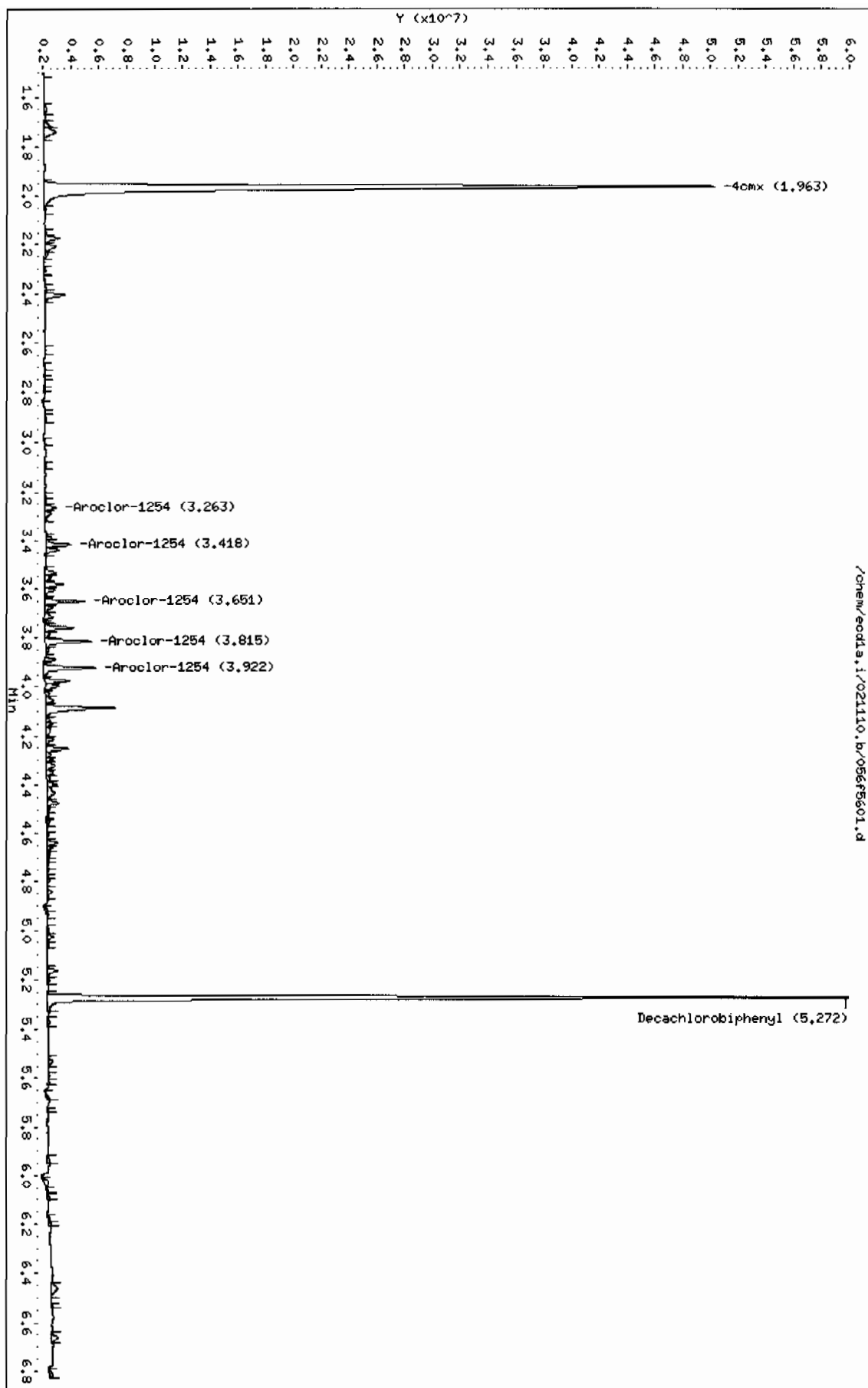
Column phase: CLP1

Instrument: ecdda.i

Operator: YSA

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/021110.b/056b5601.d
Report Date: 12-Feb-2010 07:33

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/021110.b/056b5601.d
Lab Smp Id: 245979014 Client Smp ID: RE15-10-8063
Inj Date : 11-FEB-2010 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |245979014|1|
Misc Info : |ECD82P_1S|951299|SVA|LANL|SOIL|RE15-10-8063|||
Comment :
Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
Meth Date : 12-Feb-2010 07:00 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 56
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1514.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	18.47730	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.294	2.294	0.000	38592462	134.510	5.5 80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.939	5.941	-0.002	29259509	136.031	5.6 80.00- 120.00	100.00	
6 Aroclor-1254					CAS #: 11097-69-1		
3.400	3.400	0.000	101100	15.2472	0.62 80.00- 120.00	100.00(a)	
3.821	3.822	-0.001	439214	37.5296	1.5 159.63- 199.63	434.43	
3.937	3.939	-0.002	970258	75.2729	3.1 177.60- 217.60	959.69	
4.213	4.215	-0.002	1409831	79.7259	3.2 255.98- 295.98	1394.48	

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)						
4.350	4.351	-0.001	1633032	123.874	5.1	179.01- 219.01 1615.25
Average of Peak Concentrations =					2.7	

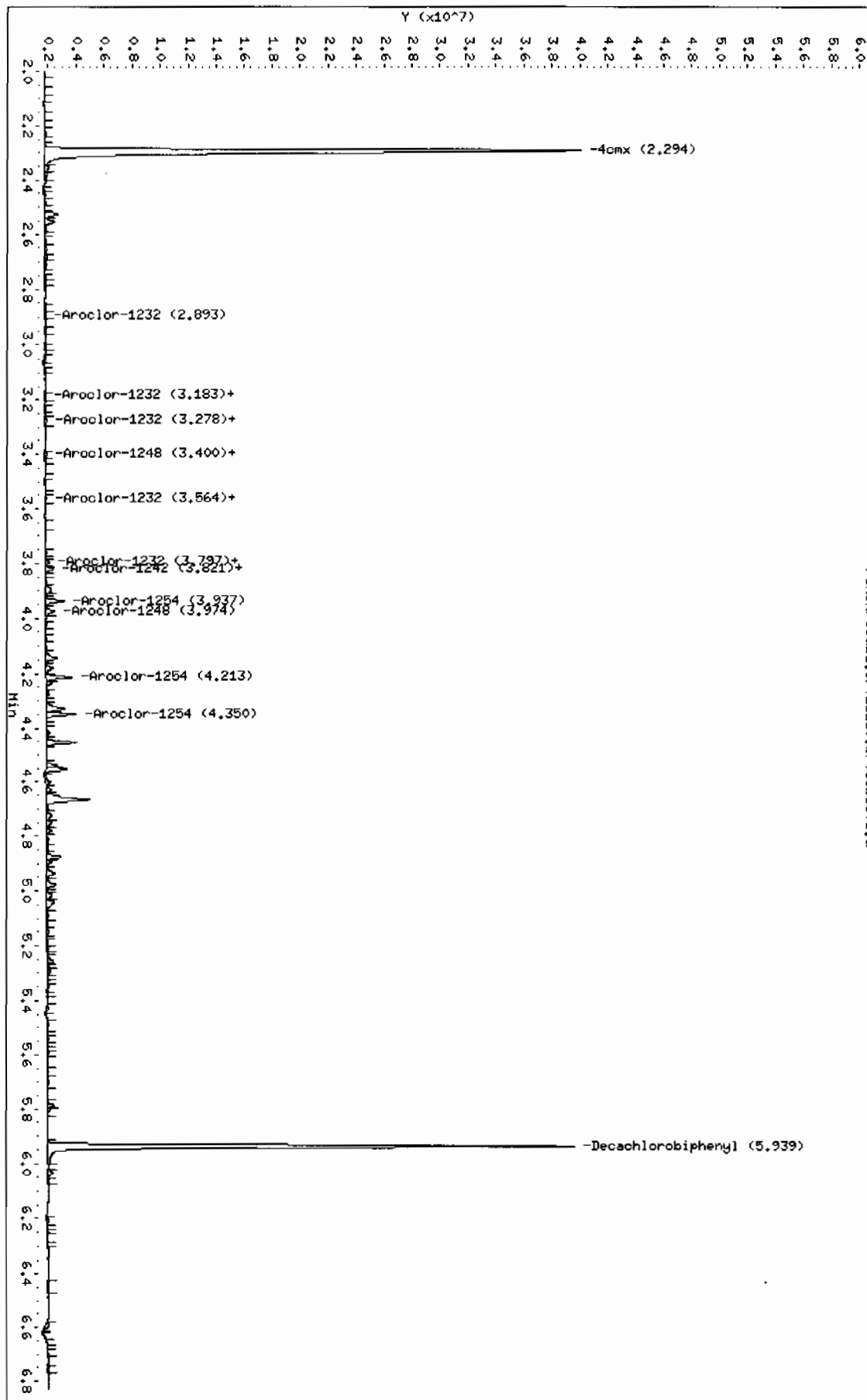
QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecdda.i/021110.b/056b5601.d
 Date: 11-FEB-2010 17:00
 Client ID: RELS-10-8063
 Sample Info: 124579014|11
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: ecdda.i
 Operator: YSI
 Column diameter: 0.25

/chem/ecdda.i/021110.b/056b5601.d



STANDARDS DATA

Report Date: 12-Feb-2010 09:03

Calibration History

Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
Start Cal Date: 14-DEC-2009 05:36
End Cal Date : 11-FEB-2010 08:54

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-JAN-2010 08:01	AR1262	/chem/ecdla.i/012210.b/013f1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdla.i/012210.b/006f0601.d
28-JAN-2010 12:18	AR1268	/chem/ecdla.i/012810a.b/018f1801.d
11-FEB-2010 08:12	AR1248	/chem/ecdla.i/021110.b/011f1101.d
10-FEB-2010 22:01	AR1242	/chem/ecdla.i/021010c.b/008f0801.d
09-FEB-2010 08:36	AR1254	/chem/ecdla.i/020910.b/011f1101.d
10-FEB-2010 20:58	AR1660	/chem/ecdla.i/021010c.b/002f0201.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecdla.i/012210.b/014f1401.d
22-JAN-2010 06:58	AR1232	/chem/ecdla.i/012210.b/007f0701.d
28-JAN-2010 12:29	AR1268	/chem/ecdla.i/012810a.b/019f1901.d
11-FEB-2010 08:22	AR1248	/chem/ecdla.i/021110.b/012f1201.d
10-FEB-2010 22:12	AR1242	/chem/ecdla.i/021010c.b/009f0901.d
09-FEB-2010 08:47	AR1254	/chem/ecdla.i/020910.b/012f1201.d
10-FEB-2010 21:09	AR1660	/chem/ecdla.i/021010c.b/003f0301.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecdla.i/012210.b/015f1501.d
22-JAN-2010 07:09	AR1232	/chem/ecdla.i/012210.b/008f0801.d
28-JAN-2010 12:39	AR1268	/chem/ecdla.i/012810a.b/020f2001.d
11-FEB-2010 08:33	AR1248	/chem/ecdla.i/021110.b/013f1301.d
10-FEB-2010 22:22	AR1242	/chem/ecdla.i/021010c.b/010f1001.d
09-FEB-2010 08:57	AR1254	/chem/ecdla.i/020910.b/013f1301.d
10-FEB-2010 21:19	AR1660	/chem/ecdla.i/021010c.b/004f0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdla.i/121409.b/046f4601.d
11-FEB-2010 08:44	AR1248	/chem/ecdla.i/021110.b/014f1401.d
10-FEB-2010 22:33	AR1242	/chem/ecdla.i/021010c.b/011f1101.d
09-FEB-2010 09:08	AR1254	/chem/ecdla.i/020910.b/014f1401.d
10-FEB-2010 21:30	AR1660	/chem/ecdla.i/021010c.b/005f0501.d
28-JAN-2010 12:50	AR1268	/chem/ecdla.i/012810a.b/021f2101.d
22-JAN-2010 08:36	AR1262	/chem/ecdla.i/012210.b/016f1601.d
14-DEC-2009 05:47	AR1221	/chem/ecdla.i/121409.b/007f0701.d
22-JAN-2010 07:19	AR1232	/chem/ecdla.i/012210.b/009f0901.d

Cal Level: 5 , Cal Amount: 4000.00000		
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22-JAN-2010 08:47	AR1262	/chem/ecdla.i/012210.b/017f1701.d
22-JAN-2010 07:30	AR1232	/chem/ecdla.i/012210.b/010f1001.d
28-JAN-2010 13:00	AR1268	/chem/ecdla.i/012810a.b/022f2201.d
11-FEB-2010 08:54	AR1248	/chem/ecdla.i/021110.b/015f1501.d
10-FEB-2010 22:43	AR1242	/chem/ecdla.i/021010c.b/012f1201.d
09-FEB-2010 09:18	AR1254	/chem/ecdla.i/020910.b/015f1501.d
10-FEB-2010 21:40	AR1660	/chem/ecdla.i/021010c.b/006f0601.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 18:28	AR1660	/chem/ecdla.i/021110.b/063f6301.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 20:56	AR1660	/chem/ecdla.i/021110.b/075f7501.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 16:26	AR1660	/chem/ecdla.i/021110.b/053f5301.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 13:59	AR1660	/chem/ecdla.i/021110.b/041f4101.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 13:12	AR1660	/chem/ecdla.i/021110.b/037f3701.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 10:35	AR1660	/chem/ecdla.i/021110.b/024f2401.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 09:04	AR1248	/chem/ecdla.i/021110.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 08:44	AR1248	/chem/ecdla.i/021110.b/014f1401.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 08:01	AR1268	/chem/ecdla.i/021110.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 07:51	AR1262	/chem/ecdla.i/021110.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 07:40	AR1221	/chem/ecdla.i/021110.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 07:19	AR1232	/chem/ecdla.i/021110.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 06:46	AR1242	/chem/ecdla.i/021110.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 06:35	AR1254	/chem/ecdla.i/021110.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 06:25	AR1660	/chem/ecdla.i/021110.b/002f0201.d

Report Date: 12-Feb-2010 09:02

Calibration History

Method : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m
Start Cal Date: 11-DEC-2009 10:17
End Cal Date : 11-FEB-2010 08:54

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-JAN-2010 08:01	AR1262	/chem/ecdla.i/012210.b/013b1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdla.i/012210.b/006b0601.d
28-JAN-2010 12:18	AR1268	/chem/ecdla.i/012810a.b/018b1801.d
11-FEB-2010 08:12	AR1248	/chem/ecdla.i/021110.b/011b1101.d
10-FEB-2010 22:01	AR1242	/chem/ecdla.i/021010c.b/008b0801.d
09-FEB-2010 08:36	AR1254	/chem/ecdla.i/020910.b/011b1101.d
10-FEB-2010 20:58	AR1660	/chem/ecdla.i/021010c.b/002b0201.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecdla.i/012210.b/014b1401.d
22-JAN-2010 06:58	AR1232	/chem/ecdla.i/012210.b/007b0701.d
28-JAN-2010 12:29	AR1268	/chem/ecdla.i/012810a.b/019b1901.d
11-FEB-2010 08:22	AR1248	/chem/ecdla.i/021110.b/012b1201.d
10-FEB-2010 22:12	AR1242	/chem/ecdla.i/021010c.b/009b0901.d
09-FEB-2010 08:47	AR1254	/chem/ecdla.i/020910.b/012b1201.d
10-FEB-2010 21:09	AR1660	/chem/ecdla.i/021010c.b/003b0301.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecdla.i/012210.b/015b1501.d
22-JAN-2010 07:09	AR1232	/chem/ecdla.i/012210.b/008b0801.d
28-JAN-2010 12:39	AR1268	/chem/ecdla.i/012810a.b/020b2001.d
11-FEB-2010 08:33	AR1248	/chem/ecdla.i/021110.b/013b1301.d
10-FEB-2010 22:22	AR1242	/chem/ecdla.i/021010c.b/010b1001.d
09-FEB-2010 08:57	AR1254	/chem/ecdla.i/020910.b/013b1301.d
10-FEB-2010 21:19	AR1660	/chem/ecdla.i/021010c.b/004b0401.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdla.i/121409.b/046b4601.d
28-JAN-2010 12:50	AR1268	/chem/ecdla.i/012810a.b/021b2101.d
22-JAN-2010 08:36	AR1262	/chem/ecdla.i/012210.b/016b1601.d
14-DEC-2009 05:47	AR1221	/chem/ecdla.i/121409.b/007b0701.d
22-JAN-2010 07:19	AR1232	/chem/ecdla.i/012210.b/009b0901.d
11-FEB-2010 08:44	AR1248	/chem/ecdla.i/021110.b/014b1401.d
10-FEB-2010 22:33	AR1242	/chem/ecdla.i/021010c.b/011b1101.d
09-FEB-2010 09:08	AR1254	/chem/ecdla.i/020910.b/014b1401.d
10-FEB-2010 21:30	AR1660	/chem/ecdla.i/021010c.b/005b0501.d

Cal Level: 5 , Cal Amount: 4000.00000		
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22-JAN-2010 08:47	AR1262	/chem/ecdla.i/012210.b/017b1701.d
22-JAN-2010 07:30	AR1232	/chem/ecdla.i/012210.b/010b1001.d
28-JAN-2010 13:00	AR1268	/chem/ecdla.i/012810a.b/022b2201.d
11-FEB-2010 08:54	AR1248	/chem/ecdla.i/021110.b/015b1501.d
10-FEB-2010 22:43	AR1242	/chem/ecdla.i/021010c.b/012b1201.d
09-FEB-2010 09:18	AR1254	/chem/ecdla.i/020910.b/015b1501.d
10-FEB-2010 21:40	AR1660	/chem/ecdla.i/021010c.b/006b0601.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 20:56	AR1660	/chem/ecdla.i/021110.b/075b7501.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 18:28	AR1660	/chem/ecdla.i/021110.b/063b6301.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 16:26	AR1660	/chem/ecdla.i/021110.b/053b5301.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 13:59	AR1660	/chem/ecdla.i/021110.b/041b4101.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 13:12	AR1660	/chem/ecdla.i/021110.b/037b3701.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 10:35	AR1660	/chem/ecdla.i/021110.b/024b2401.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 09:04	AR1248	/chem/ecdla.i/021110.b/016b1601.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 08:44	AR1248	/chem/ecdla.i/021110.b/014b1401.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 08:01	AR1268	/chem/ecdla.i/021110.b/010b1001.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 07:51	AR1262	/chem/ecdla.i/021110.b/009b0901.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 07:40	AR1221	/chem/ecdla.i/021110.b/008b0801.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 07:19	AR1232	/chem/ecdla.i/021110.b/006b0601.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 06:46	AR1242	/chem/ecdla.i/021110.b/004b0401.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 06:35	AR1254	/chem/ecdla.i/021110.b/003b0301.d
| Ccal Level: 4 , Ccal Amount: 1000		
11-FEB-2010 06:25	AR1660	/chem/ecdla.i/021110.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/021110.b/ECD1-F-8082-021110.m
Quant Method : ESTD Target Version : 3.50
Last Update : 12-Feb-2010 07:41 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	12031.000000
Initial:End Threshold	6015.500000
Initial:Area Threshold	15489.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	2.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.500000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.418	2.388-2.448	1.611e+04
	2.705	2.675-2.735	1.978e+04
	2.786	2.756-2.816	1.303e+04
	2.824	2.794-2.854	7.781e+03
	3.035	3.005-3.065	1.002e+04
63 4,4-DDD	3.953	3.933-3.973	3.938e+05
64 4,4-DDE	3.603	3.583-3.623	4.795e+05
62 4,4-DDT	4.118	4.098-4.138	3.238e+05
2 Aroclor-1221	2.075	2.045-2.105	4.301e+03
	2.168	2.138-2.198	2.440e+03
	2.194	2.164-2.224	1.027e+04
3 Aroclor-1232	2.422	2.392-2.452	6.849e+03
	2.711	2.681-2.741	8.426e+03
	2.792	2.762-2.822	5.627e+03
	3.041	3.011-3.071	3.983e+03
4 Aroclor-1242	3.296	3.266-3.326	3.858e+03
	2.418	2.388-2.448	1.423e+04
	2.706	2.676-2.736	1.725e+04
	2.825	2.795-2.855	6.715e+03
	3.035	3.005-3.065	8.866e+03
	3.290	3.260-3.320	8.594e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/021110.b/ECD1-F-8082-021110.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.087	3.057-3.117	9.450e+03
	3.238	3.208-3.268	8.270e+03
	3.290	3.260-3.320	1.593e+04
	3.421	3.391-3.451	1.308e+04
	3.654	3.624-3.684	8.823e+03
6 Aroclor-1254	3.264	3.234-3.294	1.578e+04
	3.420	3.390-3.450	2.135e+04
	3.654	3.624-3.684	2.726e+04
	3.817	3.787-3.847	2.062e+04
	3.926	3.896-3.956	1.959e+04
7 Aroclor-1260	3.760	3.730-3.790	1.903e+04
	3.924	3.894-3.954	2.835e+04
	4.154	4.124-4.184	1.704e+04
	4.296	4.266-4.326	1.789e+04
	4.475	4.445-4.505	3.885e+04
8 Aroclor-1262	3.762	3.732-3.792	1.500e+04
	3.925	3.895-3.955	2.038e+04
	4.155	4.125-4.185	2.520e+04
	4.297	4.267-4.327	2.299e+04
	4.477	4.447-4.507	4.717e+04
9 Aroclor-1268	4.662	4.632-4.691	5.248e+04
	4.685	4.655-4.715	4.812e+04
	4.797	4.767-4.827	3.703e+04
	5.001	4.971-5.031	1.629e+04
	5.166	5.136-5.196	1.083e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.962	1.932-1.992	4.372e+05
\$ 12 Decachlorobiphenyl	5.275	5.245-5.305	3.336e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 11-Feb-2010 10:57 Number of CpnDs : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

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Initial:Start Threshold      7222.000000
Initial:End Threshold        3611.000000
Initial:Area Threshold       6833.000000
Initial:P-P Resolution        0.000000
Initial:Bunch Factor          2.000000
Initial:Negative Peaks        OFF
Initial:Tension               0.500000
  
```

Compound	RT	RT Window	RF
1 Aroclor-1016	3.190	3.160-3.220	1.243e+04
	3.274	3.244-3.304	8.521e+03
	3.337	3.307-3.367	5.254e+03
	3.564	3.534-3.594	6.732e+03
	3.640	3.610-3.670	6.324e+03
62 4,4-DDT	4.670	4.650-4.690	2.436e+05
63 4,4-DDE	4.139	4.119-4.159	3.580e+05
64 4,4-DDD	4.483	4.463-4.503	2.893e+05
2 Aroclor-1221	2.491	2.461-2.521	3.640e+03
	2.585	2.555-2.615	2.329e+03
	2.626	2.596-2.656	8.119e+03
3 Aroclor-1232	2.895	2.865-2.925	5.892e+03
	3.194	3.164-3.224	6.222e+03
	3.278	3.248-3.308	4.345e+03
	3.569	3.539-3.599	3.111e+03
4 Aroclor-1242	3.803	3.773-3.833	3.193e+03
	3.191	3.161-3.221	1.075e+04
	3.274	3.244-3.304	7.486e+03
	3.565	3.535-3.595	5.934e+03
	3.799	3.769-3.829	5.957e+03
	3.825	3.795-3.855	6.667e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.400	3.370-3.430	7.671e+03
	3.565	3.535-3.595	9.454e+03
	3.799	3.769-3.829	1.075e+04
	3.826	3.796-3.856	1.201e+04
	3.963	3.933-3.993	1.157e+04
6 Aroclor-1254	3.400	3.370-3.430	6.631e+03
	3.822	3.792-3.852	1.170e+04
	3.939	3.909-3.969	1.289e+04
	4.215	4.185-4.245	1.768e+04
	4.351	4.321-4.381	1.318e+04
7 Aroclor-1260	4.330	4.300-4.360	1.259e+04
	4.455	4.425-4.485	1.507e+04
	4.721	4.691-4.751	1.162e+04
	4.895	4.865-4.925	1.203e+04
	5.042	5.012-5.072	2.582e+04
8 Aroclor-1262	4.456	4.426-4.486	1.356e+04
	4.722	4.692-4.752	1.889e+04
	4.896	4.866-4.926	1.747e+04
	5.043	5.013-5.073	3.453e+04
	5.256	5.226-5.286	2.487e+04
9 Aroclor-1268	5.255	5.225-5.285	3.626e+04
	5.282	5.252-5.312	3.358e+04
	5.432	5.402-5.462	2.598e+04
	5.597	5.567-5.627	1.135e+04
	5.790	5.760-5.820	6.708e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.294	2.264-2.324	2.869e+05
\$ 12 Decachlorobiphenyl	5.941	5.911-5.971	2.151e+05

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36
 End Cal Date : 11-FEB-2010 08:54
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/021110.b/ECD1-F-8082-021110.m
 Cal Date : 11-Feb-2010 10:57 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/012210.b/013f1301.d
 Level 2: /chem/ecdl1a.i/012210.b/014f1401.d
 Level 3: /chem/ecdl1a.i/012210.b/015f1501.d
 Level 4: /chem/ecdl1a.i/121409.b/046f4601.d
 Level 5: /chem/ecdl1a.i/012210.b/017f1701.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	19326	17292	16249	14619	13058	16109	14.981
(2)	22153	20229	20057	18657	17817	19783	8.392
(3)	15191	13813	12984	11880	11259	13025	11.981
(4)	8766	8210	7786	7162	6984	7781	9.470
(5)	11843	10436	9856	9117	8861	10022	11.892
63 4,4-DDD	++++	++++	++++	393799	++++	393799	0.000
64 4,4-DDE	++++	++++	++++	479509	++++	479509	0.000
62 4,4-DDT	++++	++++	++++	323817	++++	323817	0.000
2 Aroclor-1221(1)	++++	++++	++++	4301	++++	4301	0.000
(2)	++++	++++	++++	2440	++++	2440	0.000
(3)	++++	++++	++++	10272	++++	10272	0.000
3 Aroclor-1232(1)	8031	7459	6765	6313	5679	6849	13.524
(2)	9246	8871	8229	8095	7686	8426	7.427
(3)	6376	6076	5599	5256	4827	5627	11.031
(4)	4642	4328	3905	3655	3384	3983	12.710
(5)	4445	4061	3757	3587	3443	3858	10.378
4 Aroclor-1242(1)	17196	15480	14031	13205	11219	14226	15.919
(2)	19366	18107	17235	16522	15038	17254	9.451
(3)	7556	7133	6646	6336	5902	6715	9.682
(4)	10515	9349	8647	8192	7629	8866	12.591
(5)	9978	8943	8379	8018	7652	8594	10.575
5 Aroclor-1248(1)	10726	9846	9290	8975	8413	9450	9.334
(2)	9327	8548	8186	7843	7446	8270	8.680
(3)	17521	16821	15652	15280	14383	15931	7.826
(4)	14862	13498	12885	12502	11648	13079	9.187
(5)	10025	9201	8833	8291	7765	8823	9.799

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36
 End Cal Date : 11-FEB-2010 08:54
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
 Cal Date : 11-Feb-2010 10:57 yip00818
 Curve Type : Average

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
6 Aroclor-1254(1)	18218	16468	15766	15064	13404	15784	11.233
(2)	24302	22248	21155	20648	18377	21346	10.182
(3)	29883	28006	27625	26757	24011	27256	7.865
(4)	22385	20901	20953	20353	18513	20621	6.778
(5)	21764	19914	20167	19029	17098	19594	8.725
7 Aroclor-1260(1)	21642	19935	19107	17723	16744	19030	10.032
(2)	32138	29342	28391	26620	25276	28353	9.293
(3)	19407	17671	16915	15834	15397	17045	9.355
(4)	20180	18339	17702	16653	16586	17892	8.248
(5)	42057	39974	39147	37071	36004	38851	6.158
8 Aroclor-1262(1)	16796	15375	14585	14470	13775	15000	7.687
(2)	22563	20964	19865	19587	18936	20383	6.975
(3)	27641	25661	24522	24605	23554	25197	6.179
(4)	25041	23378	22465	22352	21708	22989	5.624
(5)	49563	47861	46825	46728	44852	47166	3.655
9 Aroclor-1268(1)	55111	53385	52967	52495	48466	52485	4.676
(2)	51014	48609	47960	48222	44786	48118	4.620
(3)	39244	37391	36973	36968	34562	37028	4.505
(4)	17802	16531	16072	16029	15038	16294	6.158
(5)	113064	109648	108755	109096	100824	108277	4.162
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 4cmx	463524	446573	443497	419634	412623	437170	4.761
12 Decachlorobiphenyl	376792	343805	329903	311587	305664	333550	8.544

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17
 End Cal Date : 11-FEB-2010 08:54
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
 Cal Date : 11-Feb-2010 10:57 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/012210.b/013b1301.d
 Level 2: /chem/ecdl1a.i/012210.b/014b1401.d
 Level 3: /chem/ecdl1a.i/012210.b/015b1501.d
 Level 4: /chem/ecdl1a.i/121409.b/046b4601.d
 Level 5: /chem/ecdl1a.i/012210.b/017b1701.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	14591	12913	12188	11398	11060	12430	11.307
(2)	10470	9150	8372	7586	7028	8521	15.876
(3)	6450	5571	5116	4655	4476	5254	15.089
(4)	8237	7137	6558	5942	5787	6732	14.811
(5)	7728	6741	6161	5527	5464	6324	14.885
62 4,4-DDT	++++	++++	++++	243613	++++	243613	0.000
63 4,4-DDE	++++	++++	++++	357996	++++	357996	0.000
64 4,4-DDD	++++	++++	++++	289343	++++	289343	0.000
2 Aroclor-1221(1)	++++	++++	++++	3640	++++	3640	0.000
(2)	++++	++++	++++	2329	++++	2329	0.000
(3)	++++	++++	++++	8119	++++	8119	0.000
3 Aroclor-1232(1)	7405	6518	5773	5260	4504	5892	19.017
(2)	7294	6687	6058	5769	5299	6222	12.576
(3)	5336	4800	4249	3912	3427	4345	17.180
(4)	3854	3418	3039	2783	2462	3111	17.466
(5)	3940	3492	3102	2870	2562	3193	16.853
4 Aroclor-1242(1)	12868	11152	10610	10007	9095	10746	13.125
(2)	9289	8079	7275	6770	6015	7486	16.798
(3)	7189	6322	5719	5508	4930	5934	14.498
(4)	7095	6343	5815	5502	5032	5957	13.341
(5)	7801	7111	6544	6217	5664	6667	12.341
5 Aroclor-1248(1)	9444	8118	7508	7032	6252	7671	15.686
(2)	11407	9946	9274	8769	7875	9454	14.042
(3)	12626	11184	10575	10134	9235	10751	11.776
(4)	13986	12612	11847	11369	10240	12011	11.653
(5)	13621	12052	11294	10873	9986	11565	11.846

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17
 End Cal Date : 11-FEB-2010 08:54
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m
 Cal Date : 11-Feb-2010 10:57 yip00818
 Curve Type : Average

	100.000	250.000	500.000	1000.000	4000.000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
6 Aroclor-1254(1)	8119	7134	6511	6102	5288	6631	16.115
(2)	13835	12411	11575	10994	9701	11703	13.219
(3)	15198	13631	12780	12111	10729	12890	12.960
(4)	20285	18437	17626	16945	15125	17683	10.740
(5)	15441	13882	13241	12228	11123	13183	12.432
7 Aroclor-1260(1)	15081	13204	12414	11388	10875	12592	13.167
(2)	17861	15711	14887	13769	13107	15067	12.319
(3)	13915	12197	11404	10497	10076	11618	13.121
(4)	14295	12571	11824	10912	10548	12030	12.409
(5)	29523	26703	25717	24048	23128	25824	9.659
8 Aroclor-1262(1)	15849	14211	13033	12748	11945	13557	11.192
(2)	21776	19630	18382	17939	16725	18890	10.157
(3)	20222	18124	16968	16542	15497	17471	10.323
(4)	38743	35618	34053	33297	30946	34532	8.384
(5)	28740	25266	23755	23937	22633	24866	9.485
9 Aroclor-1268(1)	40076	37508	36193	35765	31736	36256	8.369
(2)	36699	34342	33454	33223	30195	33583	6.968
(3)	29294	26633	25688	25340	22957	25982	8.826
(4)	12990	11609	11161	10996	9978	11347	9.656
(5)	67306	67058	67598	69416	64002	67076	2.911
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
11 4cmx	319320	296105	286786	270335	262011	286912	7.851
12 Decachlorobiphenyl	252618	222970	211940	195273	192671	215094	11.330

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 0625
 Lab File ID: 002F0201 Init. Calib. Date(s): 02/10/10 02/10/10
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16108.588	14817.126	0.01	-8.0	15.0
(2)	19782.624	18740.852	0.01	-5.3	15.0
(3)	13025.402	12028.069	0.01	-7.6	15.0
(4)	7781.493	7264.684	0.01	-6.6	15.0
(5)	10022.454	9348.232	0.01	-6.7	15.0
Aroclor-1260	19030.240	18024.742	0.01	-5.3	15.0
(2)	28353.443	26976.990	0.01	-4.8	15.0
(3)	17044.603	16166.057	0.01	-5.2	15.0
(4)	17892.160	16921.624	0.01	-5.4	15.0
(5)	38850.548	37874.774	0.01	-2.5	15.0
4cmx	437170.47	424281.80	0.01	-2.9	15.0
Decachlorobiphenyl	333550.18	317081.31	0.01	-4.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 0625
 Lab File ID: 002B0201 Init. Calib. Date(s): 02/10/10 02/10/10
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12430.231	11562.048	0.01	-7.0	15.0
(2)	8521.037	7683.410	0.01	-9.8	15.0
(3)	5253.747	4741.718	0.01	-9.7	15.0
(4)	6732.031	6035.202	0.01	-10.4	15.0
(5)	6324.172	5692.505	0.01	-10.0	15.0
Aroclor-1260	12592.453	11645.040	0.01	-7.5	15.0
(2)	15067.065	14168.599	0.01	-6.0	15.0
(3)	11617.964	10727.829	0.01	-7.7	15.0
(4)	12030.051	11090.617	0.01	-7.8	15.0
(5)	25823.849	24504.654	0.01	-5.1	15.0
4cmx	286911.58	274787.62	0.01	-4.2	15.0
Decachlorobiphenyl	215094.49	199976.09	0.01	-7.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 0635
 Lab File ID: 003F0301 Init. Calib. Date(s): 02/09/10 02/09/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0836 0918
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	15784.063	14558.540	0.01	-7.8	15.0
(2)	21345.916	19465.262	0.01	-8.8	15.0
(3)	27256.404	25592.166	0.01	-6.1	15.0
(4)	20620.884	19314.338	0.01	-6.3	15.0
(5)	19594.109	18698.582	0.01	-4.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 0635
 Lab File ID: 003B0301 Init. Calib. Date(s): 02/09/10 02/09/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0836 0918
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Aroclor-1254	6630.731	5993.845	0.01	-9.6	15.0
(2)	11703.124	10766.620	0.01	-8.0	15.0
(3)	12889.867	11844.136	0.01	-8.1	15.0
(4)	17683.472	16541.698	0.01	-6.4	15.0
(5)	13183.053	11928.232	0.01	-9.5	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 0801
 Lab File ID: 010F1001 Init. Calib. Date(s): 01/28/10 01/28/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1218 1300
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1268	52484.978	48752.732	0.01	-7.1	15.0
(2)	48118.088	46743.320	0.01	-2.8	15.0
(3)	37027.541	36739.910	0.01	-0.8	15.0
(4)	16294.262	18430.486	0.01	13.1	15.0
(5)	108277.36	116812.90	0.01	7.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 0801
 Lab File ID: 010B1001 Init. Calib. Date(s): 01/28/10 01/28/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1218 1300
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1268	36255.530	31076.356	0.01	-14.3	15.0
(2)	33582.584	29783.418	0.01	-11.3	15.0
(3)	25982.381	23368.210	0.01	-10.1	15.0
(4)	11346.665	11578.931	0.01	2.0	15.0
(5)	67076.083	73183.396	0.01	9.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 1359
 Lab File ID: 041F4101 Init. Calib. Date(s): 02/10/10 02/10/10
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16108.588	15417.702	0.01	-4.3	15.0
(2)	19782.624	20182.782	0.01	2.0	15.0
(3)	13025.402	12638.306	0.01	-3.0	15.0
(4)	7781.493	7558.454	0.01	-2.9	15.0
(5)	10022.454	9745.749	0.01	-2.8	15.0
Aroclor-1260	19030.240	20119.986	0.01	5.7	15.0
(2)	28353.443	30406.525	0.01	7.2	15.0
(3)	17044.603	18123.617	0.01	6.3	15.0
(4)	17892.160	19480.990	0.01	8.9	15.0
(5)	38850.548	42671.482	0.01	9.8	15.0
4cmx	437170.47	445336.32	0.01	1.9	15.0
Decachlorobiphenyl	333550.18	333901.88	0.01	0.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 1359
 Lab File ID: 041B4101 Init. Calib. Date(s): 02/10/10 02/10/10
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12430.231	12136.535	0.01	-2.4	15.0
(2)	8521.037	7885.509	0.01	-7.4	15.0
(3)	5253.747	4854.387	0.01	-7.6	15.0
(4)	6732.031	6230.767	0.01	-7.4	15.0
(5)	6324.172	5804.457	0.01	-8.2	15.0
Aroclor-1260	12592.453	12875.144	0.01	2.2	15.0
(2)	15067.065	15626.067	0.01	3.7	15.0
(3)	11617.964	11908.223	0.01	2.5	15.0
(4)	12030.051	12306.280	0.01	2.3	15.0
(5)	25823.849	27241.559	0.01	5.5	15.0
4cmx	286911.58	282518.17	0.01	-1.5	15.0
Decachlorobiphenyl	215094.49	208423.32	0.01	-3.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 1626
 Lab File ID: 053F5301 Init. Calib. Date(s): 02/10/10 02/10/10
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16108.588	15384.834	0.01	-4.5	15.0
(2)	19782.624	19723.224	0.01	-0.3	15.0
(3)	13025.402	12610.788	0.01	-3.2	15.0
(4)	7781.493	7597.045	0.01	-2.4	15.0
(5)	10022.454	9627.379	0.01	-3.9	15.0
Aroclor-1260	19030.240	20163.698	0.01	6.0	15.0
(2)	28353.443	30122.749	0.01	6.2	15.0
(3)	17044.603	17936.662	0.01	5.2	15.0
(4)	17892.160	18821.491	0.01	5.2	15.0
(5)	38850.548	41846.605	0.01	7.7	15.0
4cmx	437170.47	444487.38	0.01	1.7	15.0
Decachlorobiphenyl	333550.18	323722.27	0.01	-2.9	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 1626
 Lab File ID: 053B5301 Init. Calib. Date(s): 02/10/10 02/10/10
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12430.231	11752.589	0.01	-5.4	15.0
(2)	8521.037	7925.933	0.01	-7.0	15.0
(3)	5253.747	4861.568	0.01	-7.5	15.0
(4)	6732.031	6425.703	0.01	-4.6	15.0
(5)	6324.172	5899.022	0.01	-6.7	15.0
Aroclor-1260	12592.453	12748.818	0.01	1.2	15.0
(2)	15067.065	15400.913	0.01	2.2	15.0
(3)	11617.964	11718.691	0.01	0.9	15.0
(4)	12030.051	12136.482	0.01	0.9	15.0
(5)	25823.849	26752.597	0.01	3.6	15.0
4cmx	286911.58	282963.31	0.01	-1.4	15.0
Decachlorobiphenyl	215094.49	202100.79	0.01	-6.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 1828
 Lab File ID: 063F6301 Init. Calib. Date(s): 02/10/10 02/10/10
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	16108.588	14670.768	0.01	-8.9	15.0
(2)	19782.624	19413.394	0.01	-1.9	15.0
(3)	13025.402	12409.380	0.01	-4.7	15.0
(4)	7781.493	7474.666	0.01	-3.9	15.0
(5)	10022.454	9497.975	0.01	-5.2	15.0
Aroclor-1260	19030.240	19886.462	0.01	4.5	15.0
(2)	28353.443	29823.794	0.01	5.2	15.0
(3)	17044.603	17865.326	0.01	4.8	15.0
(4)	17892.160	18725.540	0.01	4.6	15.0
(5)	38850.548	41814.099	0.01	7.6	15.0
4cmx	437170.47	434734.20	0.01	-0.6	15.0
Decachlorobiphenyl	333550.18	325516.50	0.01	-2.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514
 Instrument ID: ECD1A Calibration Date: 02/11/10 Time: 1828
 Lab File ID: 063B6301 Init. Calib. Date(s): 02/10/10 02/10/10
 Heated Purge: (Y/N) N Init. Calib. Times: 2058 2140
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12430.231	11730.474	0.01	-5.6	15.0
(2)	8521.037	7797.700	0.01	-8.5	15.0
(3)	5253.747	4820.709	0.01	-8.2	15.0
(4)	6732.031	6116.647	0.01	-9.1	15.0
(5)	6324.172	5692.008	0.01	-10.0	15.0
Aroclor-1260	12592.453	12653.249	0.01	0.5	15.0
(2)	15067.065	15351.314	0.01	1.9	15.0
(3)	11617.964	11677.224	0.01	0.5	15.0
(4)	12030.051	12150.048	0.01	1.0	15.0
(5)	25823.849	26887.303	0.01	4.1	15.0
4cmx	286911.58	277205.39	0.01	-3.4	15.0
Decachlorobiphenyl	215094.49	205818.45	0.01	-4.3	15.0

FORM VII PEST

Data File: /chem/ecdla.i/021110.b/002f0201.d
 Report Date: 11-Feb-2010 09:42

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 lNJ VOL

Data file : /chem/ecdla.i/021110.b/002f0201.d
 Lab Smp Id: WAR100203-60 01 Client Smp ID: AR166001
 Inj Date : 11-FEB-2010 06:25
 Operator : YS1 Inst lD: ecdla.i
 Smp Info : |WAR100203-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 11-Feb-2010 09:42 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.962	1.962	0.000	42428180 100.000	97.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.275	5.275	0.000	31708131 100.000	95.1	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.418	2.418	0.000	14817126 1000.00	920	80.00- 120.00	100.00
2.705	2.705	0.000	18740852 1000.00	947	106.48- 146.48	126.48
2.786	2.786	0.000	12028069 1000.00	923	61.18- 101.18	81.18
2.824	2.824	0.000	7264684 1000.00	934	29.03- 69.03	49.03
3.035	3.035	0.000	9348232 1000.00	933	43.09- 83.09	63.09
Average of Peak Amounts =				931		

7 Aroclor-1260				CAS #: 11096-82-5		
3.760	3.760	0.000	18024742 1000.00	947	80.00- 120.00	100.00
3.924	3.924	0.000	26976990 1000.00	951	129.67- 169.67	149.67
4.154	4.154	0.000	16166057 1000.00	948	69.69- 109.69	89.69
4.296	4.296	0.000	16921624 1000.00	946	73.88- 113.88	93.88
4.475	4.475	0.000	37874774 1000.00	975	190.13- 230.13	210.13
Average of Peak Amounts =				954		

Data File: /chem/ecdl1a.i/021110.b/002f0201.d

Date: 11-FEB-2010 06:25

Client ID: AR166001

Sample Info: 11AR100203-60 01

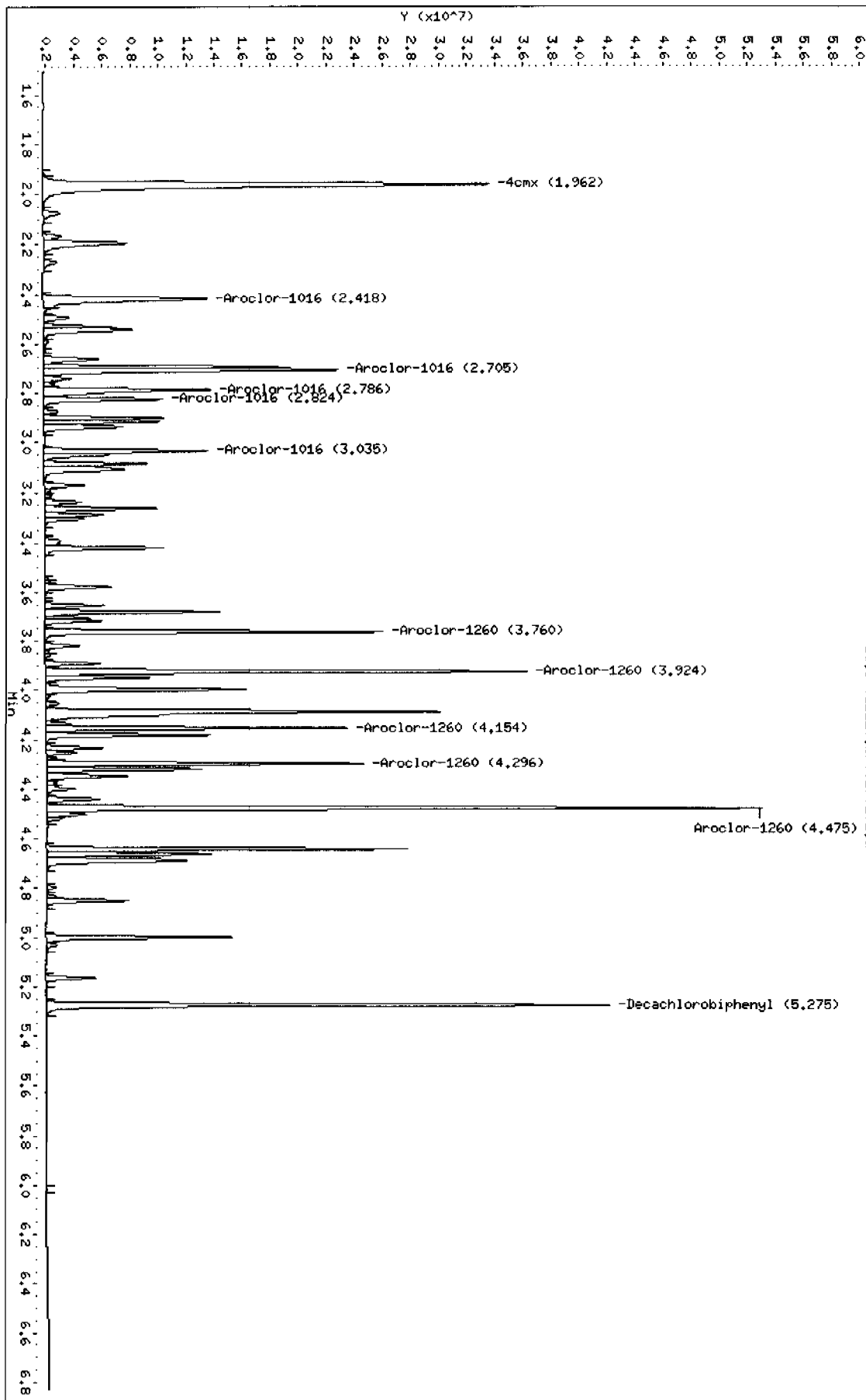
Column phase: CLP1

Instrument: ecdl1a.i

Operator: YSA

Column diameter: 0.25

/chem/ecdl1a.i/021110.b/002f0201.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/002b0201.d
 Lab Smp 1d: WAR100203-60 01 Client Smp ID: AR166001
 Inj Date : 11-FEB-2010 06:25
 Operator : YS1 Inst 1D: ecd1a.i
 Smp Info : |WAR100203-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
 Meth Date : 11-Feb-2010 09:42 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
		=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.294	2.294	0.000	27478762 100.000	95.8	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.941	5.941	0.000	19997609 100.000	93.0	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
3.190	3.190	0.000	11562048 1000.00	930	80.00- 120.00	100.00 (M)	
3.274	3.274	0.000	7683410 1000.00	902	46.45- 86.45	66.45	
3.337	3.337	0.000	4741718 1000.00	902	21.01- 61.01	41.01	
3.564	3.564	0.000	6035202 1000.00	896	32.20- 72.20	52.20	
3.640	3.640	0.000	5692505 1000.00	900	29.23- 69.23	49.23	
Average of Peak Amounts =				906			

7 Aroclor-1260				CAS #: 11096-82-5			
4.330	4.330	0.000	11645040 1000.00	925	80.00- 120.00	100.00	
4.455	4.455	0.000	14168599 1000.00	940	101.67- 141.67	121.67	
4.721	4.721	0.000	10727829 1000.00	923	72.12- 112.12	92.12	
4.895	4.895	0.000	11090617 1000.00	922	75.24- 115.24	95.24	
5.042	5.042	0.000	24504654 1000.00	949	190.43- 230.43	210.43	
Average of Peak Amounts =				932			

QC Flag Legend

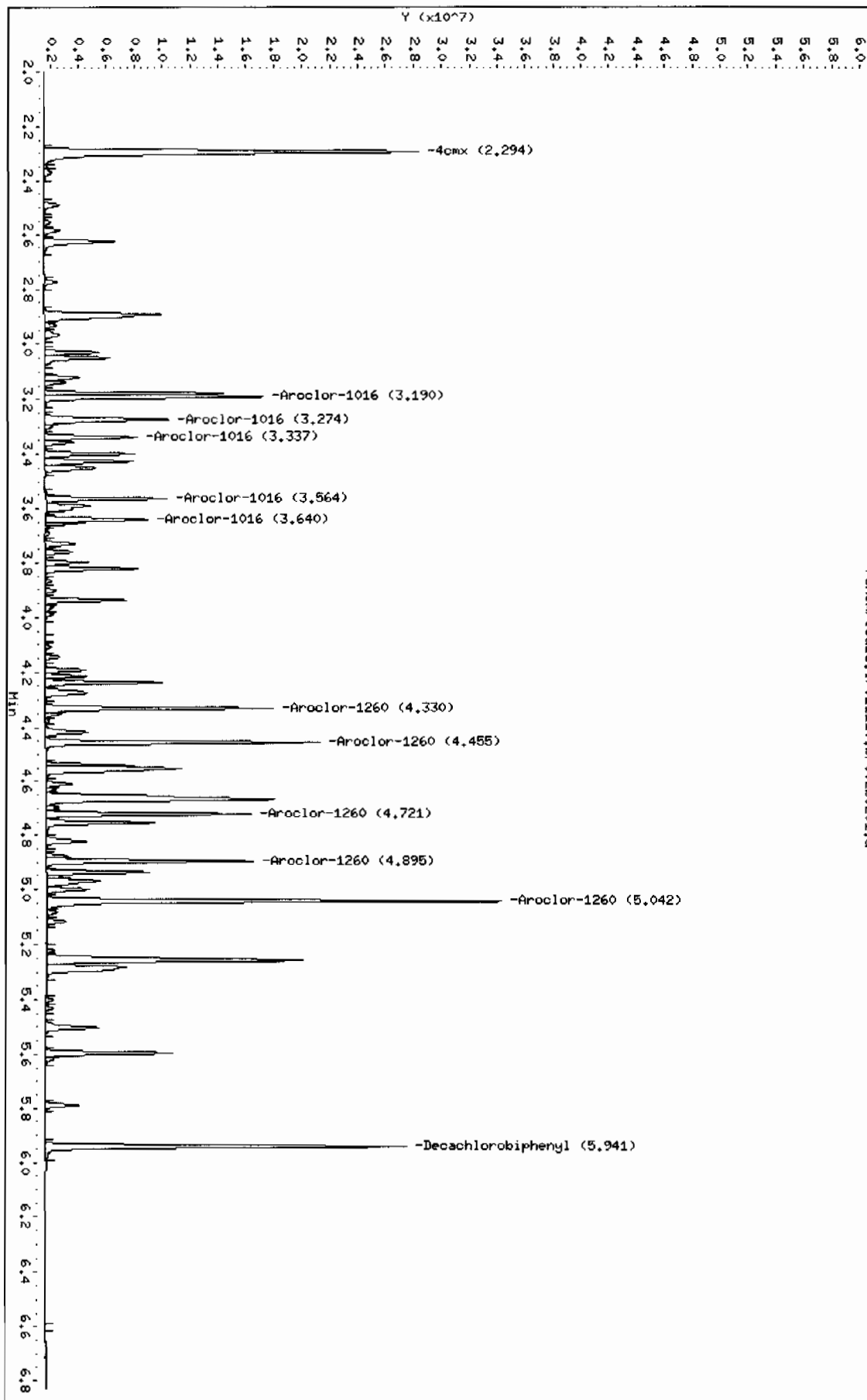
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Data File: /chem/ecda.i/021110.b/002b0201.d
Date: 11-FEB-2010 06:25
Client ID: AR166001
Sample Info: MAR100203-60 01

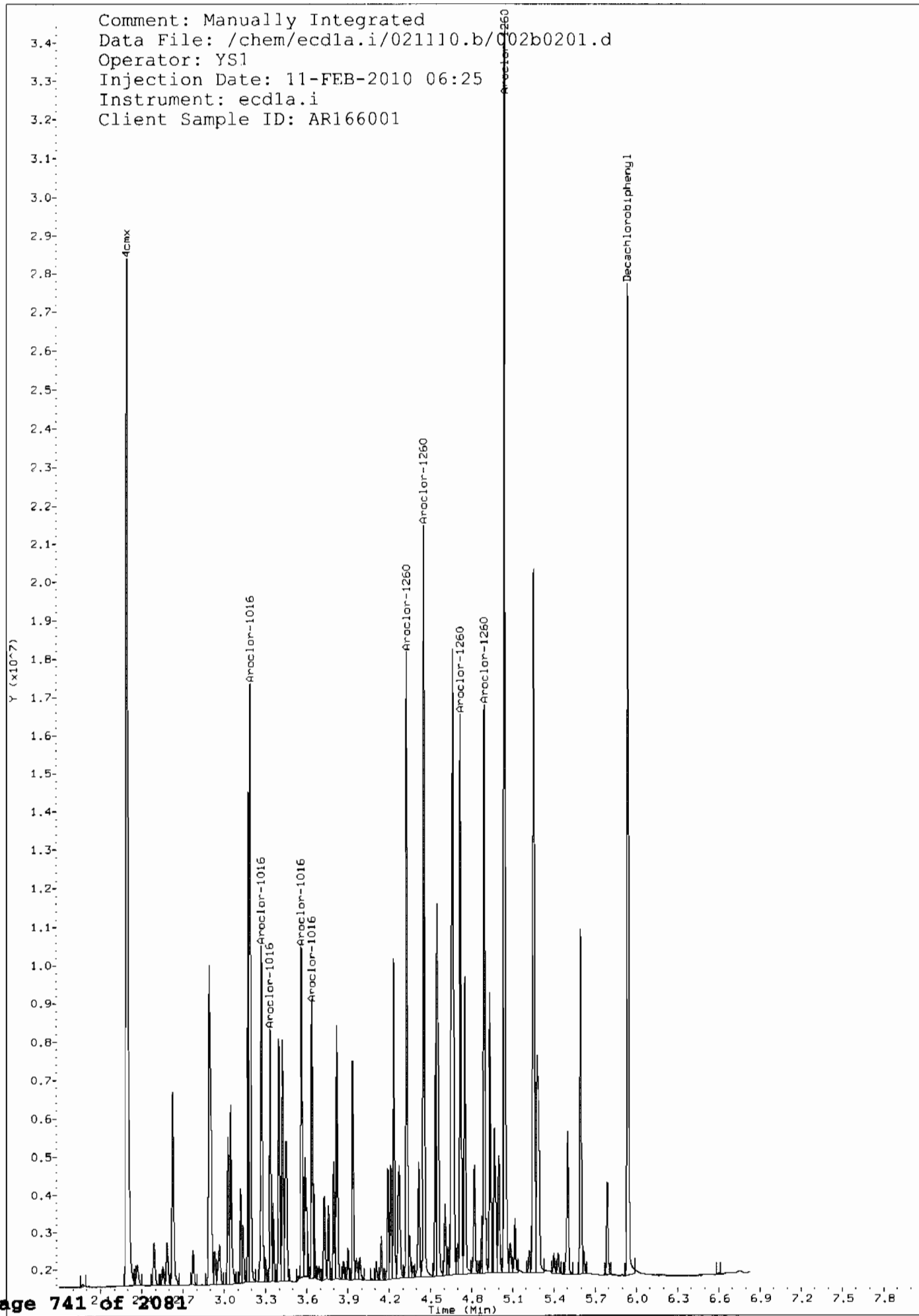
Column Phase: CLP2

Instrument: ecda.i
Operator: YSI
Column diameter: 0.25

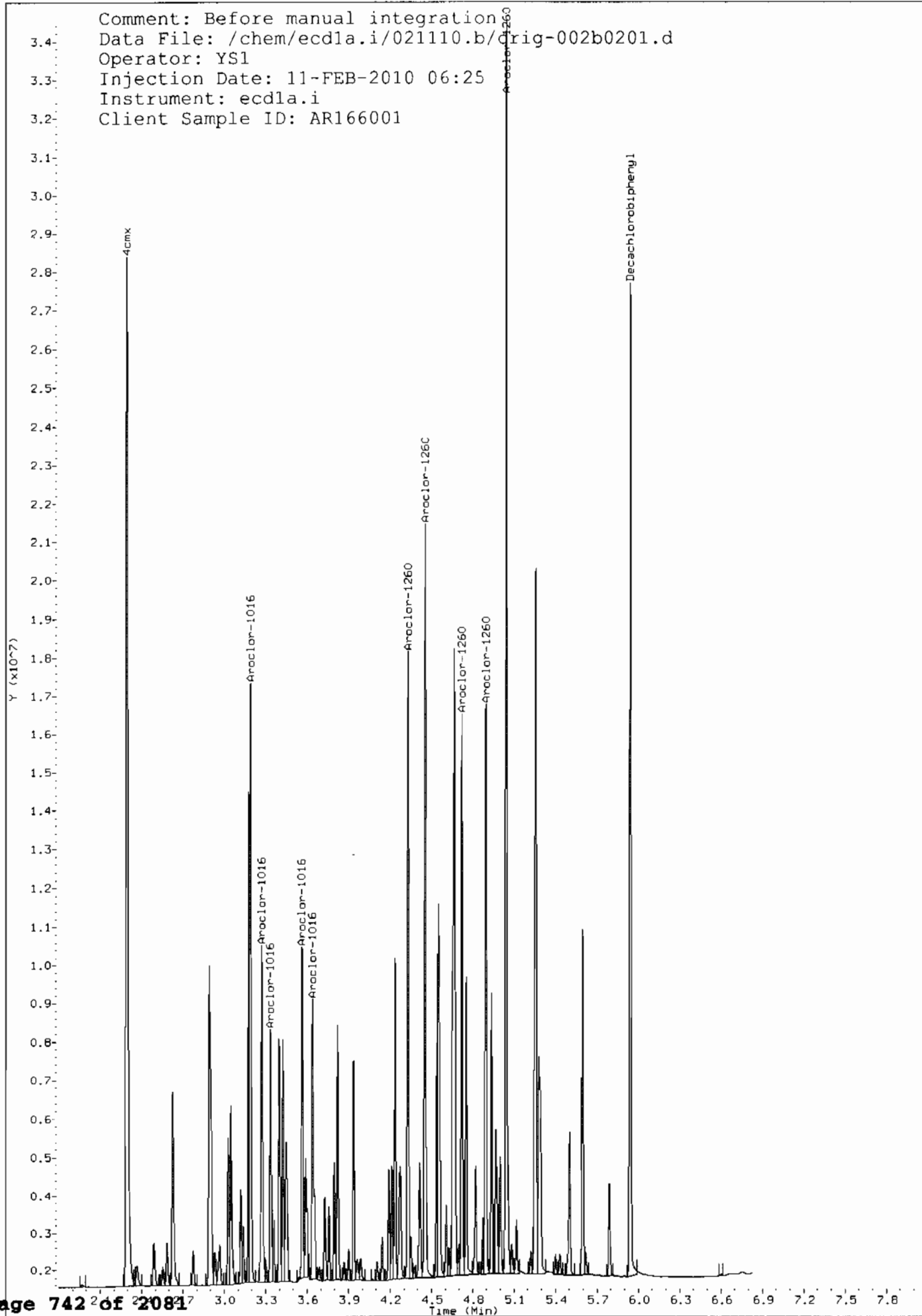
/chem/ecda.i/021110.b/002b0201.d



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/021110.b/002b0201.d
Operator: YS1
Injection Date: 11-FEB-2010 06:25
Instrument: ecdl1a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdla.i/021110.b/orig-002b0201.d
Operator: YSl
Injection Date: 11-FEB-2010 06:25
Instrument: ecdla.i
Client Sample ID: AR166001



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/003f0301.d
 Lab Smp Id: WAR091216-54 Client Smp ID: AR125401
 Inj Date : 11-FEB-2010 06:35
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR091216-54
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 11-Feb-2010 09:42 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 3 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1254.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS

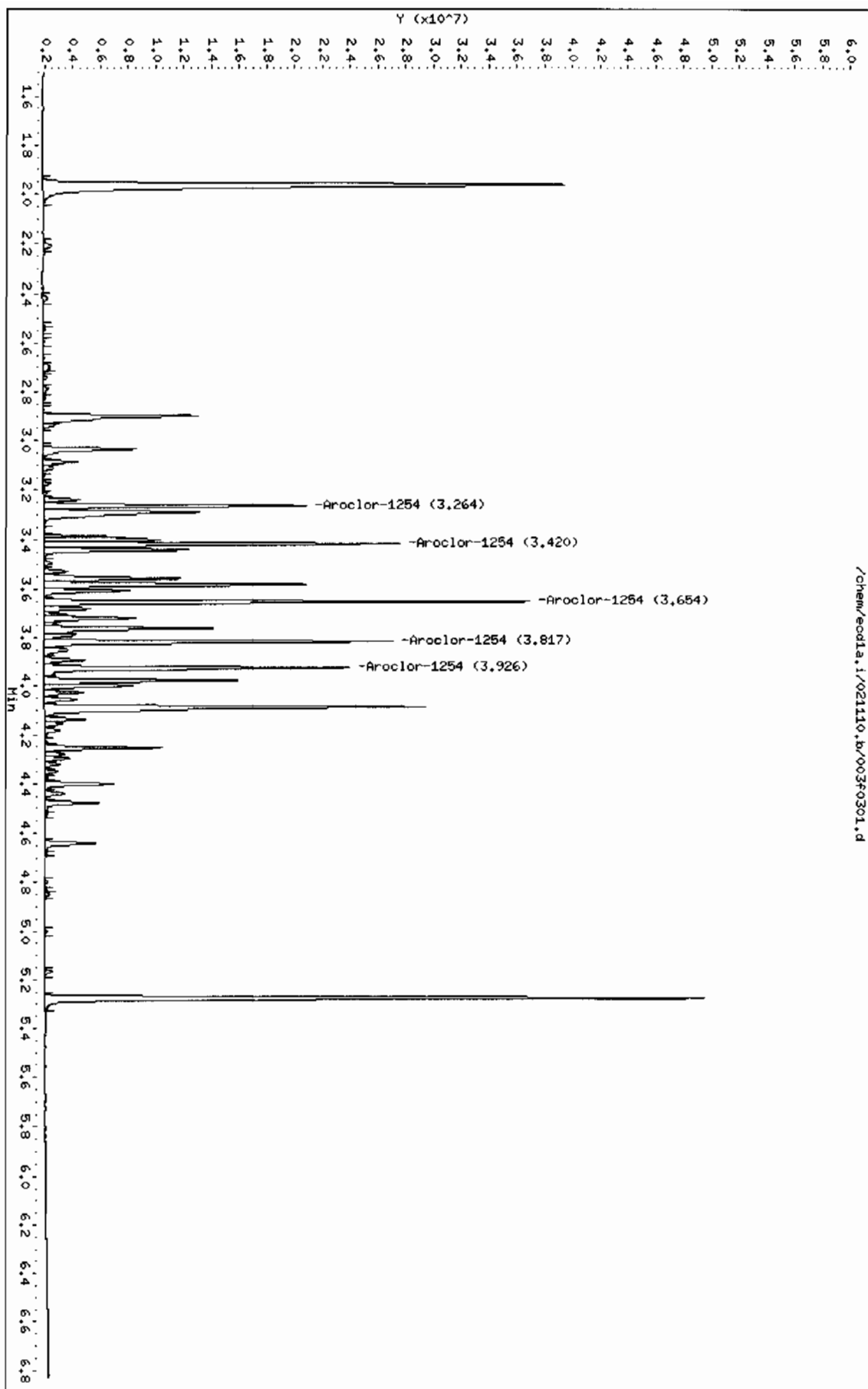
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	-----	=====	=====	=====	=====
6 Aroclor-1254			CAS #: 11097-69-1			
3.264	3.264	0.000	14558540	1000.00	922 80.00- 120.00	100.00
3.420	3.420	0.000	19465262	1000.00	912 113.70- 153.70	133.70
3.654	3.654	0.000	25592166	1000.00	939 155.79- 195.79	175.79
3.817	3.817	0.000	19314338	1000.00	937 112.67- 152.67	132.67
3.926	3.926	0.000	18698582	1000.00	954 108.44- 148.44	128.44
Average of Peak Amounts =			933			

Data File: /chem/ecdl1.i/021110.b/003f0301.d
Date: 11-FEB-2010 06:35
Client ID: RK125401
Sample Info: 1MR091216-54

Column phase: CLP1

Instrument: ecdl1.i
Operator: VSI
Column diameter: 0.25

/chem/ecdl1.i/021110.b/003f0301.d



Data File: /chem/ecdla.i/021110.b/003b0301.d
Report Date: 11-Feb-2010 09:42

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/003b0301.d
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401
Inj Date : 11-FEB-2010 06:35
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR091216-54
Misc Info :
Comment :
Method : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m
Meth Date : 11-Feb-2010 09:42 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclpl

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
6 Aroclor-1254			CAS #: 11097-69-1			
3.400	3.400	0.000	5993845 1000.00	904	80.00- 120.00	100.00
3.822	3.822	0.000	10766620 1000.00	920	159.63- 199.63	179.63
3.939	3.939	0.000	11844136 1000.00	919	177.60- 217.60	197.60
4.215	4.215	0.000	16541698 1000.00	935	255.98- 295.98	275.98
4.351	4.351	0.000	11928232 1000.00	905	179.01- 219.01	199.01
Average of Peak Amounts =				917		

Data File: /chem/eodda,i/021110,b/003b0301.d

Date: 11-FEB-2010 06:35

Client ID: AR125401

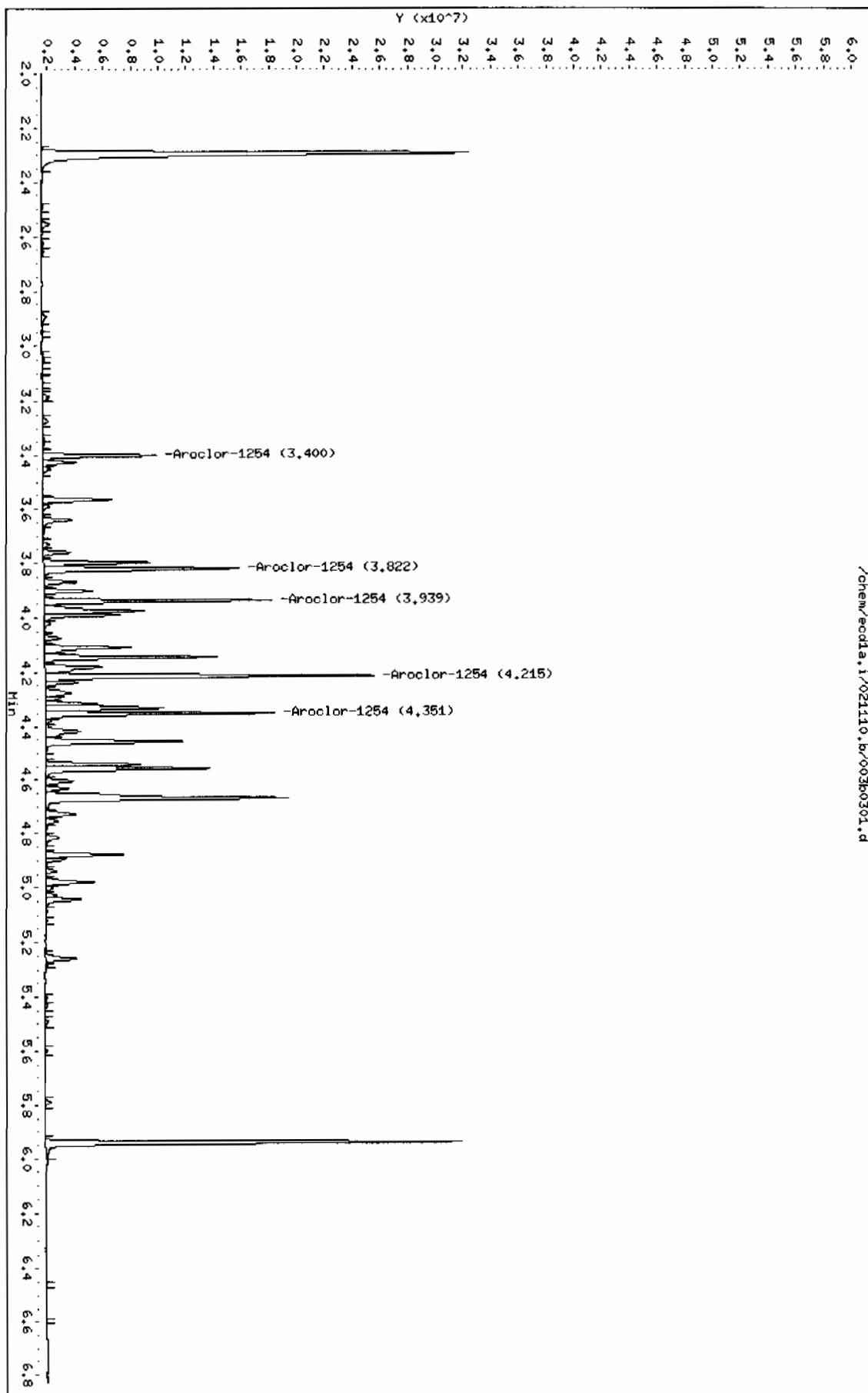
Sample Info: 14MR091216-54

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Column phase: CLP2

/chem/eodda,i/021110,b/003b0301.d

Instrument: eodda,i
Operator: YSL
Column diameter: 0.25



Data File: /chem/ecdla.i/021110.b/004f0401.d
Report Date: 11-Feb-2010 09:42

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/004f0401.d
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201
Inj Date : 11-FEB-2010 06:46
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR091217-42
Misc Info :
Comment :
Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
Meth Date : 11-Feb-2010 09:42 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1pl

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
4 Aroclor-1242			CAS #: 53469-21-9			
2.418	2.418	0.000	12811931 1000.00	901	80.00- 120.00	100.00
2.706	2.706	0.000	16871961 1000.00	978	111.69- 151.69	131.69
2.825	2.825	0.000	6444039 1000.00	960	30.30- 70.30	50.30
3.035	3.035	0.000	8260646 1000.00	932	44.48- 84.48	64.48
3.290	3.290	0.000	8186664 1000.00	953	43.90- 83.90	63.90
Average of Peak Amounts			944			

Data File: /chem/ecdia.i/021110.b/004f0a01.d

Date: 11-FEB-2010 06:46

Client ID: AR124201

Sample Info: 1MAR091217-42

Column phase: CLP1

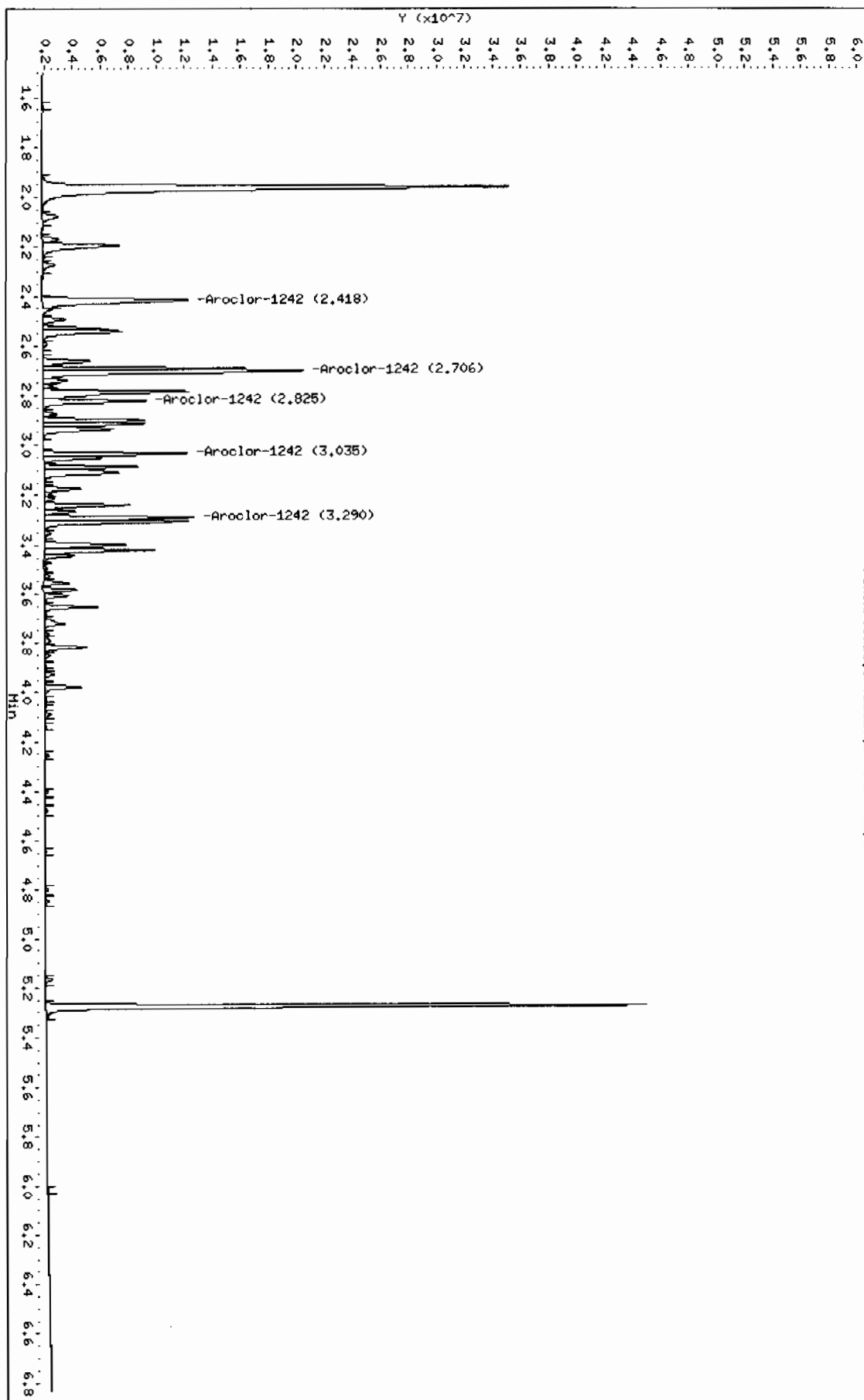
Page 1

Instrument: ecdia.i

Operator: YSA

Column diameter: 0.25

/chem/ecdia.i/021110.b/004f0a01.d



Data File: /chem/ecdl1a.i/021110.b/004b0401.d
Report Date: 11-Feb-2010 09:42

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/004b0401.d
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201
Inj Date : 11-FEB-2010 06:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091217-42
Misc Info :
Comment :
Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
Meth Date : 11-Feb-2010 09:42 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3.191	3.191	0.000	10156154	1000.00	945 80.00- 120.00	100.00
3.274	3.274	0.000	6809009	1000.00	910 47.04- 87.04	67.04
3.565	3.565	0.000	5378381	1000.00	906 32.96- 72.96	52.96
3.799	3.799	0.000	5515991	1000.00	926 34.31- 74.31	54.31
3.825	3.825	0.000	5402650	1000.00	810 33.20- 73.20	53.20
Average of Peak Amounts =				899		

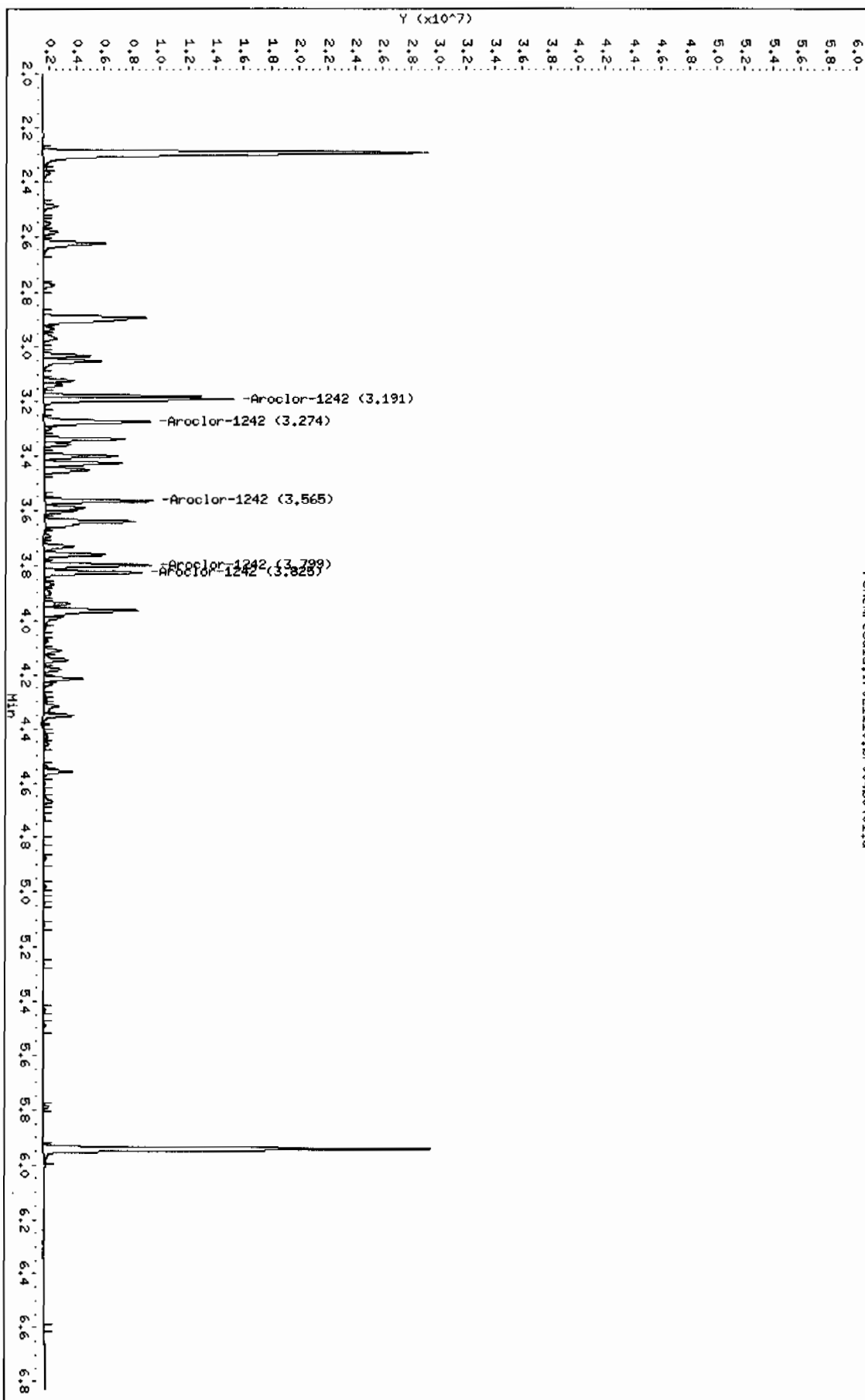
Data File: /chem/ecodla.i/021110.b/004p0401.d
Date : 11-FEB-2010 06:46
Client ID: AR124201
Sample Info: 1MAR091217-42

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Column Phase: CLP2

Operator: YS1
Column diameter: 0.25

/chem/ecodla.i/021110.b/004p0401.d



Data File: /chem/ecdl1a.i/021110.b/006f0601.d
 Report Date: 11-Feb-2010 09:43

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 lNJ VOL

Data file : /chem/ecdl1a.i/021110.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 11-FEB-2010 07:19

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/021110.b/ECD1-F-8082-021110.m

Meth Date : 11-Feb-2010 09:43 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 76

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
3 Aroclor-1232			CAS #: 11141-16-5			
2.422	2.422	0.000	8154572 1000.00	1190	80.00- 120.00	100.00
2.711	2.711	0.000	11028342 1000.00	1310	115.24- 155.24	135.24
2.792	2.792	0.000	6790675 1000.00	1210	63.27- 103.27	83.27
3.041	3.041	0.000	4995623 1000.00	1250	41.26- 81.26	61.26
3.296	3.296	0.000	4819542 1000.00	1250	39.10- 79.10	59.10

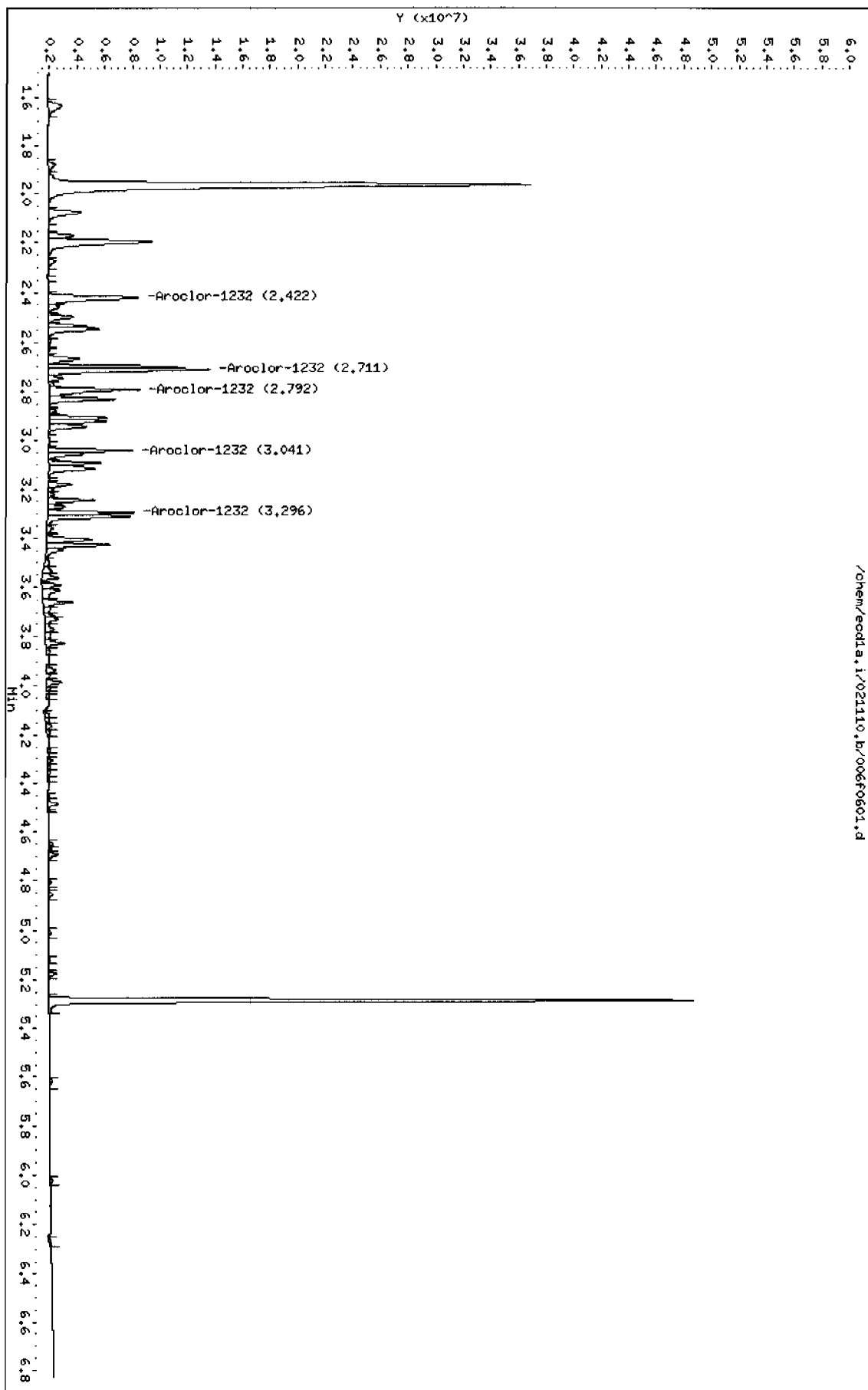
Average of Peak Amounts = 1.24e+03

Data File: /chem/eod1a.i/021110.b/006f0601.d
Date: 11-FEB-2010 07:19
Client ID: AR123201
Sample Info: 11AR100104-32

Column phase: CLP1

Instrument: eod1a.i
Operator: YS1
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/021110.b/006b0601.d
Report Date: 11-Feb-2010 09:43

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 11-FEB-2010 07:19

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m

Meth Date : 11-Feb-2010 09:43 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 76

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

3 Aroclor-1232

CAS #: 11141-16-5

2.895	2.895	0.000	5903575	1000.00	1000	80.00- 120.00	100.00
3.194	3.194	0.000	6634910	1000.00	1070	92.39- 132.39	112.39
3.278	3.278	0.000	4456496	1000.00	1020	55.49- 95.49	75.49
3.569	3.569	0.000	3304789	1000.00	1060	35.98- 75.98	55.98
3.803	3.803	0.000	3250245	1000.00	1020	35.06- 75.06	55.06

Average of Peak Amounts : 1.03e+03

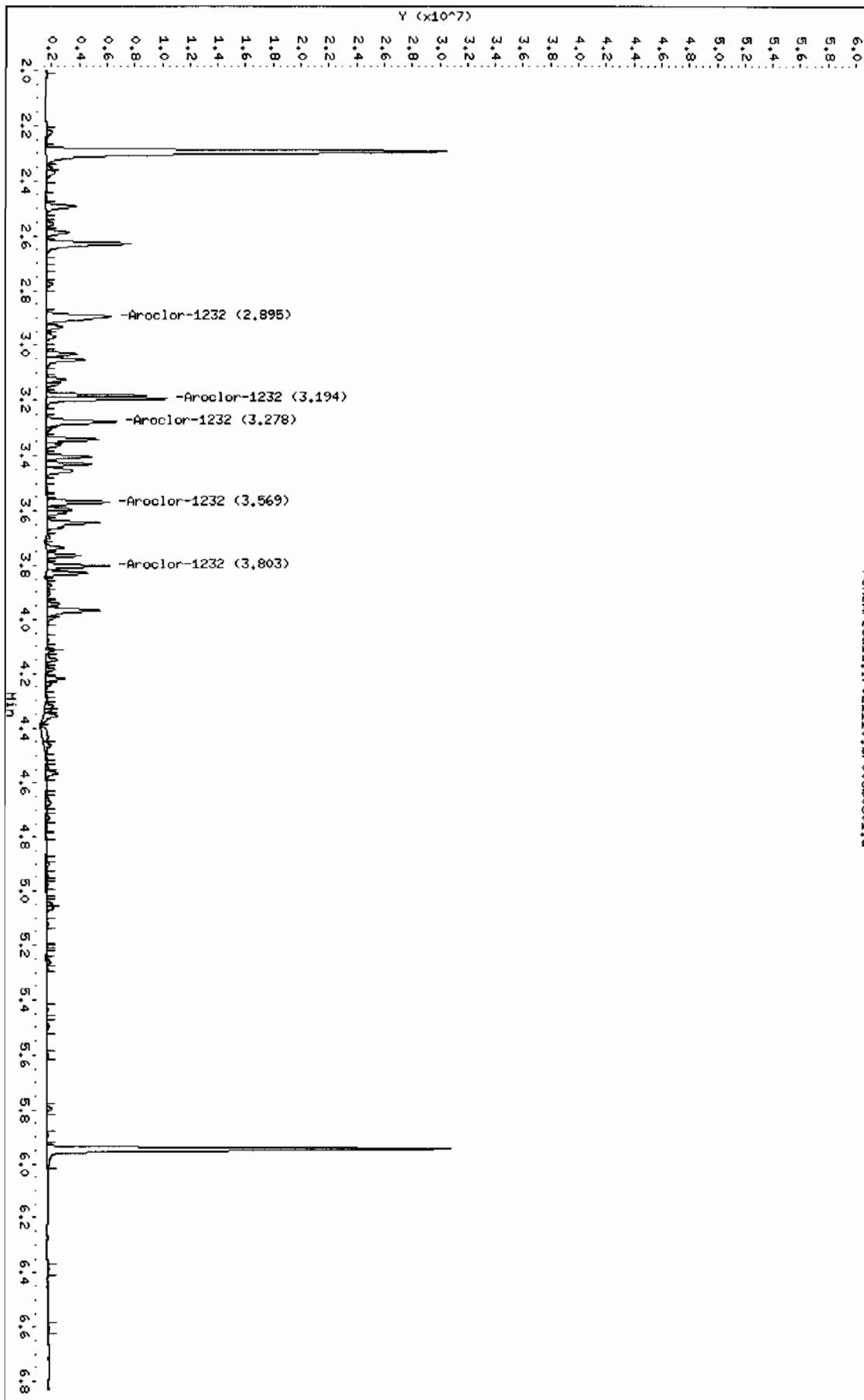
Data File: /chem/ecdl1a.i/021110.b/006b0601.d
Date: 11-FEB-2010 07:19
Client ID: AR123201
Sample Info: 14AR100104-32

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Column phase: CLP2

Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25

/chem/ecdl1a.i/021110.b/006b0601.d



Data File: /chem/ecd1a.i/021110.b/008f0801.d
 Report Date: 11-Feb-2010 09:43

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021110.b/008f0801.d

Lab Smp Id: WAR100104-21 Client Smp ID: AR122101

Inj Date : 11-FEB-2010 07:40

Operator : YS1 Inst ID: ecd1a.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecd1a.i/021110.b/ECD1-F-8082-021110.m

Meth Date : 11-Feb-2010 09:43 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d

Als bottle: 8 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: AR1221.sub

Target Version: 3.50 Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.075	2.075	0.000	5016640 1000.00	1170	80.00- 120.00	100.00
2.168	2.168	0.000	2677031 1000.00	1100	33.36- 73.36	53.36
2.194	2.194	0.000	12074242 1000.00	1180	220.68- 260.68	240.68

Average of Peak Amounts = 1.15e+03

Data File: /chem/ecod1a.i/021110.b/008f0801.d

Date: 11-FEB-2010 07:40

Client ID: AR122101

Sample Info: 1MAR100104-21

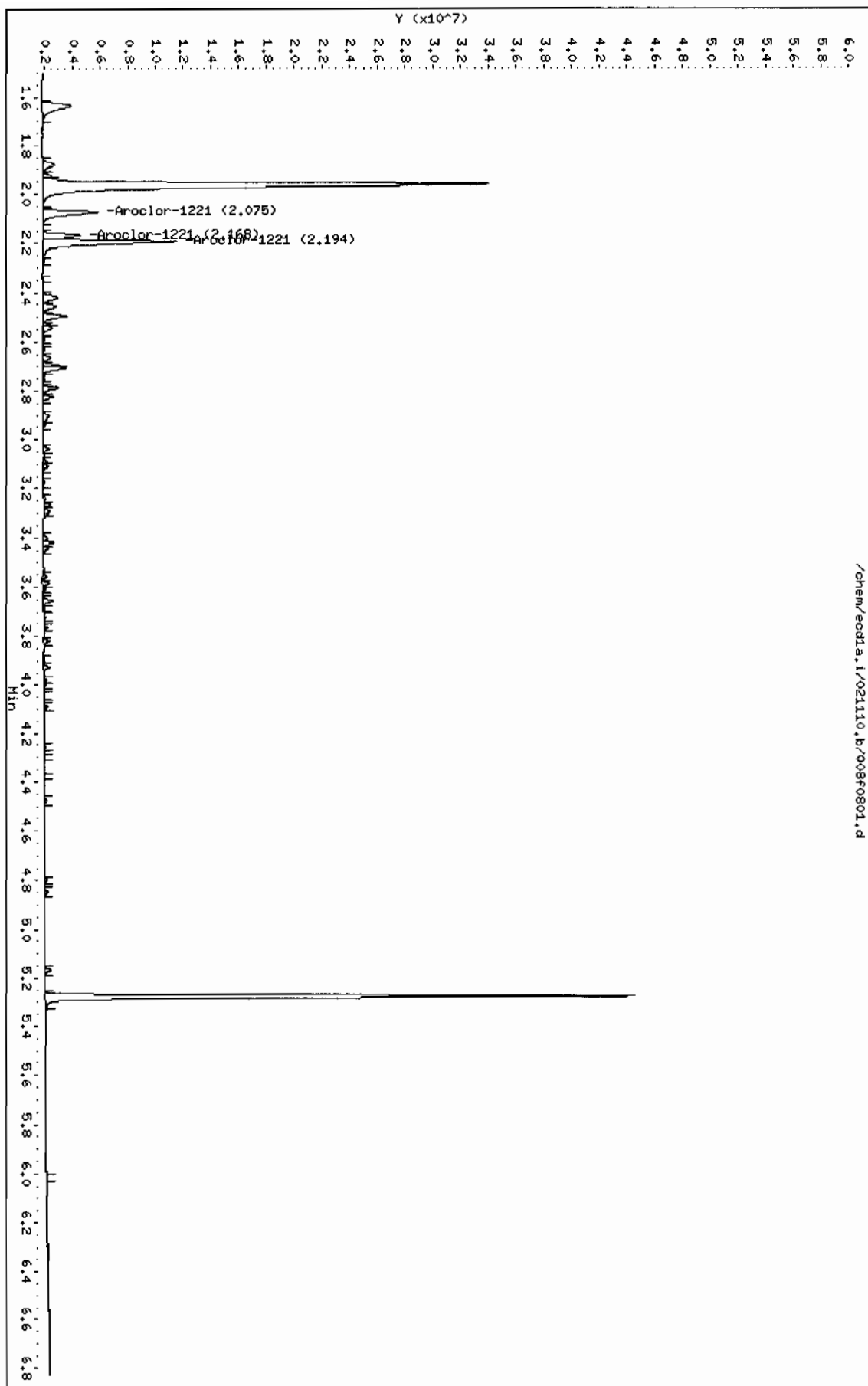
Column phase: CLP1

Instrument: ecod1a.i

Operator: YSI

Column diameter: 0.25

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Data File: /chem/ecdla.i/021110.b/008b0801.d
Report Date: 11-Feb-2010 09:43

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/008b0801.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 11-FEB-2010 07:40

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m

Meth Date : 11-Feb-2010 09:43 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 8

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

2.491	2.491	0.000	3583178	1000.00	984 80.00- 120.00	100.00
2.585	2.585	0.000	2262373	1000.00	971 43.14- 83.14	63.14
2.626	2.626	0.000	7643207	1000.00	941 193.31- 233.31	213.31

Average of Peak Amounts = 966

Data File: /chem/eod1a.i/021110.b/008b0801.d

Date: 11-FEB-2010 07:40

Client ID: AR122101

Sample Info: 1MR100104-21

Column phase: CLP2

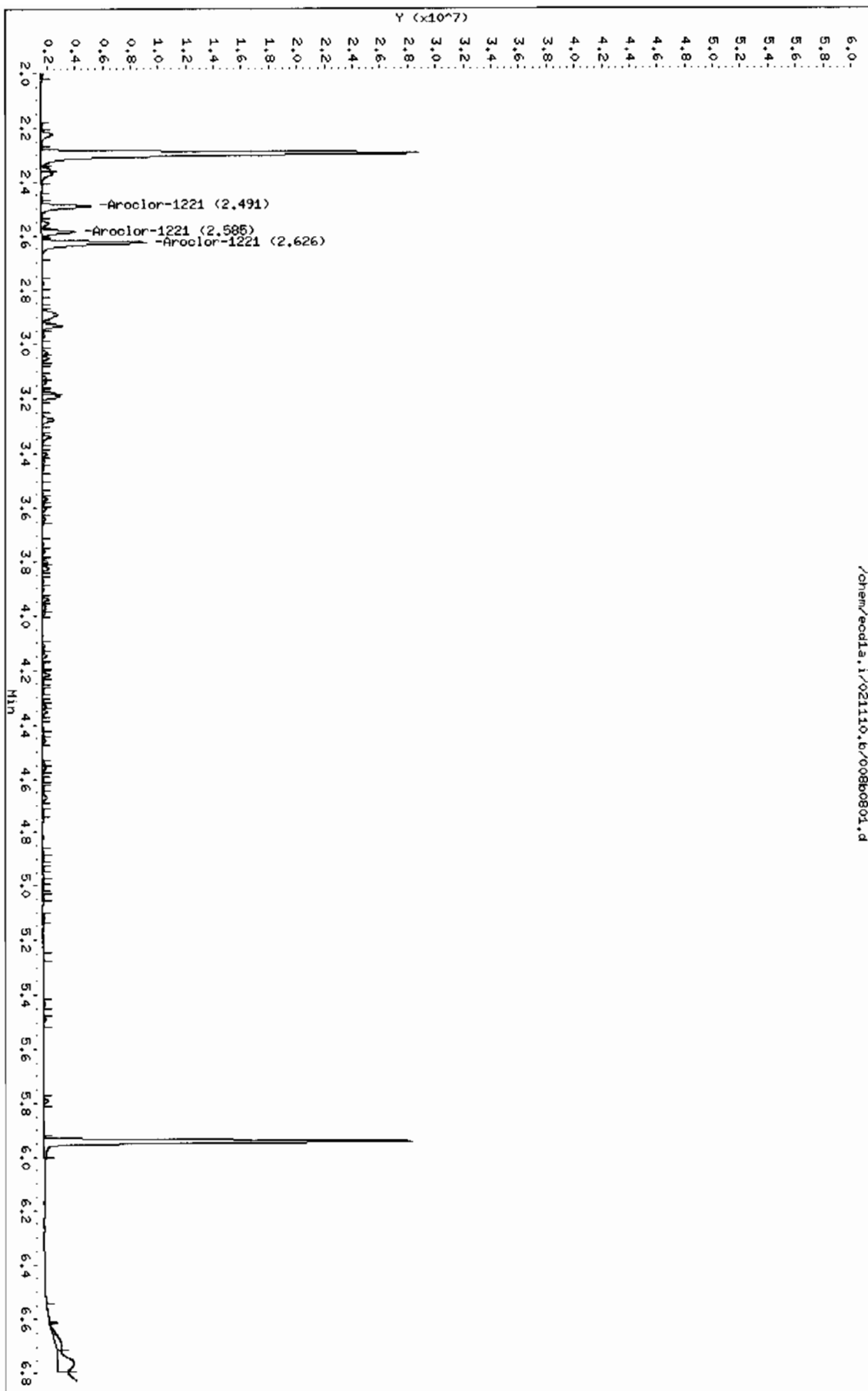
Page 1

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25

/chem/eod1a.i/021110.b/008b0801.d



Data File: /chem/ecdla.i/021110.b/010f1001.d
Report Date: 11-Feb-2010 09:44

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/010f1001.d

Lab Smp Id: WAR100107-68

Client Smp ID: AR126801

Inj Date : 11-FEB-2010 08:01

Operator : YSl

Inst ID: ecdla.i

Smp Info : |WAR100107-68

Misc Info :

Comment :

Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m

Meth Date : 11-Feb-2010 09:44 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 10

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1268.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1pl

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

9 Aroclor-1268			CAS #: 11100-14-4			
4.662	4.662	0.000	48752732 1000.00	929	80.00- 120.00	100.00
4.685	4.685	0.000	46743320 1000.00	971	75.88- 115.88	95.88
4.797	4.797	0.000	36739910 1000.00	992	55.36- 95.36	75.36
5.001	5.001	0.000	18430486 1000.00	1130	17.80- 57.80	37.80
5.166	5.166	0.000	116812895 1000.00	1080	219.60- 259.60	239.60

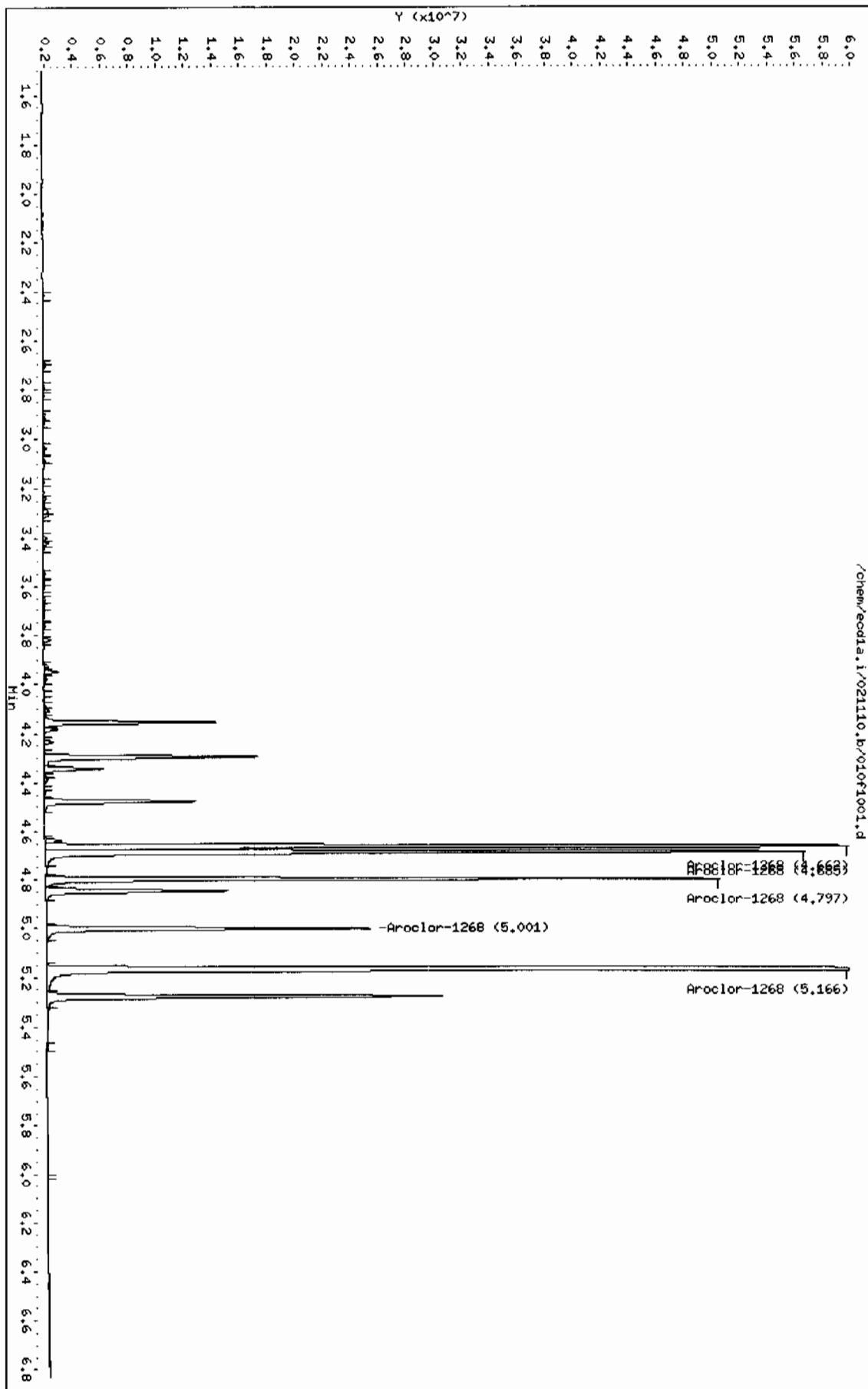
Average of Peak Amounts 1.02e+03

Data File: /chem/ecodla.i/021110.b/010f1001.d
Date : 11-FEB-2010 08:01
Client ID: AR126801
Sample Info: 1MAR100107-68

Column phase: CLP1

Instrument: ecodla.i
Operator: YSA
Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/021110.b/010b1001.d

Lab Smp Id: WAR100107-68

Client Smp ID: AR126801

Inj Date : 11-FEB-2010 08:01

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100107-68

Misc Info :

Comment :

Method : /chem/ecd1a.i/021110.b/ECD1-B-8082-021110.m

Meth Date : 11-Feb-2010 09:44 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 10

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1268.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS							
			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)		RATIO
-	=====	=====	=====	=====	=====	=====	=====
9 Aroclor-1268			CAS #: 11100-14-4				
5.255	5.255	0.000	31076356	1000.00	857	80.00- 120.00	100.00
5.282	5.282	0.000	29783418	1000.00	887	75.84- 115.84	95.84
5.432	5.432	0.000	23368210	1000.00	899	55.20- 95.20	75.20
5.597	5.597	0.000	11578931	1000.00	1020	17.26- 57.26	37.26
5.790	5.790	0.000	73183396	1000.00	1090	215.50- 255.50	235.50
Average of Peak Amounts			951				

Data File: /chem/ecdl1.i/021110.b/010b1001.d

Date: 11-FEB-2010 08:01

Client ID: AR126891

Sample Info: 1MAR100107-68

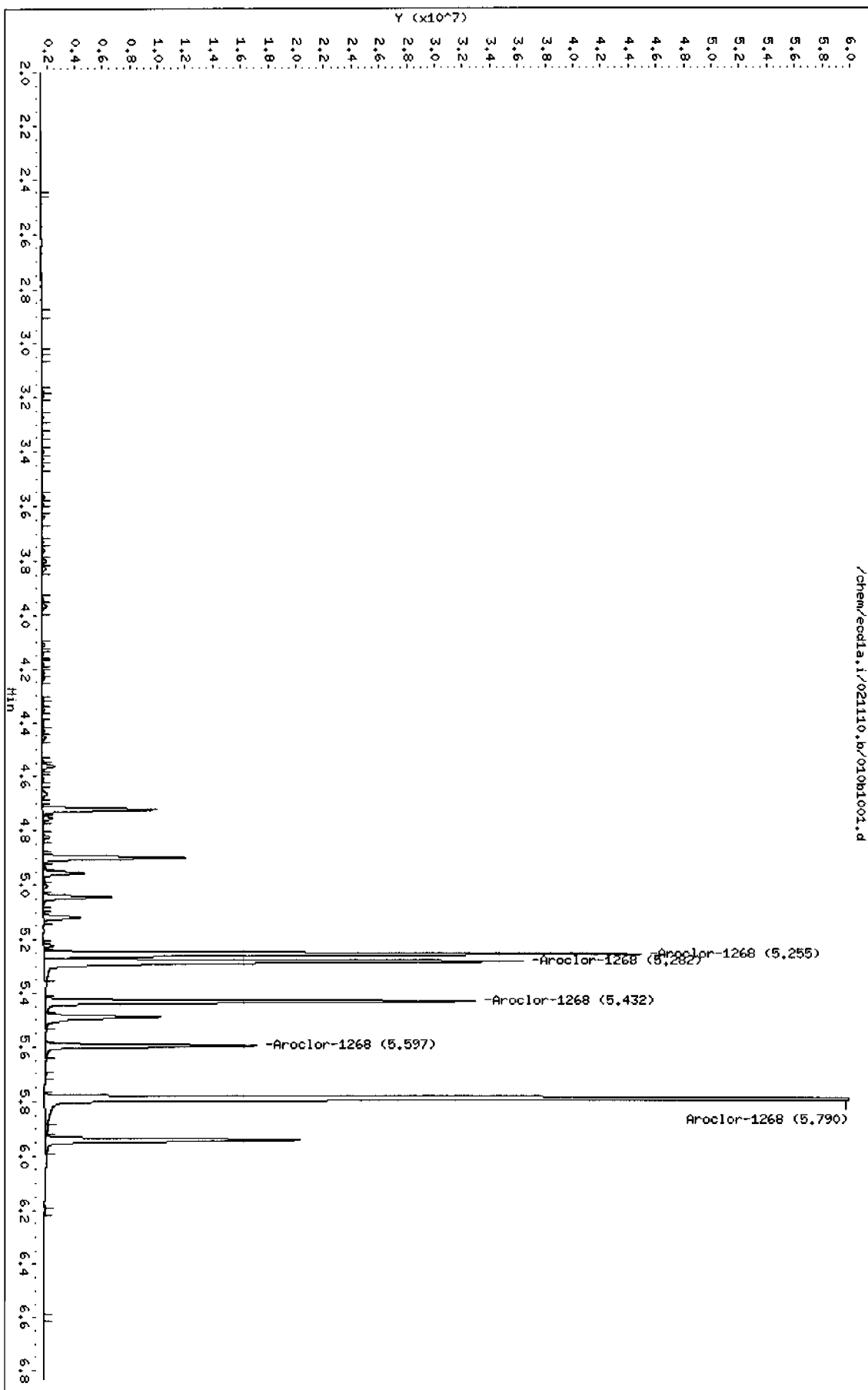
Column Phase: CLP2

Instrument: ecdl1.i

Operator: YSI

Column diameter: 0.25

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Data File: /chem/ecdla.i/021110.b/016f1601.d
 Report Date: 11-Feb-2010 09:45

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/016f1601.d
 Lab Smp Id: WAR091217-48 48 Client Smp ID: AR124801
 Inj Date : 11-FEB-2010 09:04
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR091217-48 48
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 11-Feb-2010 09:45 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 16 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1248.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5						
			CAS #: 12672-29-6			
3.087	3.087	0.000	8873993 1000.00	939	80.00- 120.00	100.00
3.238	3.238	0.000	7689955 1000.00	930	66.66- 106.66	86.66
3.290	3.290	0.000	14863457 1000.00	933	147.49- 187.49	167.49
3.421	3.421	0.000	12125245 1000.00	927	116.64- 156.64	136.64
3.654	3.654	0.000	7845412 1000.00	889	68.41- 108.41	88.41
Average of Peak Amounts =				924		

Data File: /chem/ecdl.a.i/021110.b/016f1601.d

Date: 11-FEB-2010 09:04

Client ID: AR124801

Sample Info: 1W8091217-48 48

Column phase: CLP1

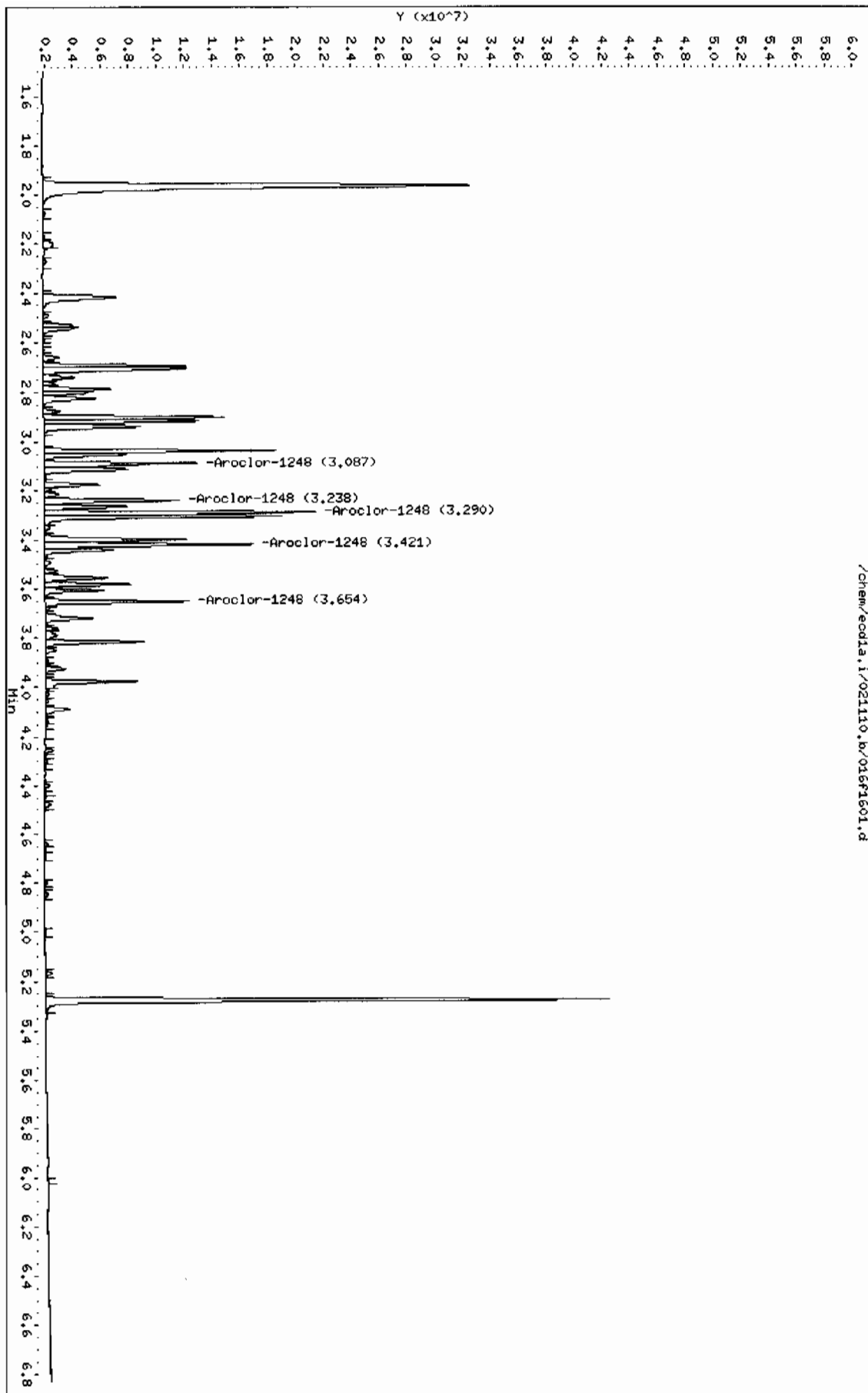
Instrument: ecdl.a.i

Operator: YSI

Column diameter: 0.25

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/chem/ecdl.a.i/021110.b/016f1601.d



Data File: /chem/ecdl1a.i/021110.b/016b1601.d
 Report Date: 11-Feb-2010 09:45

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/016b1601.d
 Lab Smp Id: WAR091217-48 48 Client Smp ID: AR124801
 Inj Date : 11-FEB-2010 09:04
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR091217-48 48
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
 Meth Date : 11-Feb-2010 09:45 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 16 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1248.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1pl

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3.400	3.400	0.000	6936077 1000.00	904 80.00-	120.00	100.00
3.565	3.565	0.000	8699287 1000.00	920 105.42-	145.42	125.42
3.799	3.799	0.000	9837681 1000.00	915 121.83-	161.83	141.83
3.826	3.826	0.000	10986647 1000.00	915 138.40-	178.40	158.40
3.963	3.963	0.000	10490931 1000.00	907 131.25-	171.25	151.25
Average of Peak Amounts =				912		

Data File: /chem/ecdda.i/021110.b/016b1601.d

Date: 11-FEB-2010 09:04

Client ID: AR124901

Sample Info: 1MR091217-48 48

Column phase: CLP2

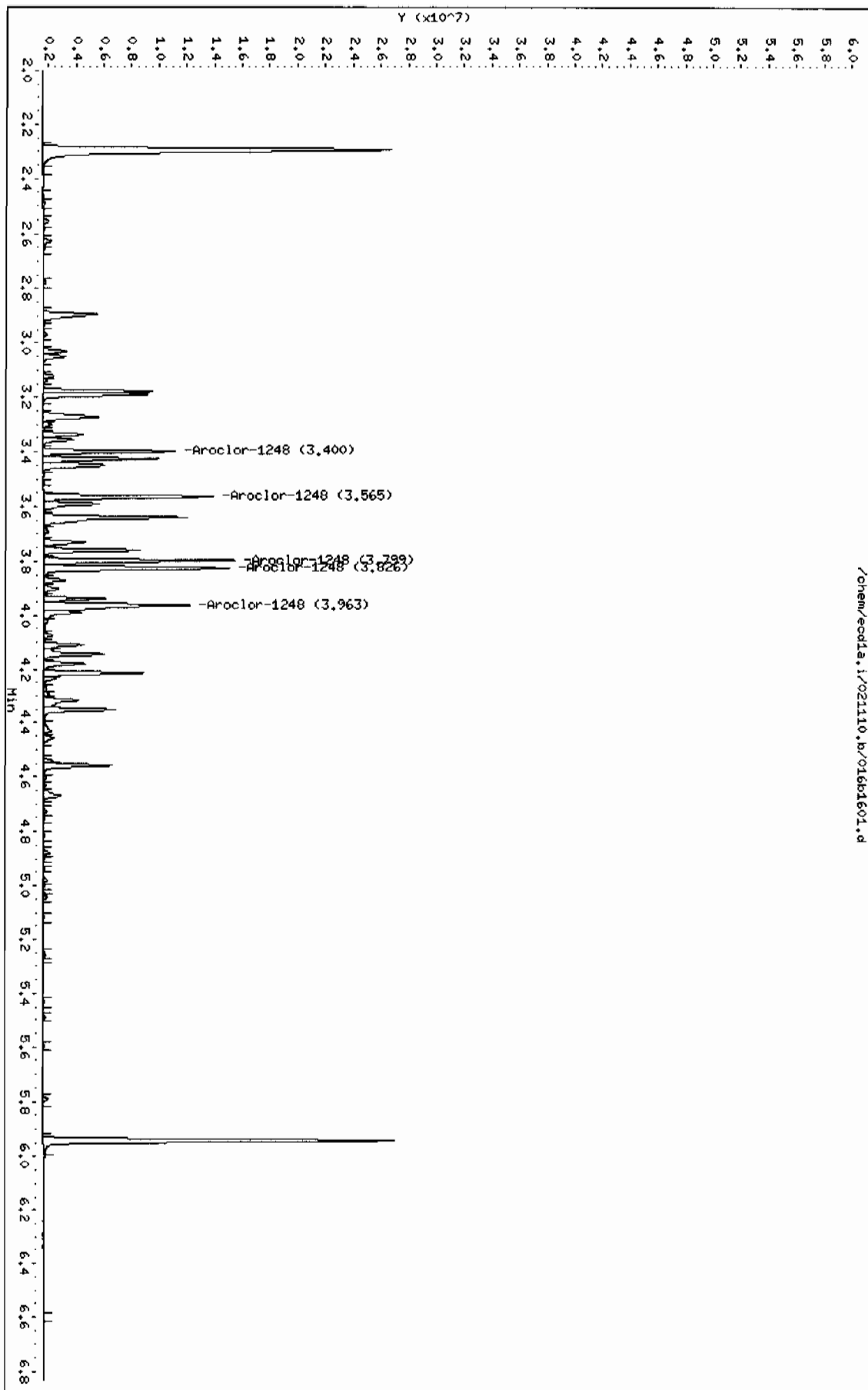
Page 1

Instrument: ecdda.i

Operator: YS1

Column diameter: 0.25

/chem/ecdda.i/021110.b/016b1601.d



Data File: /chem/ecdl1a.i/021110.b/041f4101.d
Report Date: 11-Feb-2010 14:54

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/041f4101.d

Lab Smp Id: WAR100203-60 04

Client Smp ID: AR166004

Inj Date : 11-FEB-2010 13:59

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100203-60 04

Misc Info :

Comment :

Method : /chem/ecdl1a.i/021110.b/ECD1-F-8082-021110.m

Meth Date : 11-Feb-2010 14:23 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 41

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

\$ 11 4cmx

CAS #: 877-09-8

1.962	1.962	0.000	44533632	100.000	102 80.00- 120.00	100.00
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\$ 12 Decachlorobiphenyl

CAS #: 2051-24-3

5.274	5.275	-0.001	33390188	100.000	100 80.00- 120.00	100.00
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1 Aroclor-1016

CAS #: 12674-11-2

2.417	2.418	-0.001	15417701	1000.00	957 80.00- 120.00	100.00
2.705	2.705	0.000	20182782	1000.00	1020 110.91- 150.91	130.91
2.785	2.786	-0.001	12638305	1000.00	970 61.97- 101.97	81.97
2.824	2.824	0.000	7558453	1000.00	971 29.02- 69.02	49.02
3.034	3.035	-0.001	9745748	1000.00	972 43.21- 83.21	63.21

Average of Peak Amounts =

978

7 Aroclor-1260

CAS #: 11096-82-5

3.759	3.760	-0.001	20119986	1000.00	1060 80.00- 120.00	100.00
3.922	3.924	-0.002	30406524	1000.00	1070 131.13- 171.13	151.13
4.152	4.154	-0.002	18123617	1000.00	1060 70.08- 110.08	90.08
4.295	4.296	-0.001	19480990	1000.00	1090 76.82- 116.82	96.82
4.474	4.475	-0.001	42671481	1000.00	1100 192.09- 232.09	212.09

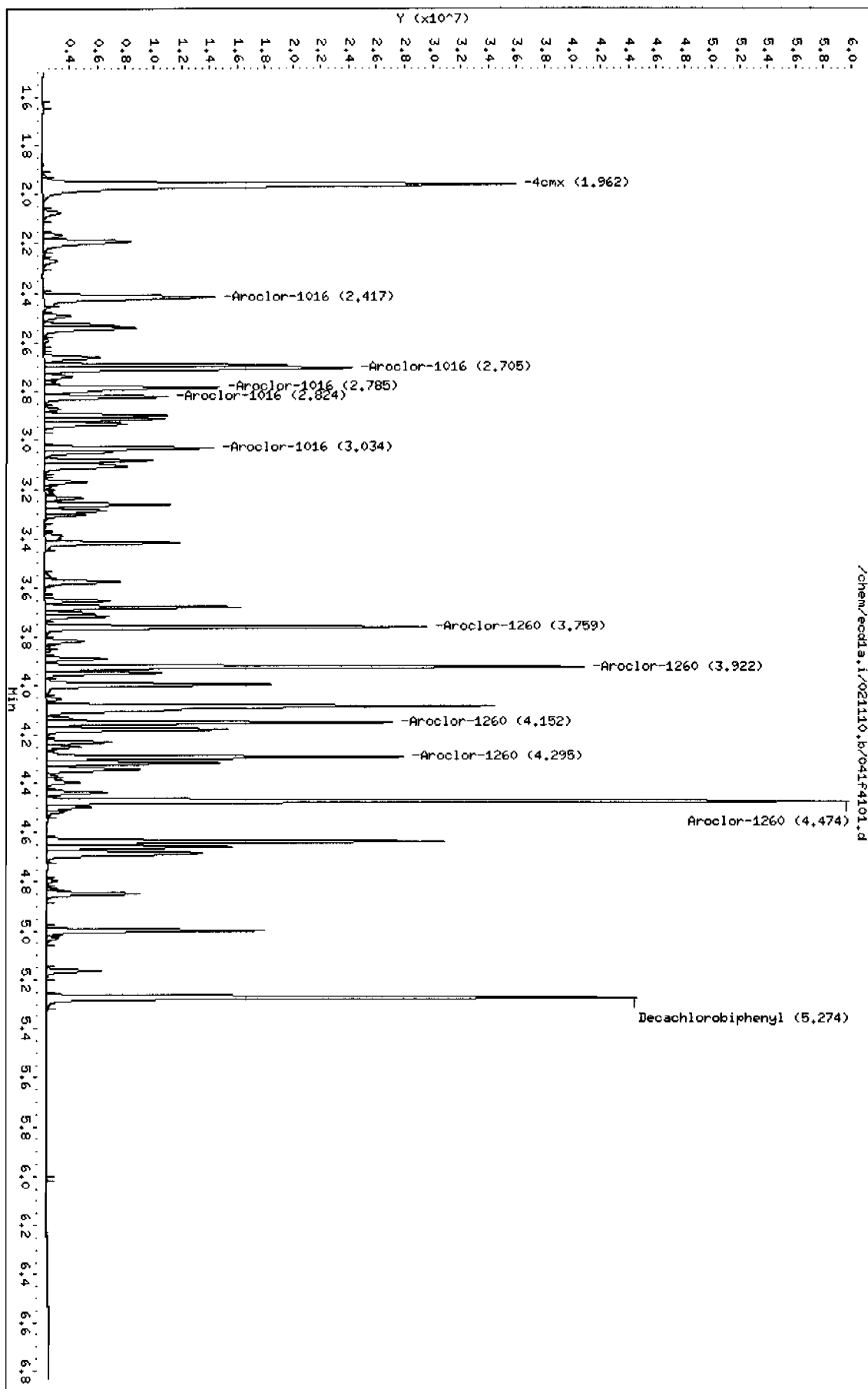
Average of Peak Amounts =

1.08e+03

Data File: /chem/eodla.i/021110.b/041f4101.d
Date: 11-FEB-2010 13:59
Client ID: AR166004
Sample Info: IMA100203-60 04

Column phase: CLP1

Instrument: eodla.i
Operator: YSL
Column diameter: 0.25



Data File: /chem/ecdl1a.i/021110.b/041b4101.d
Report Date: 11-Feb-2010 14:25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/041b4101.d
Lab Smp Id: WAR100203-60 04 Client Smp ID: AR166004
Inj Date : 11-FEB-2010 13:59
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 04
Misc Info :
Comment :
Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
Meth Date : 11-Feb-2010 14:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 41 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
---	-----	-----	-----	-----	-----	-----	
\$ 11 4cmx				CAS #: 877-09-8			
2.294	2.294	0.000	28251817 100.000	98.5	80.00-	120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.939	5.941	-0.002	20842332 100.000	96.9	80.00-	120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2			
3.189	3.190	-0.001	12136535 1000.00	976	80.00-	120.00	100.00 (M)
3.273	3.274	-0.001	7885509 1000.00	925	44.97-	84.97	64.97
3.336	3.337	-0.001	4854387 1000.00	924	20.00-	60.00	40.00
3.563	3.564	-0.001	6230767 1000.00	926	31.34-	71.34	51.34
3.639	3.640	-0.001	5804457 1000.00	918	27.83-	67.83	47.83
Average of Peak Amounts -				934			

7 Aroclor-1260				CAS #: 11096-82-5			
4.329	4.330	-0.001	12875144 1000.00	1020	80.00-	120.00	100.00
4.454	4.455	-0.001	15626067 1000.00	1040	101.37-	141.37	121.37
4.720	4.721	-0.001	11908223 1000.00	1020	72.49-	112.49	92.49
4.894	4.895	-0.001	12306280 1000.00	1020	75.58-	115.58	95.58
5.041	5.042	-0.001	27241559 1000.00	1050	191.58-	231.58	211.58
Average of Peak Amounts -				1.03e+03			

QC Flag Legend

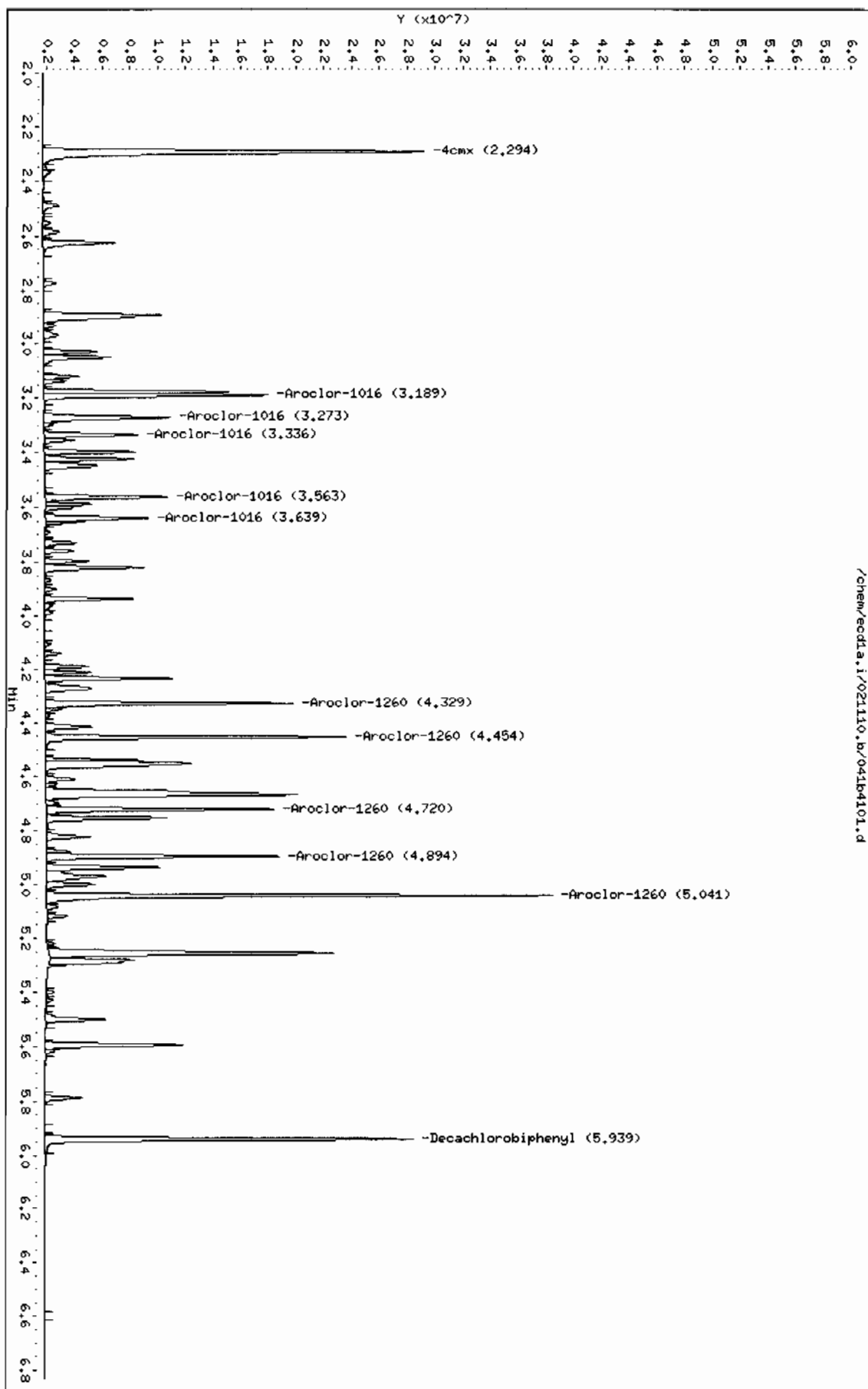
M - 'Compound response manually integrated.

Data File: /chem/ecdl1a.i/021110.b/041b4101.d
Date: 11-FEB-2010 13:59
Client ID: AR166004
Sample Info: IMAR100203-60 04

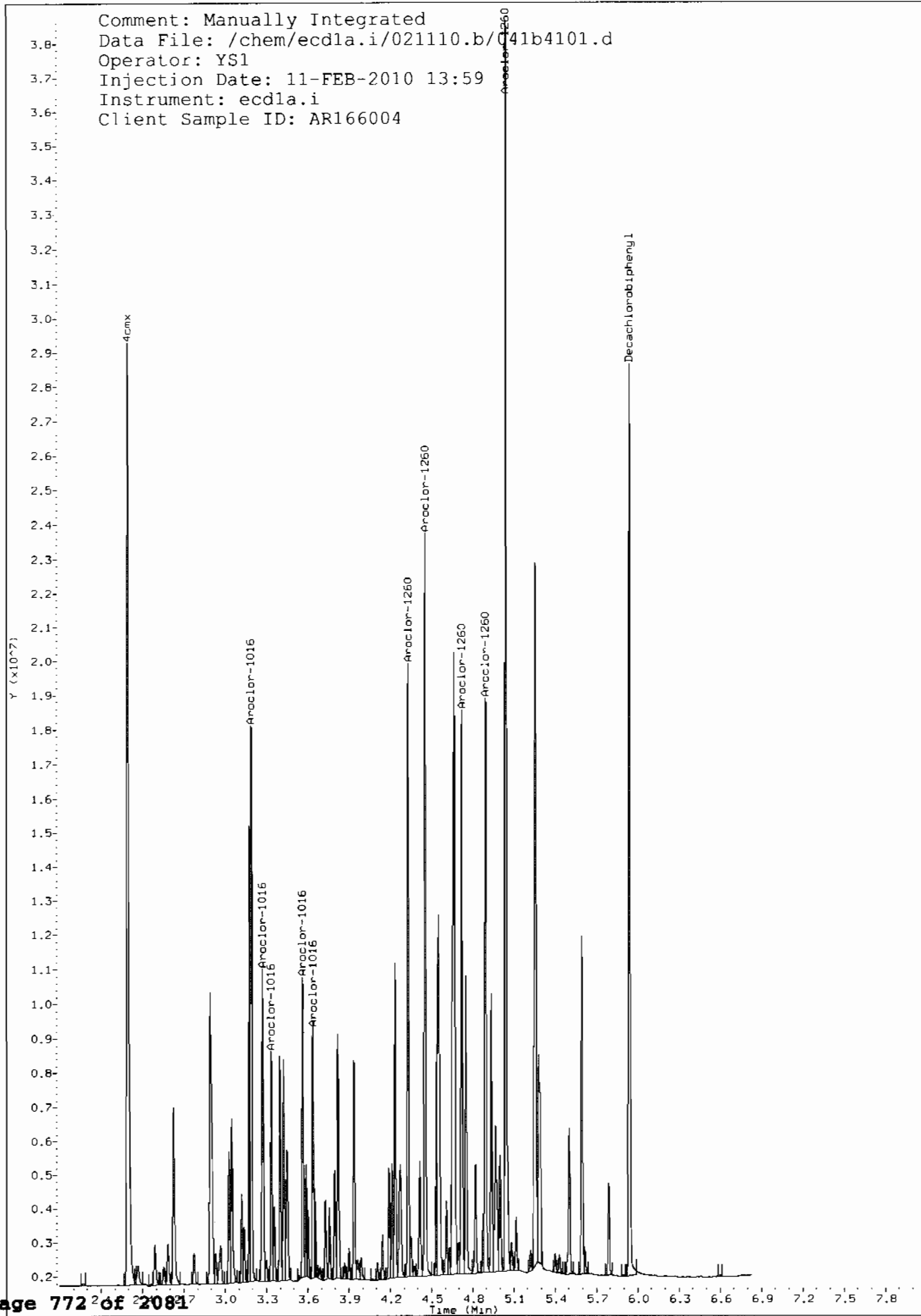
Column Phase: CLP2

Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25

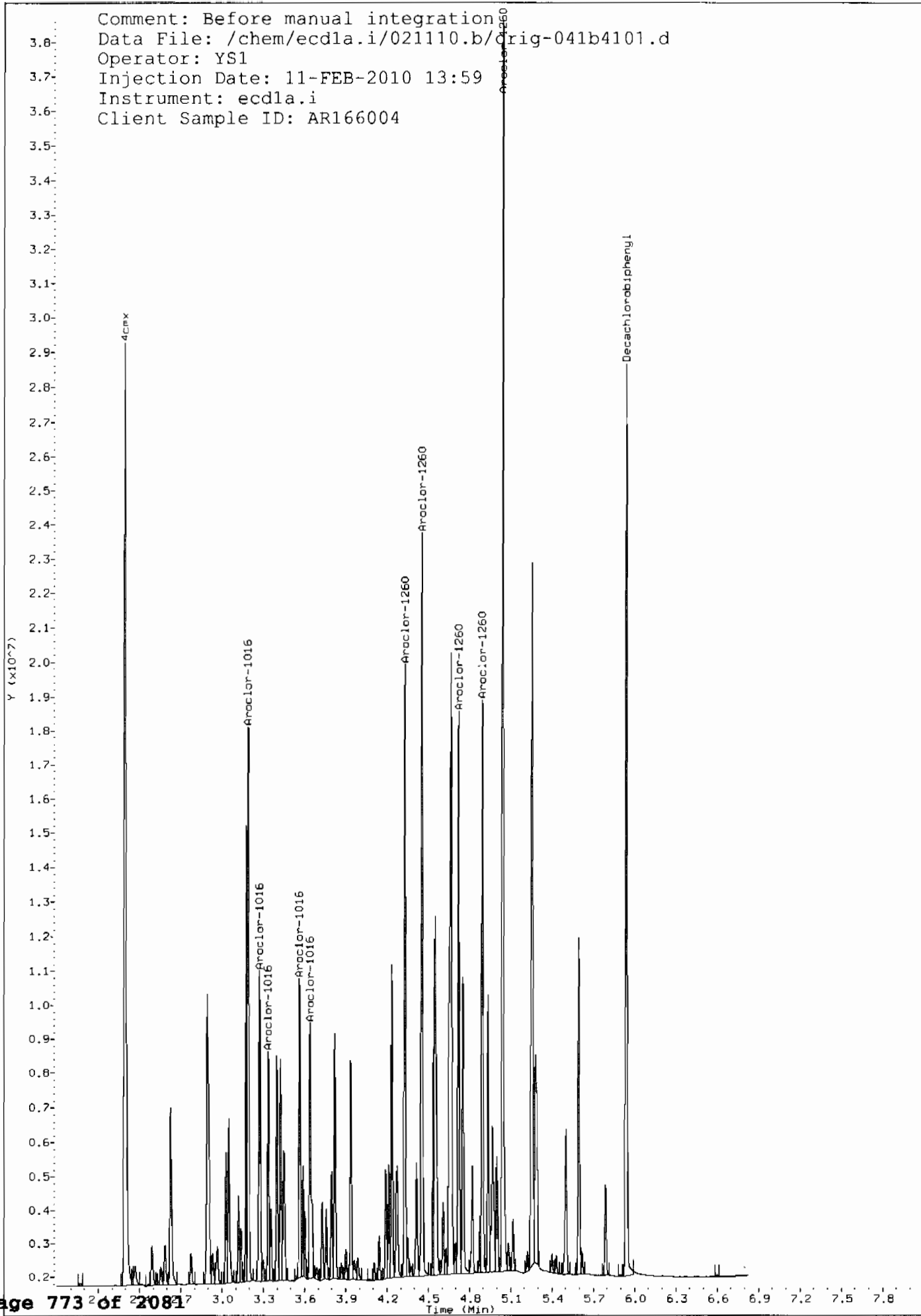
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Comment: Manually Integrated
Data File: /chem/ecdl1a.i/021110.b/041b4101.d
Operator: YS1
Injection Date: 11-FEB-2010 13:59
Instrument: ecd1a.i
Client Sample ID: AR166004



Comment: Before manual integration
Data File: /chem/ecdla.i/021110.b/Orig-041b4101.d
Operator: YS1
Injection Date: 11-FEB-2010 13:59
Instrument: ecdla.i
Client Sample ID: AR166004



Data File: /chem/ecdl1a.i/021110.b/053f5301.d
 Report Date: 12-Feb-2010 06:54

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/053f5301.d
 Lab Smp Id: WAR100203-60 05 Client Smp ID: AR166005
 Inj Date : 11-FEB-2010 16:26
 Operator : YSI Inst ID: ecd1a.i
 Smp Info : |WAR100203-60 05
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 12-Feb-2010 06:54 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 53 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	CAL-AMT (ug/L)	ON-COL	TARGET RANGE	RATIO
=====							
\$ 11 4cmx				CAS #: 877-09-8			
1.962	1.962	0.000	44448738	100.000	102	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.273	5.275	-0.002	32372227	100.000	97.0	80.00- 120.00	100.00

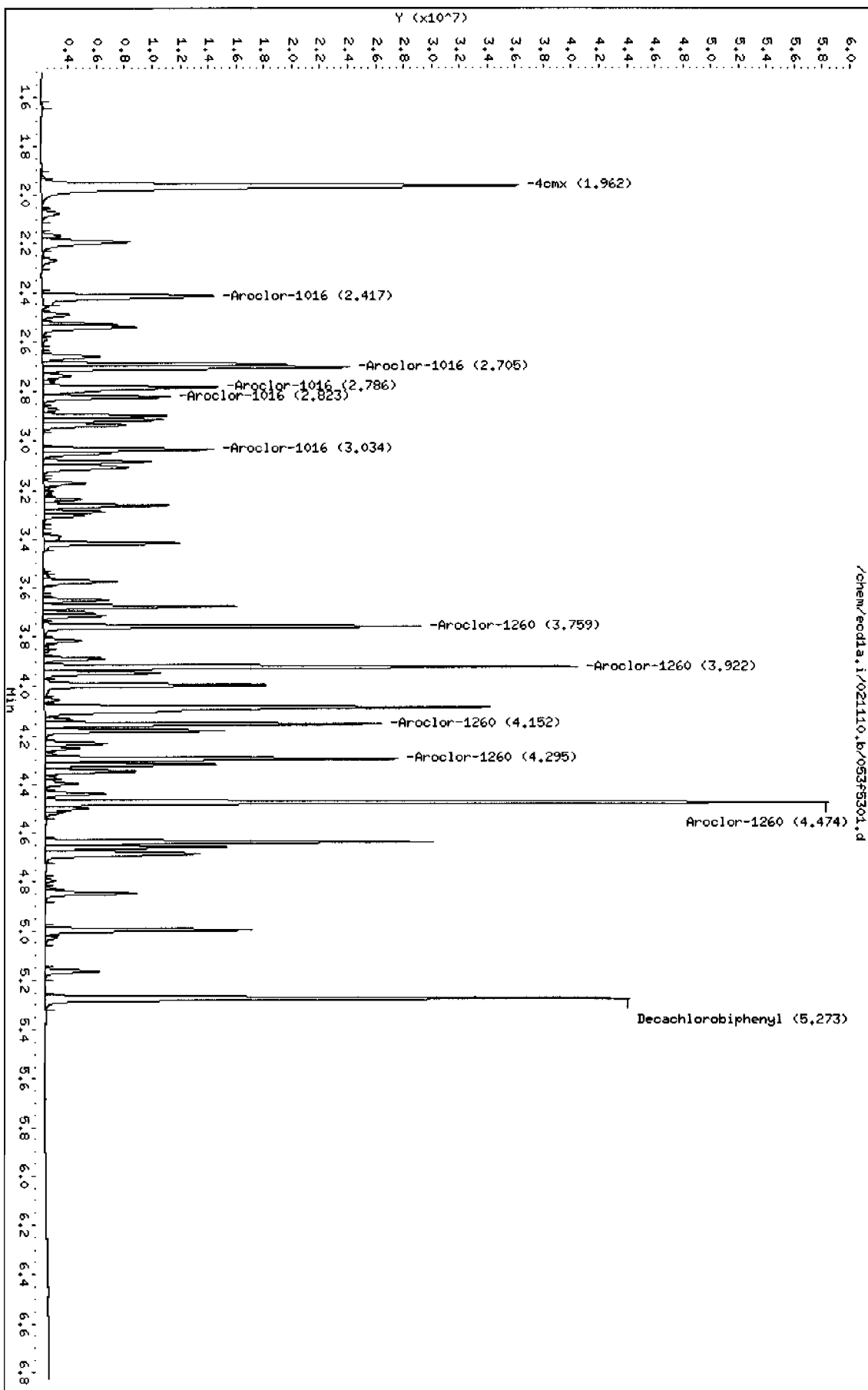
1 Aroclor-1016				CAS #: 12674-11-2			
2.417	2.418	-0.001	15384834	1000.00	955	80.00- 120.00	100.00
2.705	2.705	0.000	19723223	1000.00	997	108.20- 148.20	128.20
2.786	2.786	0.000	12610788	1000.00	968	61.97- 101.97	81.97
2.823	2.824	-0.001	7597044	1000.00	976	29.38- 69.38	49.38
3.034	3.035	-0.001	9627379	1000.00	960	42.58- 82.58	62.58
Average of Peak Amounts =				971			

7 Aroclor-1260				CAS #: 11096-82-5			
3.759	3.760	-0.001	20163698	1000.00	1060	80.00- 120.00	100.00
3.922	3.924	-0.002	30122749	1000.00	1060	129.39- 169.39	149.39
4.152	4.154	-0.002	17936661	1000.00	1050	68.96- 108.96	88.96
4.295	4.296	-0.001	18821490	1000.00	1050	73.34- 113.34	93.34
4.474	4.475	-0.001	41846605	1000.00	1080	187.53- 227.53	207.53
Average of Peak Amounts =				1.06e+03			

Data File: /chem/ecda.i/02110.b/053f5301.d
Date: 11-FEB-2010 16:26
Client ID: AR166005
Sample Info: 14R100203-60 05

Column phase: CLP1

Instrument: ecda.i
Operator: YSI
Column diameter: 0.25



Data File: /chem/ecdl1a.i/021110.b/053b5301.d
 Report Date: 12-Feb-2010 06:54

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/053b5301.d

Lab Smp Id: WAR100203-60 05

Client Smp ID: AR166005

Inj Date : 11-FEB-2010 16:26

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100203-60 05

Misc Info :

Comment :

Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m

Meth Date : 12-Feb-2010 06:54 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 53

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====		=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
2.293	2.294	-0.001	28296331	100.000	98.6	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.939	5.941	-0.002	20210079	100.000	94.0	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
3.190	3.190	0.000	11752588	1000.00	945	80.00- 120.00	100.00	
3.272	3.274	-0.002	7925933	1000.00	930	47.44- 87.44	67.44	
3.336	3.337	-0.001	4861568	1000.00	925	21.37- 61.37	41.37	
3.563	3.564	-0.001	6425703	1000.00	954	34.67- 74.67	54.67	
3.638	3.640	-0.002	5899021	1000.00	933	30.19- 70.19	50.19	
Average of Peak Amounts =					938			

7 Aroclor-1260					CAS #: 11096-82-5			
4.329	4.330	-0.001	12748817	1000.00	1010	80.00- 120.00	100.00	
4.454	4.455	-0.001	15400912	1000.00	1020	100.80- 140.80	120.80	
4.719	4.721	-0.002	11718690	1000.00	1010	71.92- 111.92	91.92	
4.893	4.895	-0.002	12136482	1000.00	1010	75.20- 115.20	95.20	
5.040	5.042	-0.002	26752597	1000.00	1040	189.84- 229.84	209.84	
Average of Peak Amounts =					1.02e+03			

Data File: /chem/ecdl.a.i/021110.b/053b5301.d

Date: 11-FEB-2010 16:26

Client ID: AR166005

Sample Info: IWAR400203-60 05

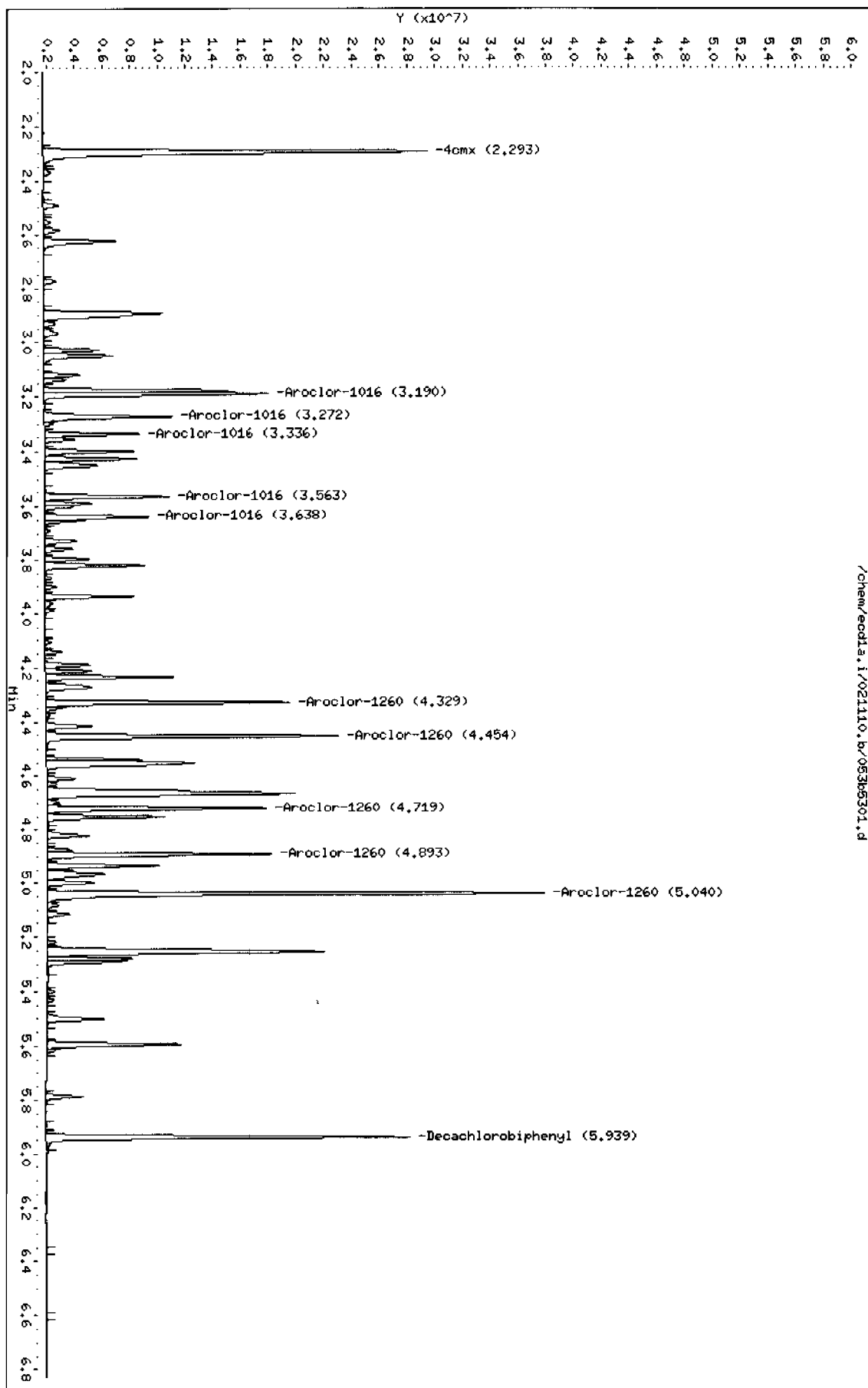
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YS1

Column diameter: 0.25

/chem/ecdl.a.i/021110.b/053b5301.d



Data File: /chem/ecdla.i/021110.b/063f6301.d
 Report Date: 12-Feb-2010 07:41

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/063f6301.d
 Lab Smp Id: WAR100203-60 06 Client Smp ID: AR166006
 Inj Date : 11-FEB-2010 18:28
 Operator : YSl Inst ID: ecdla.i
 Smp Info : |WAR100203-60 06
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 12-Feb-2010 07:41 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 63 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	==	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
1.962	1.962	0.000	43473420	100.000	99.4	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.274	5.275	-0.001	32551650	100.000	97.6	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
2.417	2.418	-0.001	14670768	1000.00	911	80.00- 120.00	100.00	
2.705	2.705	0.000	19413394	1000.00	981	112.33- 152.33	132.33	
2.785	2.786	-0.001	12409380	1000.00	953	64.59- 104.59	84.59	
2.823	2.824	-0.001	7474666	1000.00	960	30.95- 70.95	50.95	
3.033	3.035	-0.002	9497975	1000.00	948	44.74- 84.74	64.74	
Average of Peak Amounts =					951			

7 Aroclor-1260					CAS #: 11096-82-5			
3.759	3.760	-0.001	19886462	1000.00	1040	80.00- 120.00	100.00	
3.922	3.924	-0.002	29823794	1000.00	1050	129.97- 169.97	149.97	
4.152	4.154	-0.002	17865326	1000.00	1050	69.84- 109.84	89.84	
4.295	4.296	-0.001	18725540	1000.00	1050	74.16- 114.16	94.16	
4.474	4.475	-0.001	41814099	1000.00	1080	190.26- 230.26	210.26	
Average of Peak Amounts =					1.05e+03			

Data File: /chem/ecdl1.i/021110.b/063f6301.d

Date: 11-FEB-2010 18:28

Client ID: AR166006

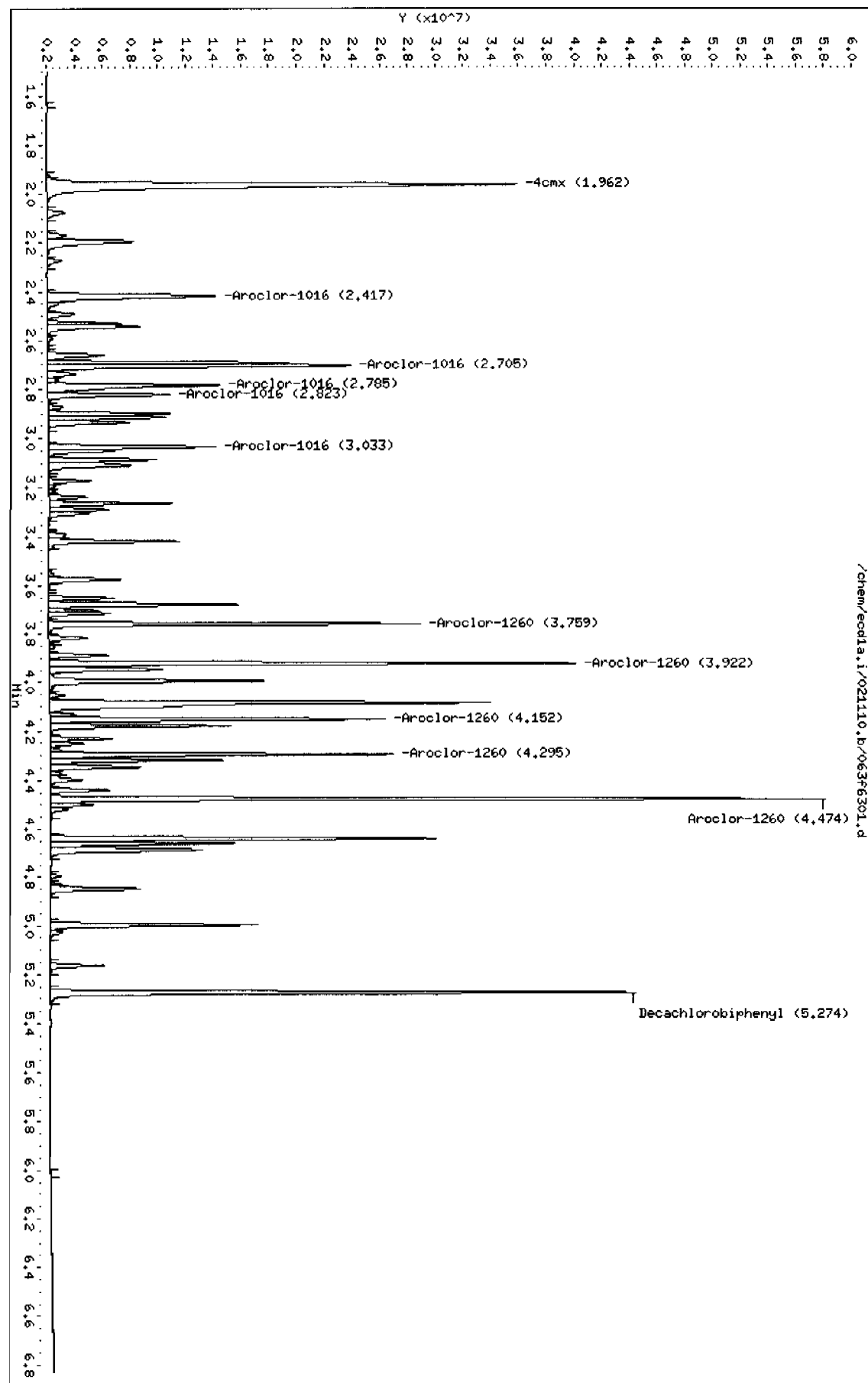
Sample Info: IWA100203-60 06

Column phase: CLP1

Instrument: ecdl1.i

Operator: YSI

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/063b6301.d

Lab Smp Id: WAR100203-60 06

Client Smp ID: AR166006

Inj Date : 11-FEB-2010 18:28

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100203-60 06

Misc Info :

Comment :

Method : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m

Meth Date : 12-Feb-2010 07:41 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 63

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx				CAS #: 877-09-8			
2.294	2.294	0.000	27720539 100.000	96.6	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.939	5.941	-0.002	20581845 100.000	95.7	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
3.190	3.190	0.000	11730474 1000.00	944	80.00- 120.00	100.00 (M)	
3.272	3.274	-0.002	7797700 1000.00	915	46.47- 86.47	66.47	
3.336	3.337	-0.001	4820709 1000.00	918	21.10- 61.10	41.10	
3.563	3.564	-0.001	6116647 1000.00	908	32.14- 72.14	52.14	
3.638	3.640	-0.002	5692008 1000.00	900	28.52- 68.52	48.52	
Average of Peak Amounts =				917			

7 Aroclor-1260				CAS #: 11096-82-5			
4.329	4.330	-0.001	12653249 1000.00	1000	80.00- 120.00	100.00	
4.454	4.455	-0.001	15351314 1000.00	1020	101.32- 141.32	121.32	
4.720	4.721	-0.001	11677224 1000.00	1000	72.29- 112.29	92.29	
4.894	4.895	-0.001	12150048 1000.00	1010	76.02- 116.02	96.02	
5.041	5.042	-0.001	26887303 1000.00	1040	192.49- 232.49	212.49	
Average of Peak Amounts =				1.02e+03			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/021110.b/063b6301.d

Date: 11-FEB-2010 18:28

Client ID: AR16006

Sample Info: 1MAR100203-60 06

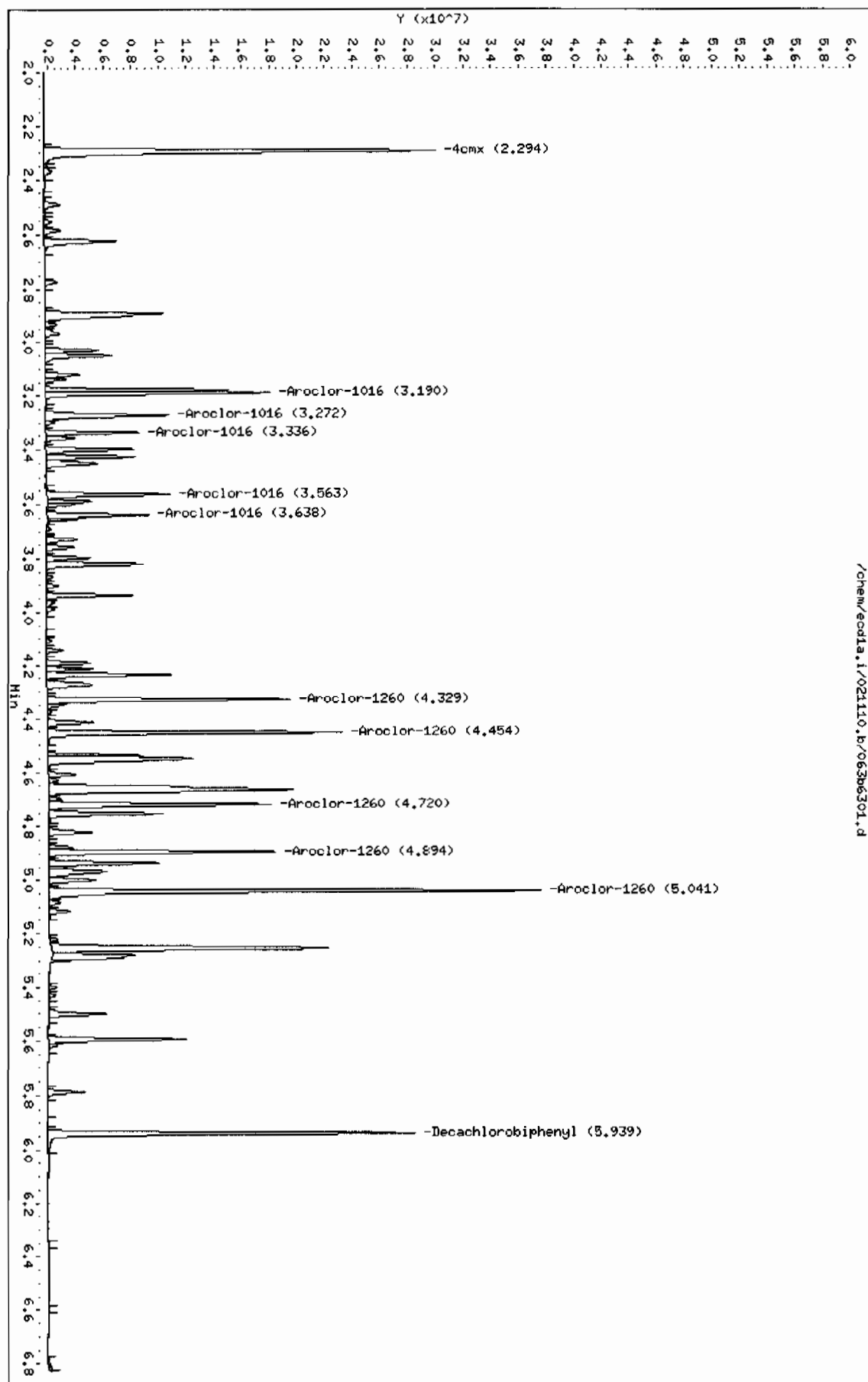
Column phase: CLP2

Instrument: eodla.i

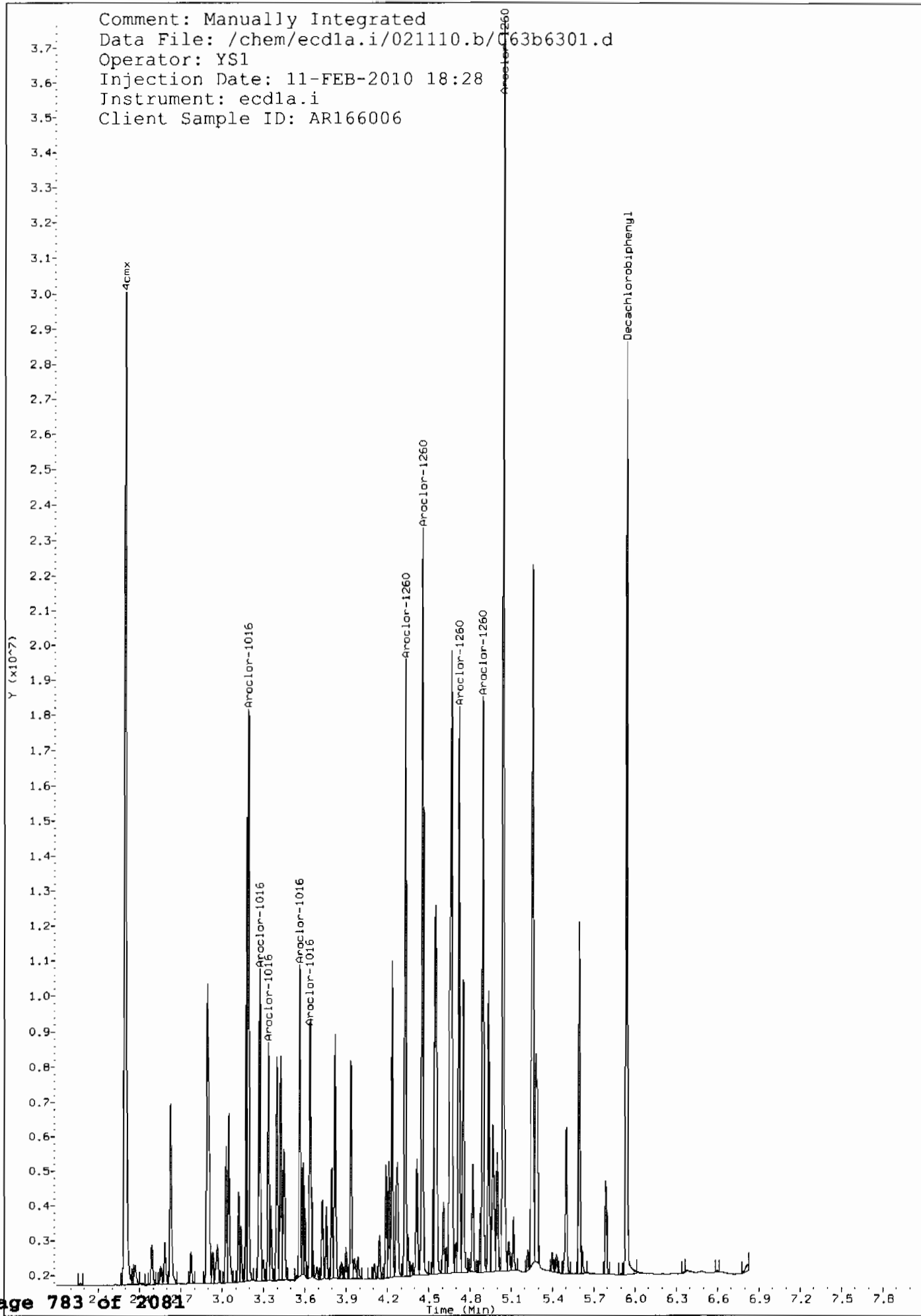
Operator: YSL

Column diameter: 0.25

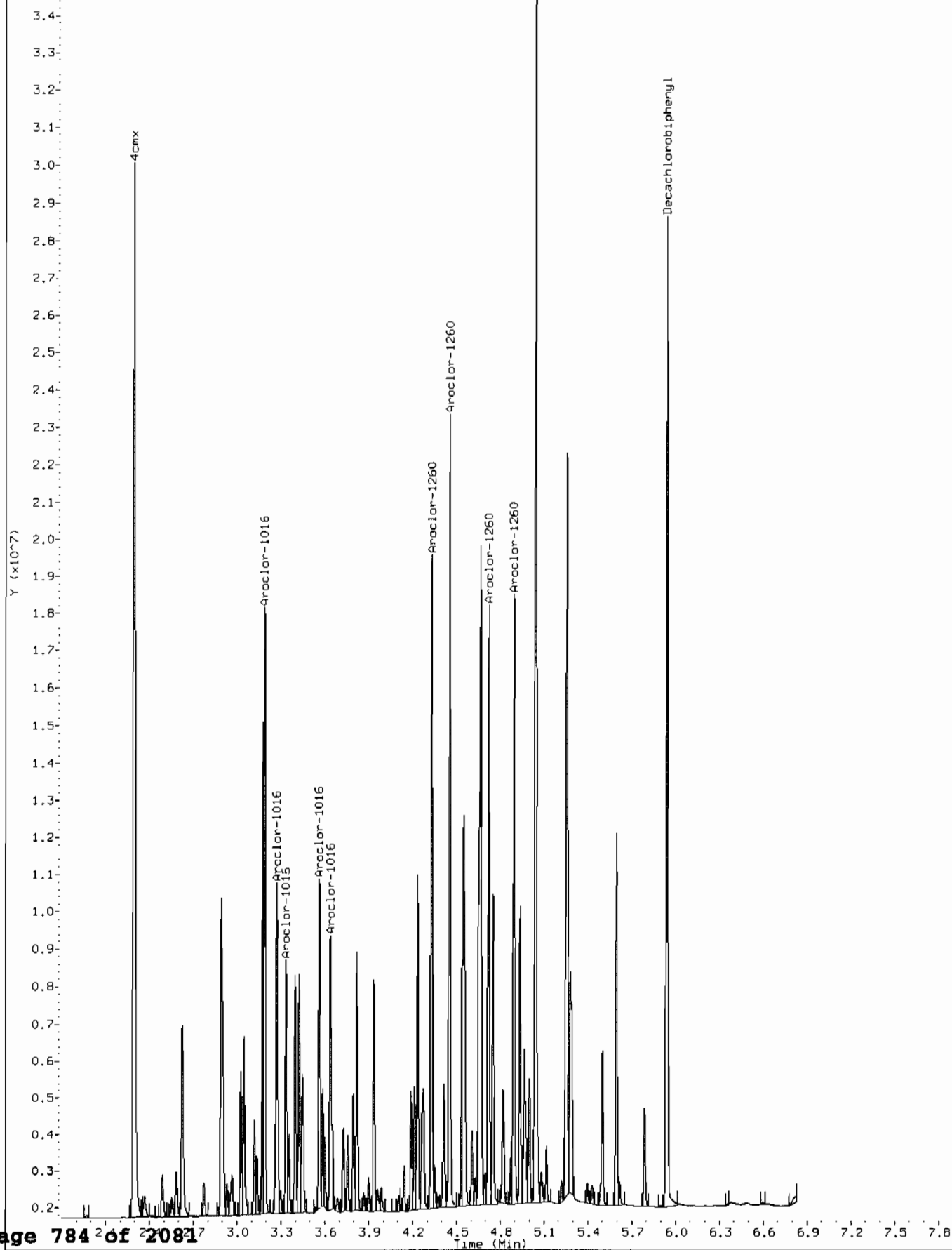
Page 1



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/021110.b/C63b6301.d
Operator: YS1
Injection Date: 11-FEB-2010 18:28
Instrument: ecd1a.i
Client Sample ID: AR166006



Comment: Before manual integration
Data File: /chem/ecdla.i/021110.b/Orig-063b6301.d
Operator: YS1
Injection Date: 11-FEB-2010 18:28
Instrument: ecdla.i
Client Sample ID: AR166006



8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 01/28/10

Instrument ID: ECDJA

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.28			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #	
01 PIBLK01	WAR100105-99	01/28/10	0916	1.97	5.28	
02 ZZZZZ	ZZZZZ	01/28/10	0927			
03 AR125401	WAR091216-54	01/28/10	0937			
04 AR124201	WAR091217-42	01/28/10	0948			
05 AR124801	WAR091217-48	01/28/10	0958			
06 AR123201	WAR100104-32	01/28/10	1009			
07 AR122101	WAR100104-21	01/28/10	1019			
08 AR126201	WAR100104-62	01/28/10	1030			
09 ZZZZZ	ZZZZZ	01/28/10	1040			
10 AR166001	WAR100128-01	01/28/10	1051	1.97	5.28	
11 AR166002	WAR100128-02	01/28/10	1101	1.97	5.28	
12 AR166003	WAR100128-03	01/28/10	1112	1.97	5.28	
13 AR166004	WAR100128-04	01/28/10	1122	1.97	5.28	
14 AR166005	IAR100104-01	01/28/10	1134	1.97	5.28	
15 AR166001	WAR100104-60	01/28/10	1144	1.97	5.28	
16 ZZZZZ	ZZZZZ	01/28/10	1155			
17 DDTANALOGSTD	WAR091219-DD	01/28/10	1205			
18 AR126801	WAR100128-05	01/28/10	1218			
19 AR126802	WAR100128-06	01/28/10	1229			
20 AR126803	WAR100128-07	01/28/10	1239			
21 AR126804	WAR100128-08	01/28/10	1250			
22 AR126805	IAR100104-05	01/28/10	1300			
23 AR126801	WAR100107-68	01/28/10	1311			
24 PIBLK02	WAR100105-99	01/28/10	1321	1.97	5.28	
25 ZZZZZ	ZZZZZ	01/28/10	1332	1.97	5.28	
26 ZZZZZ	ZZZZZ	01/28/10	1342	1.97	5.28	
27 ZZZZZ	ZZZZZ	01/28/10	1353	1.97	5.28	
28 ZZZZZ	ZZZZZ	01/28/10	1405	1.97	5.28	
29 ZZZZZ	ZZZZZ	01/28/10	1418	1.97	5.28	
30 ZZZZZ	ZZZZZ	01/28/10	1430	1.97	5.28	
31 ZZZZZ	ZZZZZ	01/28/10	1443	1.97	5.28	
32 AR166002	WAR100104-60	01/28/10	1456	1.97	5.28	

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #	
01	PIBLK01	WAR100105-99	01/28/10	0916	2.30	5.94
02	ZZZZZ	ZZZZZ	01/28/10	0927		
03	AR125401	WAR091216-54	01/28/10	0937		
04	AR124201	WAR091217-42	01/28/10	0948		
05	AR124801	WAR091217-48	01/28/10	0958		
06	AR123201	WAR100104-32	01/28/10	1009		
07	AR122101	WAR100104-21	01/28/10	1019		
08	AR126201	WAR100104-62	01/28/10	1030		
09	ZZZZZ	ZZZZZ	01/28/10	1040		
10	AR166001	WAR100128-01	01/28/10	1051	2.30	5.94
11	AR166002	WAR100128-02	01/28/10	1101	2.30	5.94
12	AR166003	WAR100128-03	01/28/10	1112	2.30	5.95
13	AR166004	WAR100128-04	01/28/10	1122	2.30	5.95
14	AR166005	IAR100104-01	01/28/10	1134	2.30	5.95
15	AR166001	WAR100104-60	01/28/10	1144	2.30	5.94
16	ZZZZZ	ZZZZZ	01/28/10	1155		
17	DDTANALOGSTD	WAR091219-DD	01/28/10	1205		
18	AR126801	WAR100128-05	01/28/10	1218		
19	AR126802	WAR100128-06	01/28/10	1229		
20	AR126803	WAR100128-07	01/28/10	1239		
21	AR126804	WAR100128-08	01/28/10	1250		
22	AR126805	IAR100104-05	01/28/10	1300		
23	AR126801	WAR100107-68	01/28/10	1311		
24	PIBLK02	WAR100105-99	01/28/10	1321	2.30	5.94
25	ZZZZZ	ZZZZZ	01/28/10	1332	2.30	5.94
26	ZZZZZ	ZZZZZ	01/28/10	1342	2.30	5.94
27	ZZZZZ	ZZZZZ	01/28/10	1353	2.30	5.94
28	ZZZZZ	ZZZZZ	01/28/10	1405	2.30	5.94
29	ZZZZZ	ZZZZZ	01/28/10	1418	2.30	5.94
30	ZZZZZ	ZZZZZ	01/28/10	1430	2.30	5.94
31	ZZZZZ	ZZZZZ	01/28/10	1443	2.30	5.94
32	AR166002	WAR100104-60	01/28/10	1456	2.30	5.94

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/09/10 02/09/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.96		DCB: 5.28			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100105-99	02/09/10 0645	1.96	5.27
02	AR166001	WAR100203-60	02/09/10 0656	1.96	5.28
03	ZZZZZ	ZZZZZ	02/09/10 0706		
04	AR124201	WAR091217-42	02/09/10 0717		
05	AR124801	WAR091217-48	02/09/10 0727		
06	AR123201	WAR100104-32	02/09/10 0738		
07	AR122101	WAR100104-21	02/09/10 0748		
08	ZZZZZ	ZZZZZ	02/09/10 0759		
09	AR126201	WAR100104-62	02/09/10 0809		
10	AR126801	WAR100107-68	02/09/10 0820		
11	AR125401	WAR100209-01	02/09/10 0836		
12	AR125402	WAR100209-02	02/09/10 0847		
13	AR125403	WAR100209-03	02/09/10 0857		
14	AR125404	WAR100209-04	02/09/10 0908		
15	AR125405	IAR091027-01	02/09/10 0918		
16	AR125401	WAR091216-54	02/09/10 0929		
17	DDTANALOGSTD	WAR091219-DD	02/09/10 0939		
18	PIBLK02	WAR100105-99	02/09/10 0950	1.96	5.28
19	ZZZZZ	ZZZZZ	02/09/10 1000	1.96	5.28
20	ZZZZZ	ZZZZZ	02/09/10 1011	1.96	5.28
21	ZZZZZ	ZZZZZ	02/09/10 1021	1.96	5.28
22	ZZZZZ	ZZZZZ	02/09/10 1032	1.96	5.28
23	ZZZZZ	ZZZZZ	02/09/10 1044	1.96	5.27
24	ZZZZZ	ZZZZZ	02/09/10 1057	1.96	5.27
25	ZZZZZ	ZZZZZ	02/09/10 1110	1.96	5.27
26	AR166002	WAR100203-60	02/09/10 1122	1.96	5.27
27	PIBLK03	WAR100105-99	02/09/10 1133	1.96	5.27
28	ZZZZZ	ZZZZZ	02/09/10 1143	1.96	5.27
29	ZZZZZ	ZZZZZ	02/09/10 1156	1.97	5.27
30	ZZZZZ	ZZZZZ	02/09/10 1208	1.96	5.28
31	ZZZZZ	ZZZZZ	02/09/10 1221	1.96	5.27
32	ZZZZZ	ZZZZZ	02/09/10 1233	1.96	5.27

QC LIMITS
S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/09/10 02/09/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.29			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	02/09/10	0645	2.29	5.94
02	AR166001	WAR100203-60	02/09/10	0656	2.29	5.94
03	ZZZZZ	ZZZZZ	02/09/10	0706		
04	AR124201	WAR091217-42	02/09/10	0717		
05	AR124801	WAR091217-48	02/09/10	0727		
06	AR123201	WAR100104-32	02/09/10	0738		
07	AR122101	WAR100104-21	02/09/10	0748		
08	ZZZZZ	ZZZZZ	02/09/10	0759		
09	AR126201	WAR100104-62	02/09/10	0809		
10	AR126801	WAR100107-68	02/09/10	0820		
11	AR125401	WAR100209-01	02/09/10	0836		
12	AR125402	WAR100209-02	02/09/10	0847		
13	AR125403	WAR100209-03	02/09/10	0857		
14	AR125404	WAR100209-04	02/09/10	0908		
15	AR125405	IAR091027-01	02/09/10	0918		
16	AR125401	WAR091216-54	02/09/10	0929		
17	DDTANALOGSTD	WAR091219-DD	02/09/10	0939		
18	PIBLK02	WAR100105-99	02/09/10	0950	2.29	5.94
19	ZZZZZ	ZZZZZ	02/09/10	1000	2.29	5.94
20	ZZZZZ	ZZZZZ	02/09/10	1011	2.29	5.94
21	ZZZZZ	ZZZZZ	02/09/10	1021	2.29	5.94
22	ZZZZZ	ZZZZZ	02/09/10	1032	2.29	5.94
23	ZZZZZ	ZZZZZ	02/09/10	1044	2.29	5.94
24	ZZZZZ	ZZZZZ	02/09/10	1057	2.29	5.94
25	ZZZZZ	ZZZZZ	02/09/10	1110	2.29	5.94
26	AR166002	WAR100203-60	02/09/10	1122	2.29	5.94
27	PIBLK03	WAR100105-99	02/09/10	1133	2.29	5.94
28	ZZZZZ	ZZZZZ	02/09/10	1143	2.29	5.94
29	ZZZZZ	ZZZZZ	02/09/10	1156	2.30	5.94
30	ZZZZZ	ZZZZZ	02/09/10	1208	2.29	5.94
31	ZZZZZ	ZZZZZ	02/09/10	1221	2.29	5.94
32	ZZZZZ	ZZZZZ	02/09/10	1233	2.29	5.94

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/10/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.96			DCB: 5.28			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	02/10/10	2048	1.96	5.28
02	AR166001	WAR100210-01	02/10/10	2058	1.96	5.28
03	AR166002	WAR100210-02	02/10/10	2109	1.96	5.28
04	AR166003	WAR100210-03	02/10/10	2119	1.96	5.28
05	AR166004	WAR100210-04	02/10/10	2130	1.96	5.28
06	AR166005	IAR100104-01	02/10/10	2140	1.96	5.28
07	AR166001	WAR100203-60	02/10/10	2151	1.96	5.28
08	AR124201	WAR100210-05	02/10/10	2201		
09	AR124202	WAR100210-06	02/10/10	2212		
10	AR124203	WAR100210-07	02/10/10	2222		
11	AR124204	WAR100210-08	02/10/10	2233		
12	AR124205	IAR091111-01	02/10/10	2243		
13	AR124201	WAR091217-42	02/10/10	2254		
14	AR124801	WAR100210-09	02/10/10	2304		
15	AR124802	WAR100210-10	02/10/10	2315		
16	AR124803	WAR100210-11	02/10/10	2325		
17	AR124804	WAR100210-12	02/10/10	2336		
18	AR124805	IAR091027-02	02/10/10	2346		
19	AR124801	WAR091217-48	02/10/10	2357		
20	PIBLK02	WAR100105-99	02/11/10	0007	1.96	5.28
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/10/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.29			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	02/10/10	2048	2.29	5.95
02	AR166001	WAR100210-01	02/10/10	2058	2.29	5.94
03	AR166002	WAR100210-02	02/10/10	2109	2.29	5.94
04	AR166003	WAR100210-03	02/10/10	2119	2.29	5.94
05	AR166004	WAR100210-04	02/10/10	2130	2.29	5.94
06	AR166005	IAR100104-01	02/10/10	2140	2.29	5.94
07	AR166001	WAR100203-60	02/10/10	2151	2.29	5.94
08	AR124201	WAR100210-05	02/10/10	2201		
09	AR124202	WAR100210-06	02/10/10	2212		
10	AR124203	WAR100210-07	02/10/10	2222		
11	AR124204	WAR100210-08	02/10/10	2233		
12	AR124205	IAR091111-01	02/10/10	2243		
13	AR124201	WAR091217-42	02/10/10	2254		
14	AR124801	WAR100210-09	02/10/10	2304		
15	AR124802	WAR100210-10	02/10/10	2315		
16	AR124803	WAR100210-11	02/10/10	2325		
17	AR124804	WAR100210-12	02/10/10	2336		
18	AR124805	IAR091027-02	02/10/10	2346		
19	AR124801	WAR091217-48	02/10/10	2357		
20	PIBLK02	WAR100105-99	02/11/10	0007	2.29	5.94
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.96			DCB: 5.27			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	SI RT	#	DCB RT
=====	=====	=====	=====	=====	=====	=====
01 PIBLK01	WAR100105-99	02/11/10	0614	1.96		5.27
02 AR166001	WAR100203-60	02/11/10	0625	1.96		5.27
03 AR125401	WAR091216-54	02/11/10	0635			
04 AR124201	WAR091217-42	02/11/10	0646			
05 ZZZZZ	ZZZZZ	02/11/10	0656			
06 AR123201	WAR100104-32	02/11/10	0719			
07 ZZZZZ	ZZZZZ	02/11/10	0730			
08 AR122101	WAR100104-21	02/11/10	0740			
09 AR126201	WAR100104-62	02/11/10	0751			
10 AR126801	WAR100107-68	02/11/10	0801			
11 AR124801	WAR100211-01	02/11/10	0812			
12 AR124802	WAR100211-02	02/11/10	0822			
13 AR124803	WAR100211-03	02/11/10	0833			
14 AR124804	WAR100211-04	02/11/10	0844			
15 AR124805	IAR100211-01	02/11/10	0854			
16 AR124801	WAR091217-48	02/11/10	0904			
17 DDTANALOGSTD	WAR091219-DD	02/11/10	0915			
18 PIBLK02	WAR100105-99	02/11/10	0926	1.96		5.28
19 ZZZZZ	ZZZZZ	02/11/10	0936	1.96		5.28
20 ZZZZZ	ZZZZZ	02/11/10	0947	1.96		5.28
21 ZZZZZ	ZZZZZ	02/11/10	0957	1.96		5.28
22 ZZZZZ	ZZZZZ	02/11/10	1010	1.96		5.28
23 ZZZZZ	ZZZZZ	02/11/10	1022	1.96		5.27
24 AR166002	WAR100203-60	02/11/10	1035	1.96		5.27
25 PIBLK03	WAR100105-99	02/11/10	1045	1.96		5.28
26 ZZZZZ	ZZZZZ	02/11/10	1056	1.96		5.28
27 ZZZZZ	ZZZZZ	02/11/10	1109	1.96		5.27
28 ZZZZZ	ZZZZZ	02/11/10	1121	1.96		5.27
29 ZZZZZ	ZZZZZ	02/11/10	1134	1.96		5.27
30 ZZZZZ	ZZZZZ	02/11/10	1146	1.96		5.27
31 ZZZZZ	ZZZZZ	02/11/10	1159	1.96		5.27
32 PIBLK04	WAR100105-99	02/11/10	1212	1.96		5.27

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 2

FORM VIII PEST

OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.96		DCB: 5.27			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	02/11/10	1222		
02	ZZZZZ	02/11/10	1235	1.96	5.27
03	ZZZZZ	02/11/10	1247	1.96	5.27
04	ZZZZZ	02/11/10	1300		
05	AR166003	WAR100203-60	02/11/10	1312	5.27
06	PIBLK05	WAR100105-99	02/11/10	1323	5.27
07	ZZZZZ	02/11/10	1333		
08	ZZZZZ	02/11/10	1346		
09	AR166004	WAR100203-60	02/11/10	1359	5.27
10	PIBLK06	WAR100105-99	02/11/10	1409	5.27
11	PBLK01	1202038652	02/11/10	1420	5.27
12	PBLK01LCS	1202038653	02/11/10	1433	5.27
13	ZZZZZ	02/11/10	1445	1.96	5.27
14	ZZZZZ	02/11/10	1458	1.96	5.27
15	ZZZZZ	02/11/10	1510	1.96	5.27
16	ZZZZZ	02/11/10	1523	1.96	5.27
17	ZZZZZ	02/11/10	1536	1.96	5.27
18	ZZZZZ	02/11/10	1548	1.96	5.27
19	ZZZZZ	02/11/10	1601	1.96	5.27
20	ZZZZZ	02/11/10	1614	1.96	5.27
21	AR166005	WAR100203-60	02/11/10	1626	5.27
22	PIBLK07	WAR100105-99	02/11/10	1637	5.27
23	RE15-10-8061	245979013	02/11/10	1647	5.28
24	RE15-10-8063	245979014	02/11/10	1700	5.27
25	RE15-10-8062	245979015	02/11/10	1713	5.27
26	ZZZZZ	02/11/10	1725	1.96	5.27
27	ZZZZZ	02/11/10	1738	1.96	5.27
28	ZZZZZ	02/11/10	1751	1.96	5.27
29	ZZZZZ	02/11/10	1803	1.96	5.27
30	ZZZZZ	02/11/10	1816	1.96	5.27
31	AR166006	WAR100203-60	02/11/10	1828	5.27
32	PIBLK08	WAR100105-99	02/11/10	1839	5.27

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 2 of 2

FORM VIII PEST

OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.29				DCB: 5.94			
EPA	LAB	DATE	TIME	S1	DCB		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT #	RT #		
01	PIBLK01	WAR100105-99	02/11/10	0614	2.29	5.94	
02	AR166001	WAR100203-60	02/11/10	0625	2.29	5.94	
03	AR125401	WAR091216-54	02/11/10	0635			
04	AR124201	WAR091217-42	02/11/10	0646			
05	ZZZZZ	ZZZZZ	02/11/10	0656			
06	AR123201	WAR100104-32	02/11/10	0719			
07	ZZZZZ	ZZZZZ	02/11/10	0730			
08	AR122101	WAR100104-21	02/11/10	0740			
09	AR126201	WAR100104-62	02/11/10	0751			
10	AR126801	WAR100107-68	02/11/10	0801			
11	AR124801	WAR100211-01	02/11/10	0812			
12	AR124802	WAR100211-02	02/11/10	0822			
13	AR124803	WAR100211-03	02/11/10	0833			
14	AR124804	WAR100211-04	02/11/10	0844			
15	AR124805	IAR100211-01	02/11/10	0854			
16	AR124801	WAR091217-48	02/11/10	0904			
17	DDTANALOGSTD	WAR091219-DD	02/11/10	0915			
18	PIBLK02	WAR100105-99	02/11/10	0926	2.29	5.94	
19	ZZZZZ	ZZZZZ	02/11/10	0936	2.29	5.94	
20	ZZZZZ	ZZZZZ	02/11/10	0947	2.29	5.94	
21	ZZZZZ	ZZZZZ	02/11/10	0957	2.29	5.94	
22	ZZZZZ	ZZZZZ	02/11/10	1010	2.29	5.94	
23	ZZZZZ	ZZZZZ	02/11/10	1022	2.29	5.94	
24	AR166002	WAR100203-60	02/11/10	1035	2.29	5.94	
25	PIBLK03	WAR100105-99	02/11/10	1045	2.29	5.94	
26	ZZZZZ	ZZZZZ	02/11/10	1056	2.29	5.94	
27	ZZZZZ	ZZZZZ	02/11/10	1109	2.29	5.94	
28	ZZZZZ	ZZZZZ	02/11/10	1121	2.29	5.94	
29	ZZZZZ	ZZZZZ	02/11/10	1134	2.29	5.94	
30	ZZZZZ	ZZZZZ	02/11/10	1146	2.29	5.94	
31	ZZZZZ	ZZZZZ	02/11/10	1159	2.29	5.94	
32	PIBLK04	WAR100105-99	02/11/10	1212	2.29	5.94	

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 1 of 2

FORM VIII PEST

OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1514

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 02/10/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.29		DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	02/11/10	1222		
02	ZZZZZ	02/11/10	1235	2.29	5.94
03	ZZZZZ	02/11/10	1247	2.29	5.94
04	ZZZZZ	02/11/10	1300		
05	AR166003	WAR100203-60	1312	2.29	5.94
06	PIBLK05	WAR100105-99	1323	2.29	5.94
07	ZZZZZ	02/11/10	1333		
08	ZZZZZ	02/11/10	1346		
09	AR166004	WAR100203-60	1359	2.29	5.94
10	PIBLK06	WAR100105-99	1409	2.29	5.94
11	PBLK01	1202038652	1420	2.29	5.94
12	PBLK01LCS	1202038653	1433	2.29	5.94
13	ZZZZZ	02/11/10	1445	2.29	5.94
14	ZZZZZ	02/11/10	1458	2.29	5.94
15	ZZZZZ	02/11/10	1510	2.29	5.94
16	ZZZZZ	02/11/10	1523	2.29	5.94
17	ZZZZZ	02/11/10	1536	2.29	5.94
18	ZZZZZ	02/11/10	1548	2.29	5.94
19	ZZZZZ	02/11/10	1601	2.29	5.94
20	ZZZZZ	02/11/10	1614	2.29	5.94
21	AR166005	WAR100203-60	1626	2.29	5.94
22	PIBLK07	WAR100105-99	1637	2.29	5.94
23	RE15-10-8061	245979013	1647	2.30	5.94
24	RE15-10-8063	245979014	1700	2.29	5.94
25	RE15-10-8062	245979015	1713	2.29	5.94
26	ZZZZZ	02/11/10	1725	2.29	5.94
27	ZZZZZ	02/11/10	1738	2.29	5.94
28	ZZZZZ	02/11/10	1751	2.29	5.94
29	ZZZZZ	02/11/10	1803	2.29	5.94
30	ZZZZZ	02/11/10	1816	2.29	5.94
31	AR166006	WAR100203-60	1828	2.29	5.94
32	PIBLK08	WAR100105-99	1839	2.29	5.94

QC LIMITS

S1 = 4cmx (+/- 0.03 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

page 2 of 2

FORM VIII PEST

OLM03.0

Identification Summary

Page 1 of 1

SDG Number: 10-1514

Client ID: LCS for batch 951296

Lab Sample ID: 1202038653

Data File: 044f4401.d

Data File: 044b4401.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 11-FEB-10 14:33

Analyzed: 11-FEB-10 14:33

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							3.76
Column 1	1	2.42	2.39 – 2.45	21.8		ug/kg	
	2	2.7	2.68 – 2.74	22.3		ug/kg	
	3	2.79	2.76 – 2.82	21.8		ug/kg	
	4	2.82	2.79 – 2.85	21.7		ug/kg	
	5	3.03	3 – 3.06	21.7		ug/kg	
					21.9		
Column 2	1	3.19	3.16 – 3.22	21.9		ug/kg	
	2	3.27	3.24 – 3.3	21.1		ug/kg	
	3	3.34	3.31 – 3.37	20.6		ug/kg	
	4	3.56	3.53 – 3.59	21		ug/kg	
	5	3.64	3.61 – 3.67	20.6		ug/kg	
					21.1		
Aroclor-1260							3.46
Column 1	1	3.76	3.73 – 3.79	25		ug/kg	
	2	3.92	3.89 – 3.95	25.4		ug/kg	
	3	4.15	4.12 – 4.18	25.5		ug/kg	
	4	4.29	4.27 – 4.33	26.2		ug/kg	
	5	4.47	4.45 – 4.51	26.8		ug/kg	
					25.8		
Column 2	1	4.33	4.3 – 4.36	24.2		ug/kg	
	2	4.45	4.43 – 4.49	24.6		ug/kg	
	3	4.72	4.69 – 4.75	24.6		ug/kg	
	4	4.89	4.86 – 4.92	24.9		ug/kg	
	5	5.04	5.01 – 5.07	26		ug/kg	
					24.9		

Identification Summary

Page 1 of 2

SDG Number: 10-1514

Client ID: RE15-10-8061

Lab Sample ID: 245979013

Data File: 055f5501.d

Data File: 055b5501.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 11-FEB-10 16:47

Analyzed: 11-FEB-10 16:47

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							27.5
Column 1	1	3.26	3.23 - 3.29	29.1		ug/kg	
	2	3.42	3.39 - 3.45	15.5		ug/kg	
	3	3.66	3.62 - 3.68	28.3		ug/kg	
	4	3.82	3.79 - 3.85	6.04		ug/kg	
	5	3.92	3.9 - 3.96	37		ug/kg	
					23.2		
Column 2	1	3.4	3.37 - 3.43	9.18		ug/kg	
	2	3.82	3.79 - 3.85	26.3		ug/kg	
	3	3.94	3.91 - 3.97	17.7		ug/kg	
	4	4.23	4.18 - 4.24	25.3		ug/kg	
	5	4.35	4.32 - 4.38	9.37		ug/kg	
					17.6		
Aroclor-1260							.74
Column 1	1	3.76	3.73 - 3.79	27.2		ug/kg	
	2	3.92	3.89 - 3.95	25.5		ug/kg	
	3	4.15	4.12 - 4.18	41.4		ug/kg	
	4	4.29	4.27 - 4.33	51.9		ug/kg	
	5	4.48	4.45 - 4.51	25.9		ug/kg	
					34.4		
Column 2	1	4.33	4.3 - 4.36	33.6		ug/kg	
	2	4.46	4.43 - 4.49	20.4		ug/kg	
	3	4.72	4.69 - 4.75	46.8		ug/kg	
	4	4.9	4.86 - 4.92	51.1		ug/kg	
	5	5.04	5.01 - 5.07	21.3		ug/kg	
					34.6		

Identification Summary

Page 2 of 2

SDG Number: 10-1514

Client ID: RE15-10-8061

Lab Sample ID: 245979013

Data File: 055f5501.d

Data File: 055b5501.d

Inst: ECD1AJ_1

Inst: ECD1AJ_2

Column: CLP1

Column: CLP2

Analyzed: 11-FEB-10 16:47

Analyzed: 11-FEB-10 16:47

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1268							5.91
Column 1	1	4.66	4.63 - 4.69	84.6		ug/kg	
	2	4.68	4.65 - 4.71	87.7		ug/kg	
	3	4.8	4.77 - 4.83	93.1		ug/kg	
	4	5	4.97 - 5.03	97		ug/kg	
	5	5.17	5.14 - 5.2	124		ug/kg	
					97.3		
Column 2	1	5.26	5.22 - 5.28	73.3		ug/kg	
	2	5.28	5.25 - 5.31	84.4		ug/kg	
	3	5.43	5.4 - 5.46	86.3		ug/kg	
	4	5.6	5.57 - 5.63	92.2		ug/kg	
	5	5.79	5.76 - 5.82	122		ug/kg	
					91.7		

Identification Summary

Page 1 of 1

SDG Number: 10-1514

Client ID: RE15-10-8063

Lab Sample ID: 245979014

Data File: 056f5601.d

Data File: 056b5601.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 11-FEB-10 17:00

Analyzed: 11-FEB-10 17:00

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							41
Column 1	1	3.26	3.23 - 3.29	1.64		ug/kg	
	2	3.42	3.39 - 3.45	3.11		ug/kg	
	3	3.65	3.62 - 3.68	3.21		ug/kg	
	4	3.81	3.79 - 3.85	5.56		ug/kg	
	5	3.92	3.9 - 3.96	7.01		ug/kg	
					4.11		
Column 2	1	3.4	3.37 - 3.43	.623		ug/kg	
	2	3.82	3.79 - 3.85	1.53		ug/kg	
	3	3.94	3.91 - 3.97	3.08		ug/kg	
	4	4.21	4.18 - 4.24	3.26		ug/kg	
	5	4.35	4.32 - 4.38	5.06		ug/kg	
					2.71		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1514

Matrix: SOIL

Lab Sample ID: 1202038652

Client Sample: QC for batch 951296

Client: LANL010

Project: QC

Client ID: MB for batch 951296

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 951299

Inst: ECD1A.I

Dilution: 1

Run Date: 02/11/2010 14:20

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 02/10/2010 21:22

Aliquot: 30 g

Final Volume: 1 mL

Data File: 043f4301-1.d

Column: 1 CLP1

Level: LOW

043b4301-1.d

2 CLP2

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1
11100-14-4	Aroclor-1268	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecdla.i/021110.b/043f4301-1.d
Report Date: 12-Feb-2010 09:11

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/043f4301-1.d
Lab Smp Id: 1202038652 Client Smp ID: PBLK01
Inj Date : 11-FEB-2010 14:20
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202038652|1|
Misc Info : |ECD82P_1S|951299|SVA|QC A|SOIL|MB|1|1|
Comment :
Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
Meth Date : 12-Feb-2010 07:41 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 43 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1514.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
11	4cmx						
1.964	1.962	0.002	57952146	132.562	4.4	80.00- 120.00	100.00
12	Decachlorobiphenyl						
5.275	5.275	0.000	49631389	148.797	5.0	80.00- 120.00	100.00

Data File: /chem/ecdl1.1/021110.b/043f4301-1.d

Date: 11-FEB-2010 14:20

Client ID: PLK01

Sample Info: 11202038652/11

Volume Injected (uL): 1.0

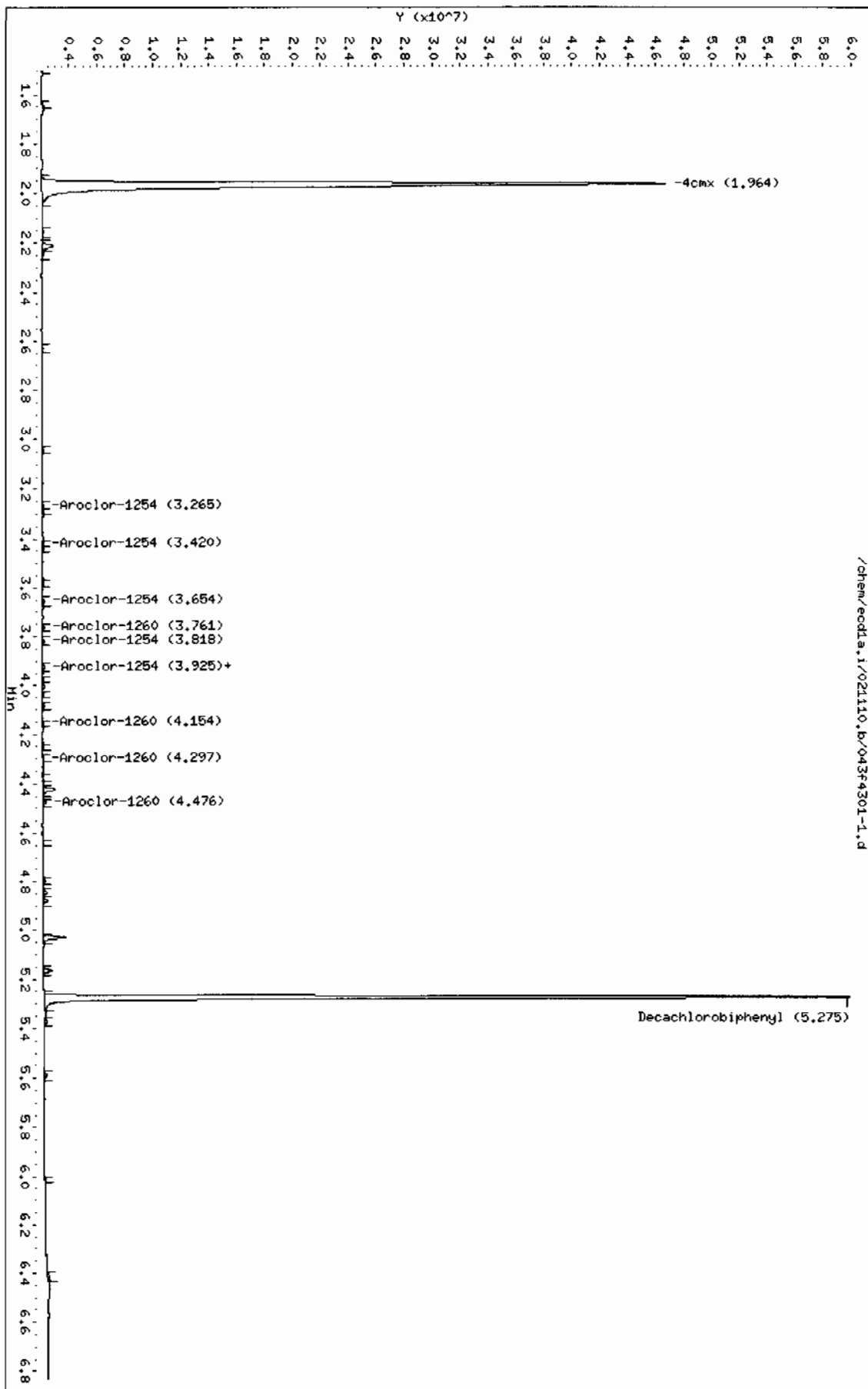
Column phase: CLP1

Instrument: ecdl1.1

Operator: YSL

Column diameter: 0.25

/chem/ecdl1.1/021110.b/043f4301-1.d



Data File: /chem/ecdla.i/021110.b/043b4301-1.d
Report Date: 12-Feb-2010 09:11

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/021110.b/043b4301-1.d
Lab Smp Id: 1202038652 Client Smp ID: PBLK01
Inj Date : 11-FEB-2010 14:20
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202038652|1|
Misc Info : |ECD82P_1S|951299|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m
Meth Date : 12-Feb-2010 07:41 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 43 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1514.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	

S 11 4cmx CAS #: 877-09-8							
2.295	2.294	0.001	37224733	129.743	4.3 80.00- 120.00	100.00	

S 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.941	5.941	0.000	31033734	144.280	4.8 80.00- 120.00	100.00	

Data File: /chem/eod1a.i/021110.b/04304301-1.d

Date: 11-FEB-2010 14:20

Client ID: PBLK01

Sample Info: 1120203865211

Volume Injected (ul): 1.0

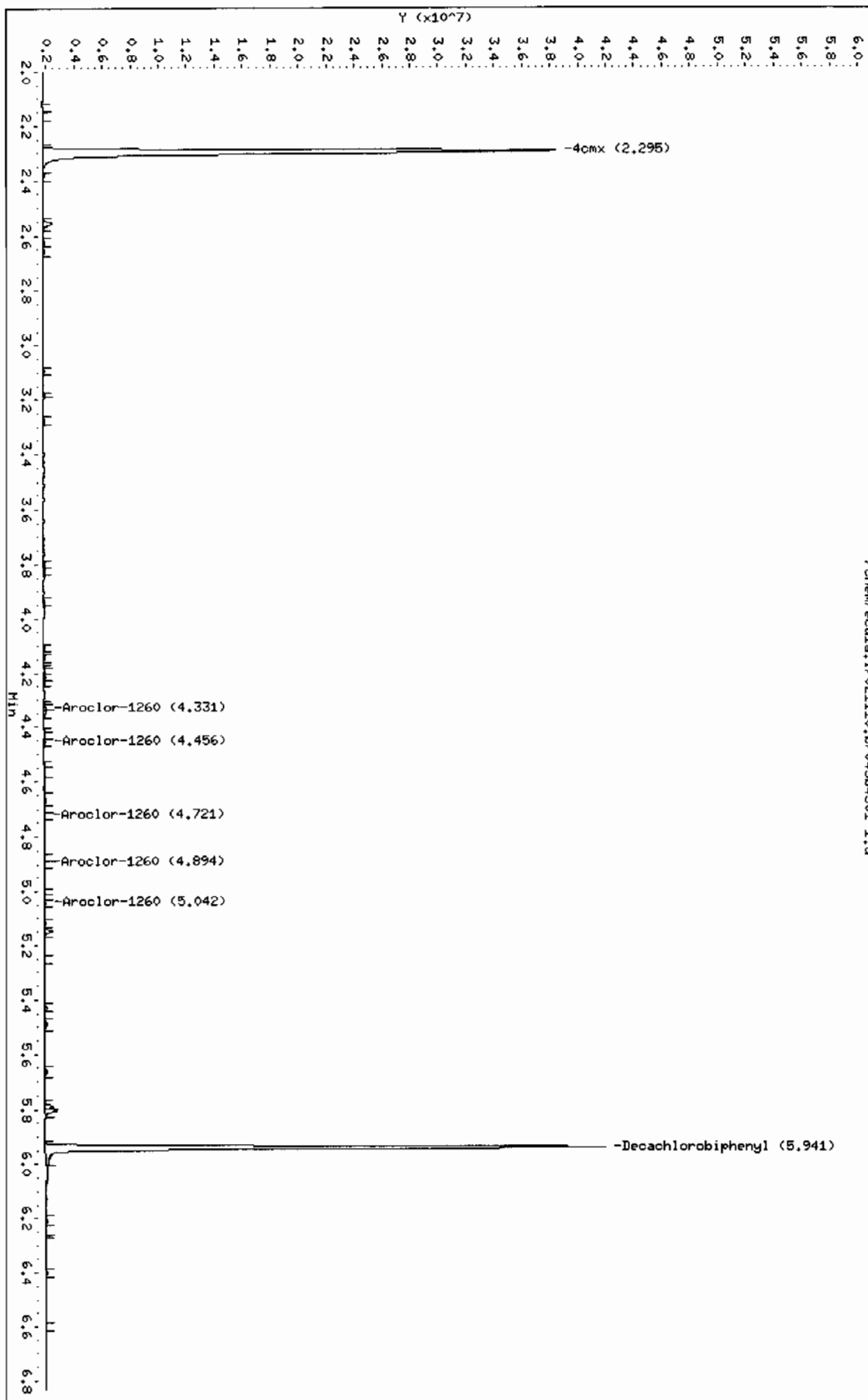
Column phase: CLP2

Instrument: eod1a.i

Operator: YSA

Column diameter: 0.25

/chem/eod1a.i/021110.b/04304301-1.d



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1514

Matrix: SOIL

Lab Sample ID: 1202038653

Client Sample: QC for batch 951296

Client: LANL010

Project: QC

Client ID: LCS for batch 951296

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 951299

Inst: ECD1A.I

Dilution: 1

Run Date: 02/11/2010 14:33

Analyst: YSI

Inj. Vol: 1 uL

Prep Date: 02/10/2010 21:22

Aliquot: 30 g

Final Volume: 1 mL

Data File: 044f4401-1.d

Column: 1 CLP1

Level: LOW

044b4401-1.d

2 CLP2

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		21.9	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		25.8	ug/kg	1.11	3.33	1
11100-14-4	Aroclor-1268	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecdla.i/021110.b/044f4401-1.d
 Report Date: 12-Feb-2010 09:11

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/021110.b/044f4401-1.d
 Lab Smp Id: 1202038653 Client Smp ID: PBLK01LCS
 Inj Date : 11-FEB-2010 14:33
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202038653|1|
 Misc Info : |ECD82P_1S|951299|SVA|QC A|SOIL|LCS|1|1|
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 12-Feb-2010 07:41 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 44 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1514.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable .. Local Compound Variable

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====	=====		
\$ 11 4cmx					CAS #: 877-09-8				
1.962	1.962	0.000	55925125	127.925	4.3	80.00- 120.00	100.00		

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3				
5.272	5.275	-0.003	46820369	140.370	4.7	80.00- 120.00	100.00		

1 Aroclor-1016					CAS #: 12674-11-2				
2.417	2.418	-0.001	10542930	654.491	21.8	80.00- 120.00	100.00		
2.705	2.705	0.000	13213069	667.913	22.3	112.33- 152.33	125.33		
2.786	2.786	0.000	8510200	653.354	21.8	64.59- 104.59	80.72		
2.823	2.824	-0.001	5077807	652.549	21.8	30.95- 70.95	48.16		

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	--	---	=====	--	=====	=====	=====	
1 Aroclor-1016 (continued)								
3.033	3.035	-0.002	6523083	650.847	21.7	44.74-	84.74	61.87
Average of Peak Concentrations =					21.9			

7 Aroclor 1260					CAS #: 11096-82-5			
3.759	3.760	-0.001	14247109	748.656	25.0	80.00-	120.00	100.00
3.921	3.924	-0.003	21579907	761.104	25.4	129.97-	169.97	151.47
4.151	4.154	-0.003	13026430	764.255	25.5	69.84-	109.84	91.43
4.294	4.296	-0.002	14072005	786.490	26.2	74.16-	114.16	98.77
4.474	4.475	-0.001	31212865	803.409	26.8	190.26-	230.26	219.08
Average of Peak Concentrations =					25.8			

Data File: /chem/ecdl.a.i/021110.b/044f4401-1.d

Date: 11-FEB-2010 14:33

Client ID: PLK01LOS

Sample Info: 11202036653111

Volume Injected (uL): 1.0

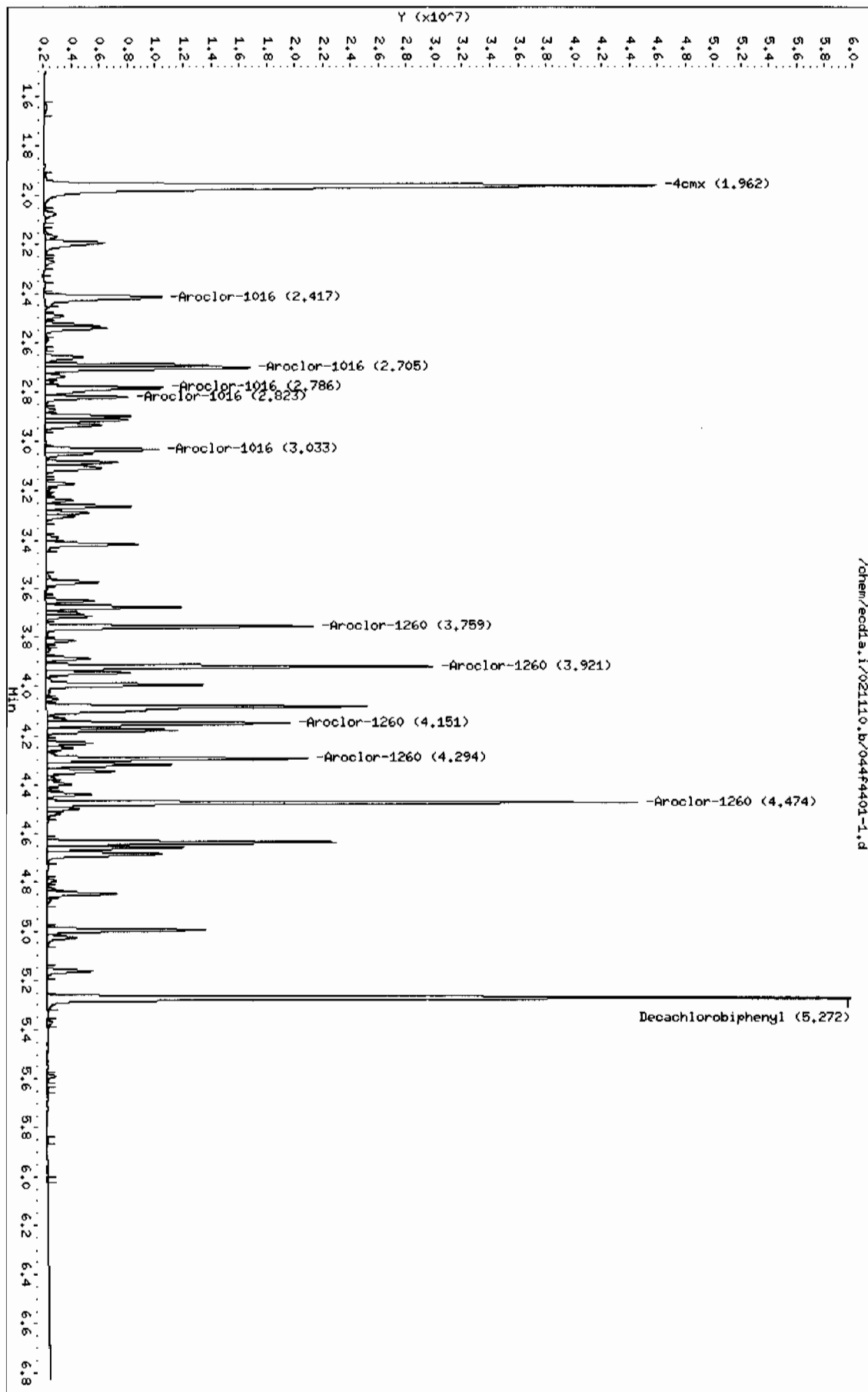
Column phase: CLP1

Instrument: ecdl.a.i

Operator: YSI

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 1NJ VOL
 Data file : /chem/ecdla.i/021110.b/044b4401-1.d
 Lab Smp Id: 1202038653 Client Smp ID: PBIK01LCS
 Inj Date : 11-FEB-2010 14:33
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202038653|1|
 Misc Info : |ECD82P_1S|951299|SVA|QC A|SOIL|LCS|||
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m
 Meth Date : 12-Feb-2010 07:41 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 44 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 245514.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.294	2.294	0.000	35816508	124.835	4.2 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.939	5.941	-0.002	29502665	137.161	4.6 80.00- 120.00	100.00

1 Aroclor-1016 CAS #: 12674-11-2						
3.189	3.190	-0.001	8161378	656.575	21.9 80.00- 120.00	100.00 (M)
3.272	3.274	-0.002	5402647	634.036	21.1 46.60- 86.60	66.20
3.336	3.337	-0.001	3246461	617.933	20.6 21.35- 61.35	39.78
3.562	3.564	-0.002	4244219	630.451	21.0 32.46- 72.46	52.00

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
=====									
1 Aroclor-1016 (continued)									
3.638	3.640	-0.002	3914834	619.027	20.6	29.42-	69.42	47.97	
Average of Peak Concentrations					21.0				

7 Aroclor-1260					CAS #: 11096-82-5				
4.329	4.330	-0.001	9143268	726.091	24.2	80.00-	120.00	100.00	
4.453	4.455	-0.002	11139712	739.342	24.6	102.02-	142.02	121.84	
4.720	4.721	-0.001	8589647	739.342	24.6	72.44-	112.44	93.95	
4.893	4.895	-0.002	8977372	746.246	24.9	75.48-	115.48	98.19	
5.041	5.042	-0.001	20181460	781.505	26.0	192.44-	232.44	220.72	
Average of Peak Concentrations					24.9				

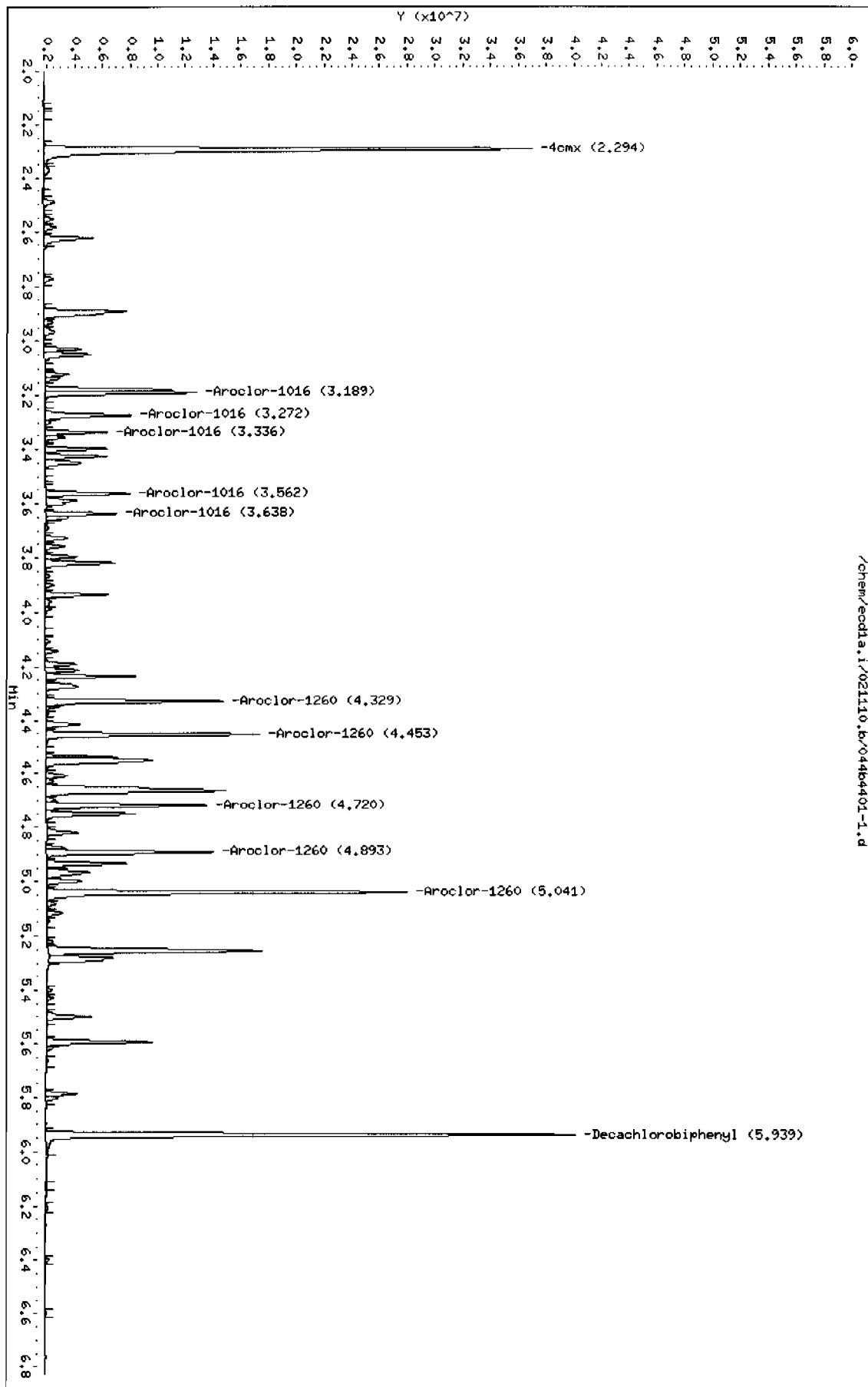
QC Flag Legend

M - Compound response manually integrated.

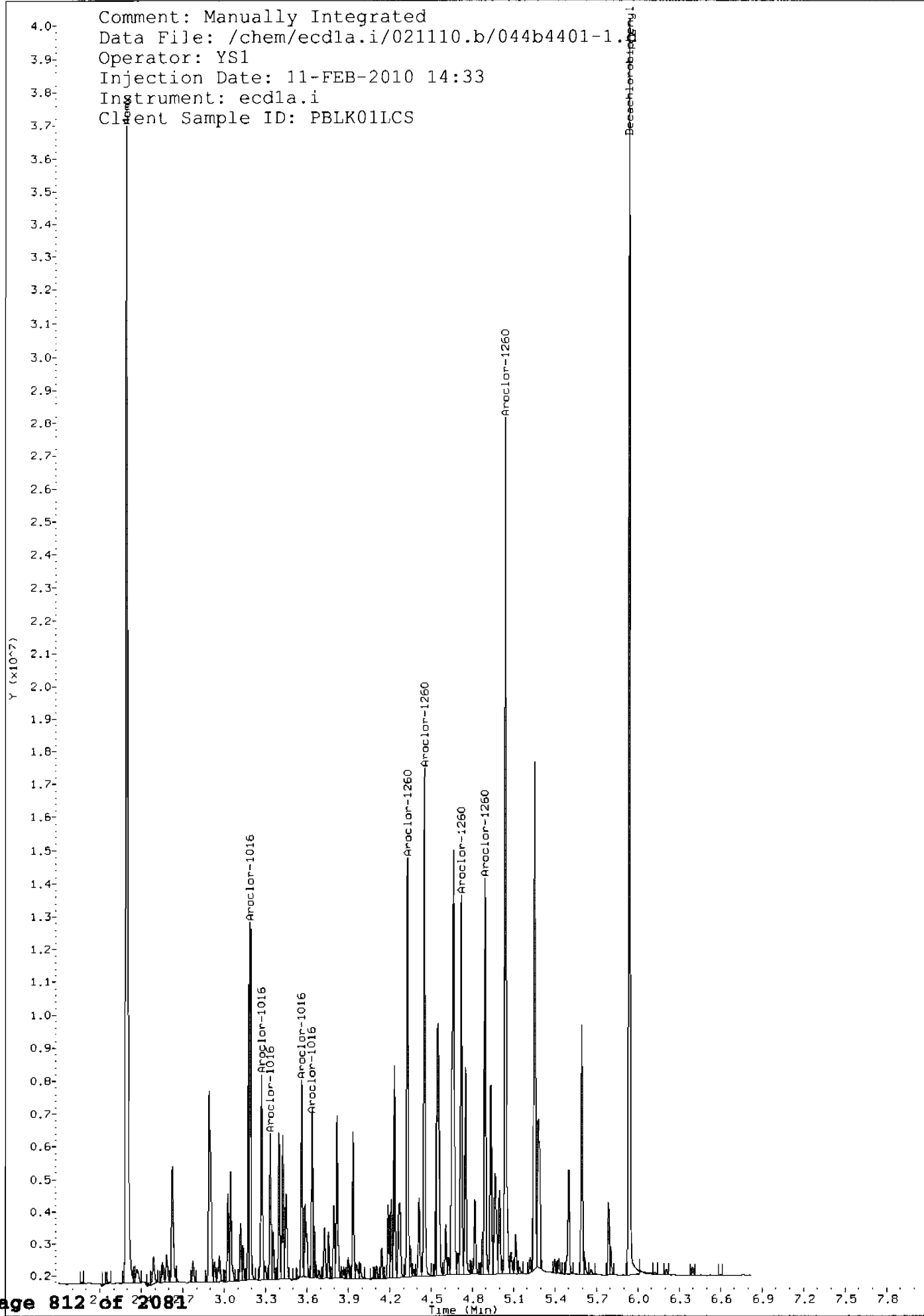
Data File: /chem/eod1a.i/021110.b/044b4401-1.d
Date: 11-FEB-2010 14:33
Client ID: PBLK01LCS
Sample Info: 1120203865311
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: eod1a.i
Operator: YS1
Column diameter: 0.25

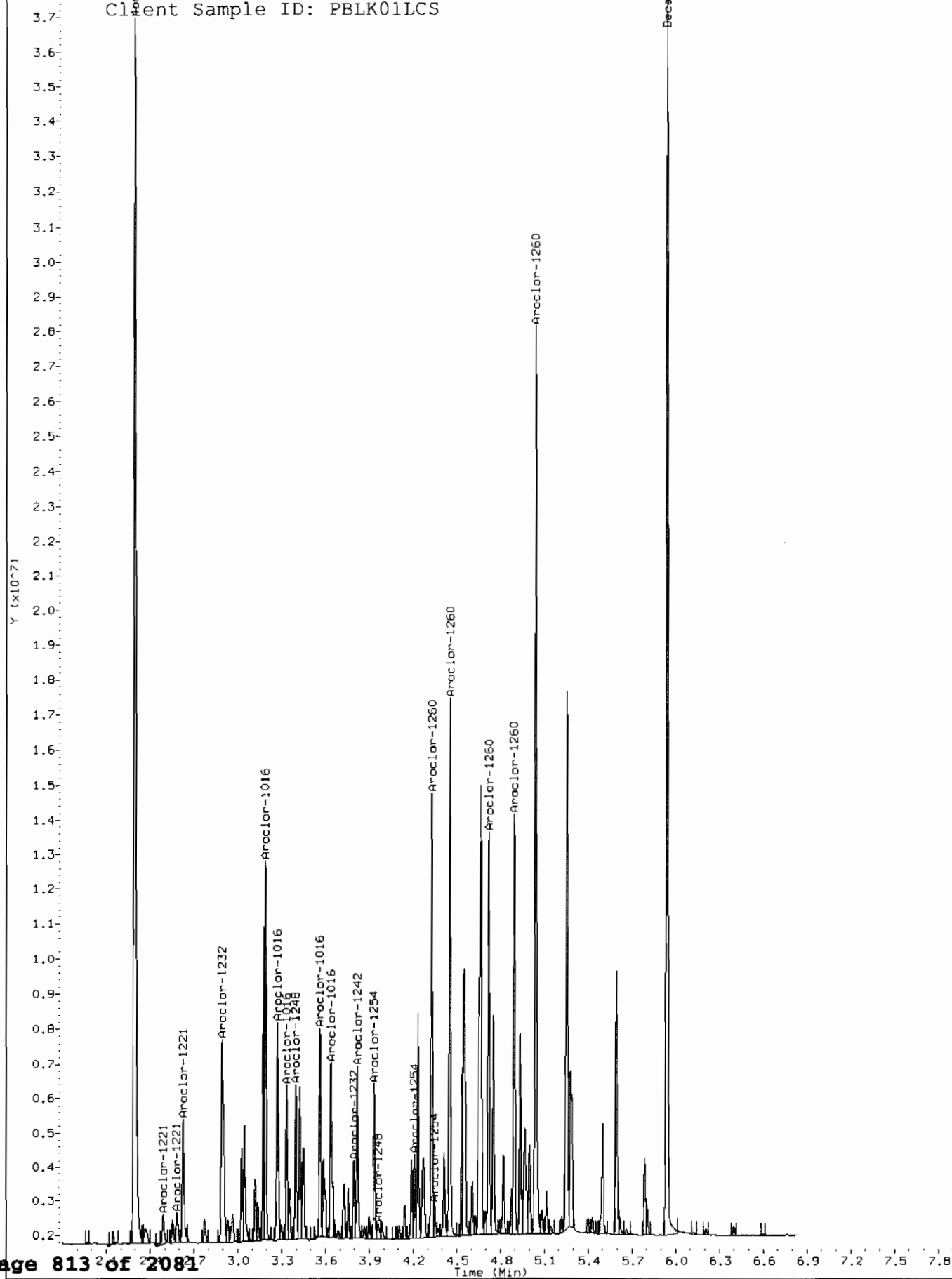
/chem/eod1a.i/021110.b/044b4401-1.d



Comment: Manually Integrated
Data File: /chem/ecdl.a.i/021110.b/044b4401-1.
Operator: YS1
Injection Date: 11-FEB-2010 14:33
Instrument: ecdla.i
Client Sample ID: PBLK01LCS



Comment: Before manual integration
Data File: /chem/ecdl1a.i/021110.b/orig-044b4401-1.d
Operator: YS1
Injection Date: 11-FEB-2010 14:33
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/29/2010 METHOD: ECD1-F-8082-121409.m OPERATOR: YS1 REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699
ALUMINA LOT 1240553-A
COPPER LOT 236547-ACalibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/012810a.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR00105-99 01	YS1	28-JAN-2010 09:16	012810a	1.00	1.00	ICLEAN	
002f0201.d	WAR00104-60 01	YS1	28-JAN-2010 09:27	012810a	1.00	1.00	IDUSE RE-I-CAL	
003f0301.d	WAR091216-54	YS1	28-JAN-2010 09:37	012810a	1.00	1.00	PASSED ON BOTH COLUMNS	
004f0401.d	WAR091217-42	YS1	28-JAN-2010 09:48	012810a	1.00	1.00	PASSED ON BOTH COLUMNS	
005f0501.d	WAR091217-48	YS1	28-JAN-2010 09:58	012810a	1.00	1.00	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100104-32	YS1	28-JAN-2010 10:09	012810a	1.00	1.00	PATTERN ONLY	
007f0701.d	WAR100104-21	YS1	28-JAN-2010 10:19	012810a	1.00	1.00	PATTERN ONLY	
008f0801.d	WAR100104-62	YS1	28-JAN-2010 10:30	012810a	1.00	1.00	PATTERN ONLY	
009f0901.d	WAR100107-68	YS1	28-JAN-2010 10:40	012810a	1.00	1.00	IDUSE RE-I-CAL	
010f1001.d	WAR100128-01 60	YS1	28-JAN-2010 10:51	012810a	1.00	1.00	AR1660 I-CAL LEVEL 1	
011f1101.d	WAR100128-02 60	YS1	28-JAN-2010 11:01	012810a	1.00	1.00	AR1660 I-CAL LEVEL 2	
012f1201.d	WAR100128-03 60	YS1	28-JAN-2010 11:12	012810a	1.00	1.00	AR1660 I-CAL LEVEL 3	
013f1301.d	WAR00128-04 60	YS1	28-JAN-2010 11:22	012810a	1.00	1.00	AR1660 I-CAL LEVEL 4	
014f1401.d	WAR100104-01-01	YS1	28-JAN-2010 11:34	012810a	1.00	1.00	AR1660 I-CAL LEVEL 5	
015f1501.d	WAR100104-60 01	YS1	28-JAN-2010 11:44	012810a	1.00	1.00	PASSED ON BOTH COLUMNS	

Instrument Batch: /chem/ecd1a.i/012810a.b

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Data File | GEL Lab Sample ID | Analyst | Injection Date/Time | Batch | SDG | Dilution | Client | Comments

016f1601.d	WAR100122-68	YS1	128-JAN-2010 11:55	|	012810a	|	1.0	|	DUSE RE-ICAL
017f1701.d	WAR091219-DCT	YS1	128-JAN-2010 12:05	|	012810a	|	1.0	|	DDT ANALOG STANDARD
018f1801.d	WAR100128-05 68	YS1	128-JAN-2010 12:18	|	012810a	|	1.0	|	ARI268 I-CAL LEVEL 1
019f1901.d	WAR100128-06 68	YS1	128-JAN-2010 12:29	|	012810a	|	1.0	|	ARI268 I-CAL LEVEL 2
020f2001.d	WAR100128-07 68	YS1	128-JAN-2010 12:39	|	012810a	|	1.0	|	ARI268 I-CAL LEVEL 3
021f2101.d	WAR100128-08 68	YS1	128-JAN-2010 12:50	|	012810a	|	1.0	|	ARI268 I-CAL LEVEL 4
022f2201.d	WAR100104-05	YS1	128-JAN-2010 13:00	|	012810a	|	1.0	|	ARI268 I-CAL LEVEL 5
023f2301.d	WAR100107-68	YS1	128-JAN-2010 13:11	|	012810a	|	1.0	|	PASSED ON BOTH COLUMNS
024f2401.d	WAR100105-99 02	YS1	128-JAN-2010 13:21	|	012810a	|	1.0	|	CLEAN
025f2501.d	1202026135	YS1	128-JAN-2010 13:32	|	945965 1245586	|	1.0	|	QC A UPLDAD BOTH COLUMNS, USE HIGHER
026f2601.d	1202026136	YS1	128-JAN-2010 13:42	|	945965 1245586	|	1.0	|	QC A UPLDAD BOTH COLUMNS, USE HIGHER
027f2701.d	1245586001	YS1	128-JAN-2010 13:53	|	945965 1245586	|	250.0	|	NNES UPLDAD BOTH COLUMNS, USE HIGHER
028f2801.d	11202026137	YS1	128-JAN-2010 14:05	|	945965 1245586	|	250.0	|	QC A UPLDAD BOTH COLUMNS, USE HIGHER
029f2901.d	1202026138	YS1	128-JAN-2010 14:18	|	945965 1245586	|	250.0	|	QC A UPLDAD BOTH COLUMNS, USE HIGHER
030f3001.d	1245586002	YS1	128-JAN-2010 14:30	|	945965 1245586	|	50.0	|	NNES UPLDAD BOTH COLUMNS, USE HIGHER
031f3101.d	1245586003	YS1	128-JAN-2010 14:43	|	945965 1245586	|	1.0	|	NNES UPLDAD BOTH COLUMNS, USE HIGHER
032f3201.d	WAR100104-60 02	YS1	128-JAN-2010 14:56	|	012810a	|	1.0	|	PASSED ON BOTH COLUMNS
033f3301.d	WAR091216-54 02	YS1	128-JAN-2010 15:06	|	012810a	|	1.0	|	PASSED ON BOTH COLUMNS
034f3401.d	WAR091217-42 02	YS1	128-JAN-2010 15:16	|	012810a	|	1.0	|	PASSED ON BOTH COLUMNS
035f3501.d	WAR091217-48 02	YS1	128-JAN-2010 15:27		012810a		1.0		PASSED ON BOTH COLUMNS

Instrument Batch: /chem/ecd1a.i/012810a.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR100104-32 02	YS1	128-JAN-2010 15:38		012810a	1.0		PATTERN ONLY
037f3701.d	WAR100104-21 02	YS1	128-JAN-2010 15:48		012810a	1.0		PATTERN ONLY
038f3801.d	WAR100104-62 02	YS1	128-JAN-2010 15:58		012810a	1.0		PATTERN ONLY
039f3901.d	WAR100122-68 02	YS1	128-JAN-2010 16:09		012810a	1.0		PASSED ON BOTH COLUMNS

040f4001.d	WAR100105-99 03	YS1	128-JAN-2010 16:19		1012810a	1.0	CLEAN
041f4101.d	1245096008	YS1	128-JAN-2010 16:30	1944883	110-1299	20.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	1245096009	YS1	128-JAN-2010 16:43	1944883	110-1299	10.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	1245096010	YS1	128-JAN-2010 16:55	1944883	10-1299	20.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	1245096011	YS1	128-JAN-2010 17:08	1944883	110-1299	20.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	1245099015	YS1	128-JAN-2010 17:20	1944883	110-1301	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	12451114003	YS1	128-JAN-2010 17:33	1944883	110-1324	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	11202023863	YS1	128-JAN-2010 17:45	1944883	110-1324	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	11202023864	YS1	128-JAN-2010 17:58	1944883	10-1324	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	12451114004	YS1	128-JAN-2010 18:11	1944883	10-1324	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	12451114005	YS1	128-JAN-2010 18:23	1944883	110-1324	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	WAR100104-60 03	YS1	128-JAN-2010 18:38		1012810a	1.0	PASSED ON BOTH COLUMNS
052f5201.d	WAR100105-99 04	YS1	128-JAN-2010 18:50		1012810a	1.0	CLEAN
053f5301.d	12451114006	YS1	128-JAN-2010 19:03	1944883	110-1324	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	WAR100104-60 04	YS1	128-JAN-2010 19:17		1012810a	1.0	PASSED ON BOTH COLUMNS
055f5501.d	WAR100105-99 05	YS1	128-JAN-2010 19:30		1012810a	1.0	CLEAN

Instrument Batch: /chem/ecd1a.i/012810a.b

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Data File	GEI Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	11202026131	YS1	128-JAN-2010 19:42	1945963	10-1372	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
057f5701.d	11202026132	YS1	128-JAN-2010 19:55	1945963	10-1372	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
058f5801.d	1245376001	YS1	128-JAN-2010 20:08	1945963	10-1372	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
059f5901.d	245376002	YS1	128-JAN-2010 20:20	1945963	10-1372	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
060f6001.d	245376003	YS1	128-JAN-2010 20:33	1945963	10-1372	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
061f6101.d	1245376004	YS1	128-JAN-2010 20:45	1945963	10-1372	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
062f6201.d	245376005	YS1	128-JAN-2010 20:58	1945963	10-1372	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
063f6301.d	1245376006	YS1	128-JAN-2010 21:10	1945963	10-1372	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	
064f6401.d	1245376007	YS1	128-JAN-2010 21:23	1945963	10-1372	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER	

065f6501.d	1245381002	YS1	128-JAN-2010 21:36	1945963	110-1380	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	1245381004-60 05	YS1	128-JAN-2010 21:48		012810a	1.0		PASSED ON BOTH COLUMNS
067f6701.d	1245381005-99 06	YS1	128-JAN-2010 22:01		012810a	1.0		CLEAN
068f6801.d	1245384001	YS1	128-JAN-2010 22:13	1945963	110-1382	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	11202026133	YS1	128-JAN-2010 22:26	1945963	110-1382	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	11202026134	YS1	128-JAN-2010 22:39	1945963	110-1382	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	1245384002	YS1	128-JAN-2010 22:51	1945963	110-1382	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	1245384003	YS1	128-JAN-2010 23:04	1945963	110-1382	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	1245384004	YS1	128-JAN-2010 23:16	1945963	110-1382	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
074f7401.d	1245384005	YS1	128-JAN-2010 23:29	1945963	110-1382	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
075f7501.d	1245384006	YS1	128-JAN-2010 23:41	1945963	110-1382	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl1a.i/012810a.b Page: 4

076f7601.d	1245384007	YS1	128-JAN-2010 23:54	1945963	110-1382	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	1245384008	YS1	129-JAN-2010 00:07	1945963	110-1382	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	1245384009	YS1	129-JAN-2010 00:19		012810a	1.0		PASSED ON BOTH COLUMNS
079f7901.d	1245384010	YS1	129-JAN-2010 00:32		012810a	1.0		CLEAN
080f8001.d	1245384012	YS1	129-JAN-2010 00:45	1945963	110-1382	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	1245384014	YS1	129-JAN-2010 00:57		012810a	1.0		PASSED ON BOTH COLUMNS
082f8201.d	1245384015	YS1	129-JAN-2010 01:10		012810a	1.0		CLEAN
083f8301.d	11202026309	YS1	129-JAN-2010 01:22	1946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	11202026310	YS1	129-JAN-2010 01:35	1946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	11202026313	YS1	129-JAN-2010 01:48	1946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
086f8601.d	1245390001	YS1	129-JAN-2010 02:00	1946042	EUI-7483	1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
087f8701.d	11202026311	YS1	129-JAN-2010 02:13	1946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	11202026312	YS1	129-JAN-2010 02:25	1946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

1089f8901.d	WAR100104-60 08	YS1	29-JAN-2010 02:38	|	012810a	|	1.01	|	PASSED ON BOTH COLUMNS	|
1090f9001.d	WAR100105-99 09	YS1	29-JAN-2010 02:51		012810a		1.01		CLEAN	

Instrument Batch: /chem/ecdl1a.i/012810a.b

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GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 02/10/2010 METHOD: ECD1-F-8082-121409.m OPERATOR: YS1 REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA699
ALUMINA LOT 1240553-A
COPPER LOT 236547-ACalibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecdl1a.i/020910.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100105-99 01	YS1	109-FEB-2010 06:45	1	1020910	1.01	ICLEAN	
002f0201.d	WAR100203-60 01	YS1	109-FEB-2010 06:56	1	1020910	1.01	PASSED ON BOTH COLUMNS	
003f0301.d	WAR091216-54	YS1	109-FEB-2010 07:06	1	1020910	1.01	ICUSE RE I-CAL	
004f0401.d	WAR09-217-42	YS1	109-FEB-2010 07:17	1	1020910	1.01	PASSED ON BOTH COLUMNS	
005f0501.d	WAR091217-48	YS1	109-FEB-2010 07:27	1	1020910	1.01	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100104-32	YS1	109-FEB-2010 07:38	1	1020910	1.01	PASSED ON BOTH COLUMNS	
007f0701.d	WAR100104-21	YS1	109-FEB-2010 07:48	1	1020910	1.01	PATTERN ONLY	
008f0801.d	WAR09-216-54	YS1	109-FEB-2010 07:59	1	1020910	1.01	ICUSE RE I-CAL	
009f0901.d	WAR100104-62	YS1	109-FEB-2010 08:09	1	1020910	1.01	PATTERN ONLY	
010f1001.d	WAR100107-68	YS1	109-FEB-2010 08:20	1	1020910	1.01	PATTERN ONLY	
011f1101.d	WAR100209-01 54	YS1	109-FEB-2010 08:36	1	1020910	1.01	AR1254 I-CAL LEVEL 1	
012f1201.d	WAR100209-02 54	YS1	109-FEB-2010 08:47	1	1020910	1.01	AR1254 I-CAL LEVEL 2	
013f1301.d	WAR100209-03 54	YS1	109-FEB-2010 08:57	1	1020910	1.01	AR1254 I-CAL LEVEL 3	
014f1401.d	WAR100209-04 54	YS1	109-FEB-2010 09:08	1	1020910	1.01	AR1254 I-CAL LEVEL 4	
015f1501.d	WAR091027-01 54	YS1	109-FEB-2010 09:18	1	1020910	1.01	AR1254 I-CAL LEVEL 5	

Instrument Batch: /chem/ecdl1a.i/020910.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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041f4101.d	WAR100203-60 04	YS1	09-FEB-2010 14:27		020910	1.01	PASSED ON BOTH COLUMNS
042f4201.d	WAR100203-60 05	YS1	09-FEB-2010 14:40		020910	1.01	PASSED ON BOTH COLUMNS
043f4301.d	WAR100105-99 05	YS1	09-FEB-2010 14:52		020910	1.01	CLEAN
044f4401.d	1202034863	YS1	09-FEB-2010 15:05	949770	NY-330_WW	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	1202034864	YS1	09-FEB-2010 15:17	949770	NY-330_WW	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1202034872	YS1	09-FEB-2010 15:30	949770	NY-330_WW	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	1245427030	YS1	09-FEB-2010 15:43	949770	NY-330_WW	1.0 PTQA	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	1202034871	YS1	09-FEB-2010 15:55	949770	NY-330_WW	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	WAR100203-60 06	YS1	09-FEB-2010 16:08		020910	1.01	PASSED ON BOTH COLUMNS
050f5001.d	WAR100105-99 06	YS1	09-FEB-2010 16:20		020910	1.01	CLEAN
051f5101.d	1202035447	YS1	09-FEB-2010 16:33	949976	SP4012	1.0 QC A	UPLOAD BOTH COLUMNS, USE FRONT
052f5201.d	1202035448	YS1	09-FEB-2010 16:46	949976	SP4012	1.0 QC A	UPLOAD BOTH COLUMNS, USE FRONT
053f5301.d	1245480001	YS1	09-FEB-2010 16:58	949976	SP4012	10.01ORNL	IRR AFTER MORE SCLFUR CLEAN
054f5401.d	1245480002	YS1	09-FEB-2010 17:11	949976	SP4012	10.0 ORNL	UPLOAD BOTH COLUMNS, USE FRONT
055f5501.d	1245480003	YS1	09-FEB-2010 17:24	949976	SP4012	10.0 ORNL	UPLOAD BOTH COLUMNS, USE FRONT

Instrument Batch: /chem/ecdl1a.i/020910.b

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Data File	GL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1245826001	YS1	09-FEB-2010 17:36	949976	1245826	5.0 BWXT		UPLOAD BOTH COLUMNS, USE FRONT
057f5701.d	1246099002	YS1	09-FEB-2010 17:49	949976	SP4006	1.01ORNL		UPLOAD BOTH COLUMNS, USE FRONT
058f5801.d	1246171001	YS1	09-FEB-2010 18:01	949976	1246171	1.01MECP		UPLOAD BOTH COLUMNS, USE FRONT
059f5901.d	1202035449	YS1	09-FEB-2010 18:14	949976	1246171	1.0 QC A		UPLOAD BOTH COLUMNS, USE FRONT
060f6001.d	1202035450	YS1	09-FEB-2010 18:27	949976	1246171	1.0 QC A		UPLOAD BOTH COLUMNS, USE FRONT
061f6101.d	WAR100203-60 07	YS1	09-FEB-2010 18:41		020910	1.01		PASSED ON BOTH COLUMNS
062f6201.d	WAR100105-99 07	YS1	09-FEB-2010 18:54		020910	1.01		CLEAN
063f6301.d	1246376001	YS1	09-FEB-2010 19:06	949976	SP4011	1.01ORNL		UPLOAD BOTH COLUMNS, USE FRONT
064f6401.d	WAR100203-60 08	YS1	09-FEB-2010 19:21		020910	1.01		PASSED ON BOTH COLUMNS

1065f6501.d |WAR:0C105-99 08 |Y51 |09-FEB-2010 19:34 | |020910 |1.01 |CLEAN |

Instrument Batch: /chem/ecdl1a.i/020910.b Page: 4

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 02/11/2010

METHOD: ECD1-F-8082-021010C.m

OPERATOR: YS1

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA699
ALUMINA LOT 1240553-A
COPPER LOT 236547-A

Calibration & QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,

DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,

BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/021010C.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
002f0101.d	WAR100105-99 01	YS1	10-FEB-2010 20:48		021010c	1.01	CLEAN	
002f0201.d	WAR100210-01 60	YS1	10-FEB-2010 20:58		021010c	1.01	ARI660 I-CAL LEVEL 1	
003f0301.d	WAR100210-02 60	YS1	10-FEB-2010 21:09		021010c	1.01	ARI660 I-CAL LEVEL 2	
004f0401.d	WAR100210-03 60	YS1	10-FEB-2010 21:19		021010c	1.01	ARI660 I-CAL LEVEL 3	
005f0501.d	WAR100210-04 60	YS1	10-FEB-2010 21:30		021010c	1.01	ARI660 I-CAL LEVEL 4	
006f0601.d	WAR100104-01	YS1	10-FEB-2010 21:40		021010c	1.01	ARI660 I-CAL LEVEL 5	
007f0701.d	WAR100203-60 01	YS1	10-FEB-2010 21:51		021010c	1.01	PASSED ON BOTH COLUMNS	
008f0801.d	WAR100210-05 42	YS1	10-FEB-2010 22:01		021010c	1.01	ARI242 I-CAL LEVEL 1	
009f0901.d	WAR100210-06 42	YS1	10-FEB-2010 22:12		021010c	1.01	ARI242 I-CAL LEVEL 2	
010f1001.d	WAR100210-07 42	YS1	10-FEB-2010 22:22		021010c	1.01	ARI242 I-CAL LEVEL 3	
011f1101.d	WAR100210-08 42	YS1	10-FEB-2010 22:33		021010c	1.01	ARI242 I-CAL LEVEL 4	
012f1201.d	WAR091111-01	YS1	10-FEB-2010 22:43		021010c	1.01	ARI242 I-CAL LEVEL 5	
013f1301.d	WAR091217-42	YS1	10-FEB-2010 22:54		021010c	1.01	PASSED ON BOTH COLUMNS	
014f1401.d	WAR100210-09 48	YS1	10-FEB-2010 23:04		021010c	1.01	DUSE	
015f1501.d	WAR100210-10 48	YS1	10-FEB-2010 23:15		021010c	1.01	DUSE	

Instrument Batch: /chem/ecd1a.i/021010C.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d	11MAR100210-11 48	YS1	11-0-FEB-2010 23:25	1	0210:30c	1	1.01	1DUSE	1
017f1701.d	11MAR100210-12 48	YS1	11-0-FEB-2010 23:36	1	1021010c	1	1.01	DUSE	1
018f1801.d	11MAR091027-32	YS1	11-0-FEB-2010 23:46	1	1021010c	1	1.01	1DUSE	1
019f1901.d	11MAR09:217-48	YS1	11-0-FEB-2010 23:57	1	1021010c	1	1.01	1DUSE	1
020f2001.d	11MAR100105-99 02	YS1	11-0-FEB-2010 30:07	1	10210:30c	1	1.0	1CLEAN	1

Instrument Batch: /chem/ecdl1a.i/02101010c.b

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GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 02/12/2010

METHOD: ECD1-F-8082-021110.m

OPERATOR: YS1

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA699
ALUMINA LOT 1240553-A
COPPER LOT 236547-A

Calibration & QC Information

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082

Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/021110.b

Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
00:f0101.d	WAR100105-99 01	YS1	11-FEB-2010 06:14	1021110	1.01	1.01	CLEAN	
002f0201.d	WAR100203-60 01	YS1	11-FEB-2010 06:25	1021110	1.01		PASSED ON BOTH COLUMNS	
003f0301.d	WAR091216-54	YS1	11-FEB-2010 06:35	1021110	1.01		PASSED ON BOTH COLUMNS	
004f0401.d	WAR091217-42	YS1	11-FEB-2010 06:46	1021110	1.01		PASSED ON BOTH COLUMNS	
005f0501.d	1248-4 old	YS1	11-FEB-2010 06:56	021110	1.01		AR1248 SCREEN DUSE	
006f0601.d	WAR100104-32	YS1	11-FEB-2010 07:19	1021110	1.01		PATTERN ONLY	
007f0701.d	11248-4	YS1	11-FEB-2010 07:30	1021110	1.01		AR1248 SCREEN DUSE	
008f0801.d	WAR100104-21	YS1	11-FEB-2010 07:40	1021110	1.01		PATTERN ONLY	
009f0901.d	WAR00104-62	YS1	11-FEB-2010 07:51	021110	1.01		PATTERN ONLY	
010f1001.d	WAR100107-68	YS1	11-FEB-2010 08:01	1021110	1.01		PASSED ON BOTH COLUMNS	
011f1101.d	WAR100211-01 48	YS1	11-FEB-2010 08:12	1021110	1.01		AR1248 I-CAL LEVEL 1	
012f1201.d	WAR100211-02 48	YS1	11-FEB-2010 08:22	1021110	1.01		AR1248 I-CAL LEVEL 2	
013f1301.d	WAR100211-03 48	YS1	11-FEB-2010 08:33	021110	1.01		AR1248 I-CAL LEVEL 3	
014f1401.d	WAR100211-04 48	YS1	11-FEB-2010 08:44	1021110	1.01		AR1248 I-CAL LEVEL 4	
015f1501.d	WAR100211-01	YS1	11-FEB-2010 08:54	1021110	1.01		AR1248 I-CAL LEVEL 5	

Instrument Batch: /chem/ecd1a.i/021110.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d	WAR091217-48 48	YS1	11-FEB-2010 09:04	021110	1.01	PASSED ON BOTH COLUMNS
017f1701.d	WAR091219-DDT	YS1	11-FEB-2010 09:15	021110	1.01	UCT ANALOG STANDARD
018f1801.d	WAR100105-99 02	YS1	11-FEB-2010 09:26	021110	1.01	CLEAN
019f1901.d	1202038145	YS1	11-FEB-2010 09:36	951079 1245514	1.01QC A	DUSE
020f2001.d	1202038146	YS1	11-FEB-2010 09:47	951079 1245514	1.0 QC A	DUSE
021f2101.d	1245514001	YS1	11-FEB-2010 09:57	951079 1245514	1.01WSRB	DUSE CONFIRMATION ONLY PER CLIENT
022f2201.d	1202038147	YS1	11-FEB-2010 10:10	951079 1245514	1.01QC A	DUSE
023f2301.d	1202038148	YS1	11-FEB-2010 10:22	951079 1245514	1.01QC A	DUSE
024f2401.d	WAR100203-60 02	YS1	11-FEB-2010 10:35	021110	1.01	PASSED ON BOTH COLUMNS
025f2501.d	WAR100105-99 03	YS1	11-FEB-2010 10:45	021110	1.0	CLEAN
026f2601.d	1202039050	YS1	11-FEB-2010 10:56	EU1-7500	1.01	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	1202039051	YS1	11-FEB-2010 11:09	EU1-7500	1.01	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	1202039058	YS1	11-FEB-2010 11:21	EU1-7500	1.01	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	1246565001	YS1	11-FEB-2010 11:34	951451 EU1-7500	1.01CARE	UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d	1202039052	YS1	11-FEB-2010 11:46	951451 165001MSD	1.01QC A	DUSE RR 200X
031f3101.d	1202039053	YS1	11-FEB-2010 11:59	951451 165001MSD	1.0 QC A	DUSE RR 200X
032f3201.d	WAR100105-99 04	YS1	11-FEB-2010 12:12	021110	1.0	CLEAN
033f3301.d	1246570001	YS1	11-FEB-2010 12:22	951451 EU1-7501	200.0 CARE	UPLOAD BOTH COLUMNS, USE HIGHER
034f3401.d	1246570002	YS1	11-FEB-2010 12:35	EU1-7501	20.01	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	1246570003	YS1	11-FEB-2010 12:47	EU1-7501	10.01	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl1a.i/021110.b

Data File	GE Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	1246640001	YS1	11-FEB-2010 13:00		EU1-7503	200.01		UPLOAD BOTH COLUMNS, USE HIGHER
1037f3701.d	WAR100203-60 03	YS1	11-FEB-2010 13:12		021110	1.01		PASSED ON BOTH COLUMNS
1038f3801.d	WAR100105-99 05	YS1	11-FEB-2010 13:23		021110	1.01		CLEAN
1039f3901.d	1202039052	YS1	11-FEB-2010 13:33	951451	EU1-7501	200.01QC A		UPLOAD BOTH COLUMNS, USE HIGHER
1040f4001.d	1202039053	YS1	11-FEB-2010 13:46	951451	EU1-7501	200.01QC A		UPLOAD BOTH COLUMNS, USE HIGHER

041f4101.d	WAR100203-60 04	YS1	11-FEB-2010 13:59	1021110	1.0	PASSED ON BOTH COLUMNS
042f4201.d	WAR100105-99 06	YS1	11-FEB-2010 14:09	021110	1.0	CLEAN
043f4301.d	12020308652	YS1	11-FEB-2010 14:20	951299 10-1505	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	12020308653	YS1	11-FEB-2010 14:33	951299 110-1505	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	1245935001	YS1	11-FEB-2010 14:45	951299 110-1505	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1245935002	YS1	11-FEB-2010 14:58	951299 110-1505	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	245935003	YS1	11-FEB-2010 15:10	951299 10-1505	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	1245935004	YS1	11-FEB-2010 15:23	951299 110-1505	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1245935005	YS1	11-FEB-2010 15:36	951299 110-1505	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	1245935006	YS1	11-FEB-2010 15:48	951299 110-1505	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	1245935008	YS1	11-FEB-2010 16:01	951299 110-1505	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	1245935009	YS1	11-FEB-2010 16:14	951299 10-1505	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	WAR100203-60 05	YS1	11-FEB-2010 16:26	021110	1.0	PASSED ON BOTH COLUMNS
054f5401.d	WAR100105-99 07	YS1	11-FEB-2010 16:37	021110	1.0	CLEAN
055f5501.d	1245979013	YS1	11-FEB-2010 16:47	951299 110-1514	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/021110.b

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Data File	GL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1245979014	YS1	11-FEB-2010 17:00	951299 110-1514	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	1245979015	YS1	11-FEB-2010 17:13	951299 110-1514	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	1245994001	YS1	11-FEB-2010 17:25	951299 10-1516	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	12020308654	YS1	11-FEB-2010 17:38	951299 10-1516	1.0 QC A			UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	12020308655	YS1	11-FEB-2010 17:51	951299 10-1516	1.0 QC A			UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	1245994002	YS1	11-FEB-2010 18:03	951299 110-1516	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	1245994003	YS1	11-FEB-2010 18:16	951299 110-1516	1.0 LANL			UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	WAR100203-60 06	YS1	11-FEB-2010 18:28	021110	1.0			PASSED ON BOTH COLUMNS
064f6401.d	WAR100105-99 08	YS1	11-FEB-2010 18:39	021110	1.0			CLEAN

1065f6501.d	1202037852	YS1	11-FEB-2010 18:49	1950925	245515	1	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1066f6601.d	1202037853	YS1	11-FEB-2010 19:02	1950925	1245515	1	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1067f6701.d	1245515001	YS1	11-FEB-2010 19:15	1950925	1245515	1	1.0 WSRB	DOSE RR 20X
1068f6801.d	1245515002	YS1	11-FEB-2010 19:27	1950925	1245515	1	1.0 WSRB	DOSE RR 5X
1069f6901.d	1245515003	YS1	11-FEB-2010 19:40	1950925	1245515	1	1.0 WSRB	DOSE RR
1070f7001.d	1245515004	YS1	11-FEB-2010 19:53	1950925	1245515	1	1.0 WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1071f7101.d	1245515005	YS1	11-FEB-2010 20:05	1950925	245515	1	1.0 WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1072f7201.d	1245515006	YS1	11-FEB-2010 20:18	1950925	1245515	1	1.0 WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1073f7301.d	1245515007	YS1	11-FEB-2010 20:31	1950925	1245515	1	1.0 WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1074f7401.d	1245515008	YS1	11-FEB-2010 20:43	1950925	1245515	1	1.0 WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1075f7501.d	100203-60 07	YS1	11-FEB-2010 20:56	1021110	1021110	1	1.0	PASSED ON BOTH COLUMNS

Instrument Batch: /chem/ecdla.i/021110.b Page: 4

Data File: /chem/ecdl1a.i/021110.b/059b5901.d
Report Date: 12-Feb-2010 07:34

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/021110.b/059b5901.d
Lab Smp Id: 1202038654 Client Smp ID: RE15-10-8122MS
Inj Date : 11-FEB-2010 17:38
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202038654|1|
Misc Info : |ECD82P_1S|951299|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecdl1a.i/021110.b/ECD1-B-8082-021110.m
Meth Date : 12-Feb-2010 07:00 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 59 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1516.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.10000	Weight of sample extracted (g)
M	14.92870	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
S 11 4cmx CAS #: 877-09-8						
2.294	2.294	0.000	33227908	115.812	4.5 80.00- 120.00	100.00

S 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.938	5.941	-0.003	28377504	131.930	5.2 80.00- 120.00	100.00

1 Aroclor-1016 CAS #: 12674-11-2						
3.190	3.190	0.000	7548542	607.273	23.7 80.00- 120.00	100.00(M)
3.273	3.274	-0.001	5220008	612.602	23.9 46.60- 86.60	69.15
3.336	3.337	-0.001	3134932	596.704	23.3 21.35- 61.35	41.53
3.563	3.564	-0.001	4178448	620.682	24.2 32.46- 72.46	55.35

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
5	=====	=====	=====	=====	=====	=====	/ 1	
1 Aroclor-1016 (continued)								
3.638	3.640	-0.002	3825888	604.963	23.6	38.93-	78.93	61.97
Average of Peak Concentrations =					23.7			

7 Aroclor-1260					CAS #: 11096-82-5			
4.328	4.330	-0.002	9243632	734.061	28.7	80.00-	120.00	100.00
4.453	4.455	-0.002	11347991	753.165	29.4	102.02-	142.02	122.77
4.719	4.721	-0.002	8692026	748.154	29.2	72.44-	112.44	94.03
4.893	4.895	-0.002	8906923	740.389	28.9	75.48-	115.48	96.36
5.040	5.042	-0.002	20112741	778.844	30.4	192.44-	232.44	217.58
Average of Peak Concentrations =					29.3			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodia.i/021110.b/05965901.d

Date: 11-FEB-2010 17:38

Client ID: RE15-10-8122MS

Sample Info: 11202038654111

Volume Injected (uL): 1.0

Column phase: CLP2

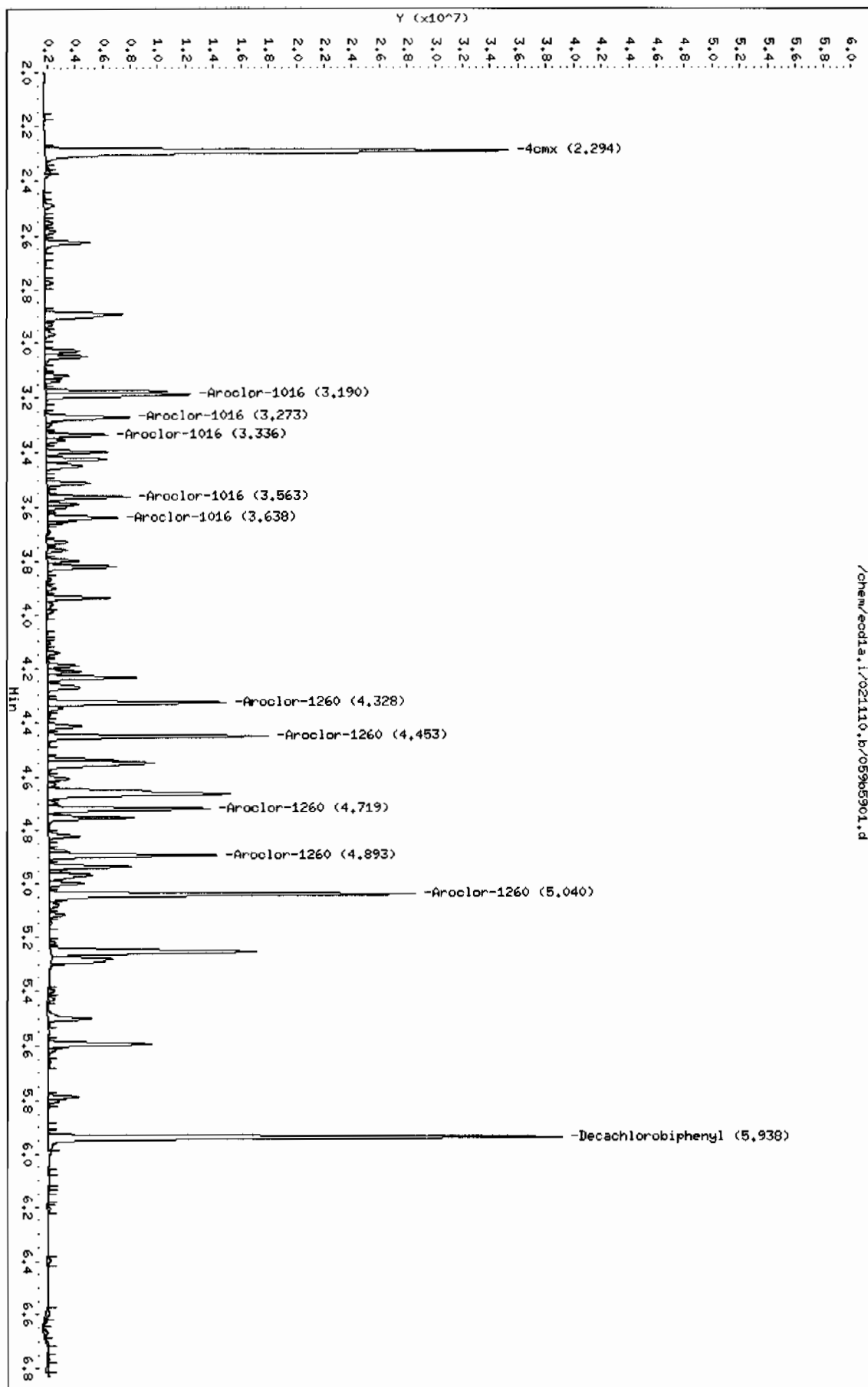
Instrument: eodia.i

Operator: YSA

Column diameter: 0.25

/chem/eodia.i/021110.b/05965901.d

Page 1



Data File: /chem/ecdla.i/021110.b/059f5901.d
 Report Date: 12-Feb-2010 07:35

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdla.i/021110.b/059f5901.d
 Lab Smp Id: 1202038654 Client Smp ID: RE15-10-8122MS
 Inj Date : 11-FEB-2010 17:38
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202038654|1|
 Misc Info : |ECD82P_1S|951299|SVA|QC A|SOIL|MS|||
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 12-Feb-2010 07:00 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 59 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1516.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.10000	Weight of sample extracted (g)
M	14.92870	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8			
1.964	1.962	0.002	52180049	119.359	4.7 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.273	5.275	-0.002	45494756	136.396	5.3 80.00- 120.00	100.00
1 Aroclor-1016			CAS #: 12674-11-2			
2.418	2.418	0.000	9702444	602.315	23.5 80.00- 120.00	100.00
2.705	2.705	0.000	12364455	625.016	24.4 107.74- 147.74	127.44
2.786	2.786	0.000	8206438	630.033	24.6 62.06- 102.06	84.58
2.823	2.824	-0.001	4797044	616.468	24.1 29.56- 69.56	49.44

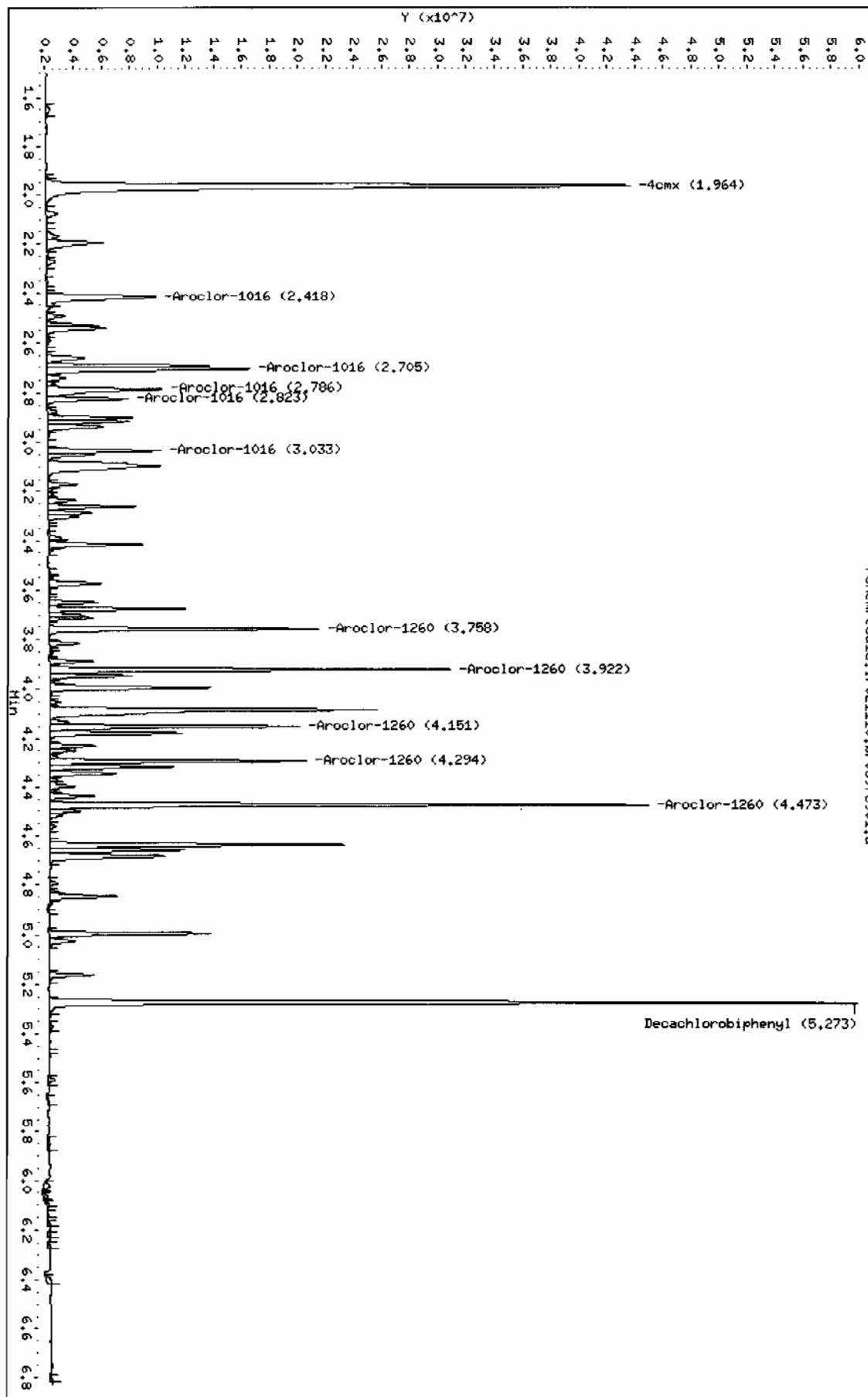
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
=====								
1 Aroclor-1016 (continued)								
3.033	3.035	-0.002	6374552	636.027	24.8	44.36-	84.36	65.70
Average of Peak Concentrations =					24.3			

7 Aroclor-1260					CAS #: 11096-82-5			
3.758	3.760	-0.002	14213694	746.900	29.2	80.00-	120.00	100.00
3.922	3.924	-0.002	21749241	767.076	30.0	130.55-	170.55	153.02
4.151	4.154	-0.003	13052842	765.805	29.9	69.92-	109.92	91.83
4.294	4.296	-0.002	13412693	749.641	29.3	76.48-	116.48	94.36
4.473	4.475	-0.002	31130200	801.281	31.3	190.91-	230.91	219.02
Average of Peak Concentrations =					29.9			

Data File: /chem/ecda.i/021110.b/059f5901.d
Date: 11-FEB-2010 17:38
Client ID: RE15-10-8122MS
Sample Info: 11202038654111
Volume Injected (ul): 1.0
Column phase: CLP1

Instrument: ecda.i
Operator: YSI
Column diameter: 0.25

/chem/ecda.i/021110.b/059f5901.d



Data File: /chem/ecdla.i/021110.b/060b6001.d
 Report Date: 12-Feb-2010 07:36

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdla.i/021110.b/060b6001.d
 Lab Smp Id: 1202038655 Client Smp ID: RE15-10-8122MSD
 Inj Date : 11-FEB-2010 17:51
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202038655|1|
 Misc Info : |ECD82P_1S|951299|SVA|QC A|SOIL|MSD|1|
 Comment :
 Method : /chem/ecdla.i/021110.b/ECD1-B-8082-021110.m
 Meth Date : 12-Feb-2010 07:00 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 60 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1516.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpclpl

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	14.92870	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
			RESPONSE (ug/L)	(ug/Kg)		

\$ 11 4cmx				CAS #: 877-09-8		
2.292	2.294	-0.002	30694699 106.983	4.2	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.940	5.941	-0.001	25097604 116.682	4.6	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.189	3.190	-0.001	7020813 564.818	22.1	80.00- 120.00	100.00 (M)
3.272	3.274	-0.002	4810303 564.521	22.1	46.60- 86.60	68.51
3.336	3.337	-0.001	2868758 546.040	21.4	21.35- 61.35	40.86
3.563	3.564	-0.001	3782571 561.877	22.0	32.46- 72.46	53.88

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.638	3.640	-0.002	3487259	551.418	21.6	38.93-	78.93	60.11
Average of Peak Concentrations =					21.8			

7 Aroclor-1260					CAS #: 11096-82-5			
4.329	4.330	-0.001	8250050	655.158	25.6	80.00-	120.00	100.00
4.454	4.455	-0.001	10078748	668.926	26.2	102.02-	142.02	122.17
4.720	4.721	-0.001	7709838	663.614	26.0	72.44-	112.44	93.45
4.894	4.895	-0.001	7948327	660.706	25.9	75.48-	115.48	96.34
5.041	5.042	-0.001	17752424	687.443	26.9	192.44-	232.44	215.18
Average of Peak Concentrations =					26.1			

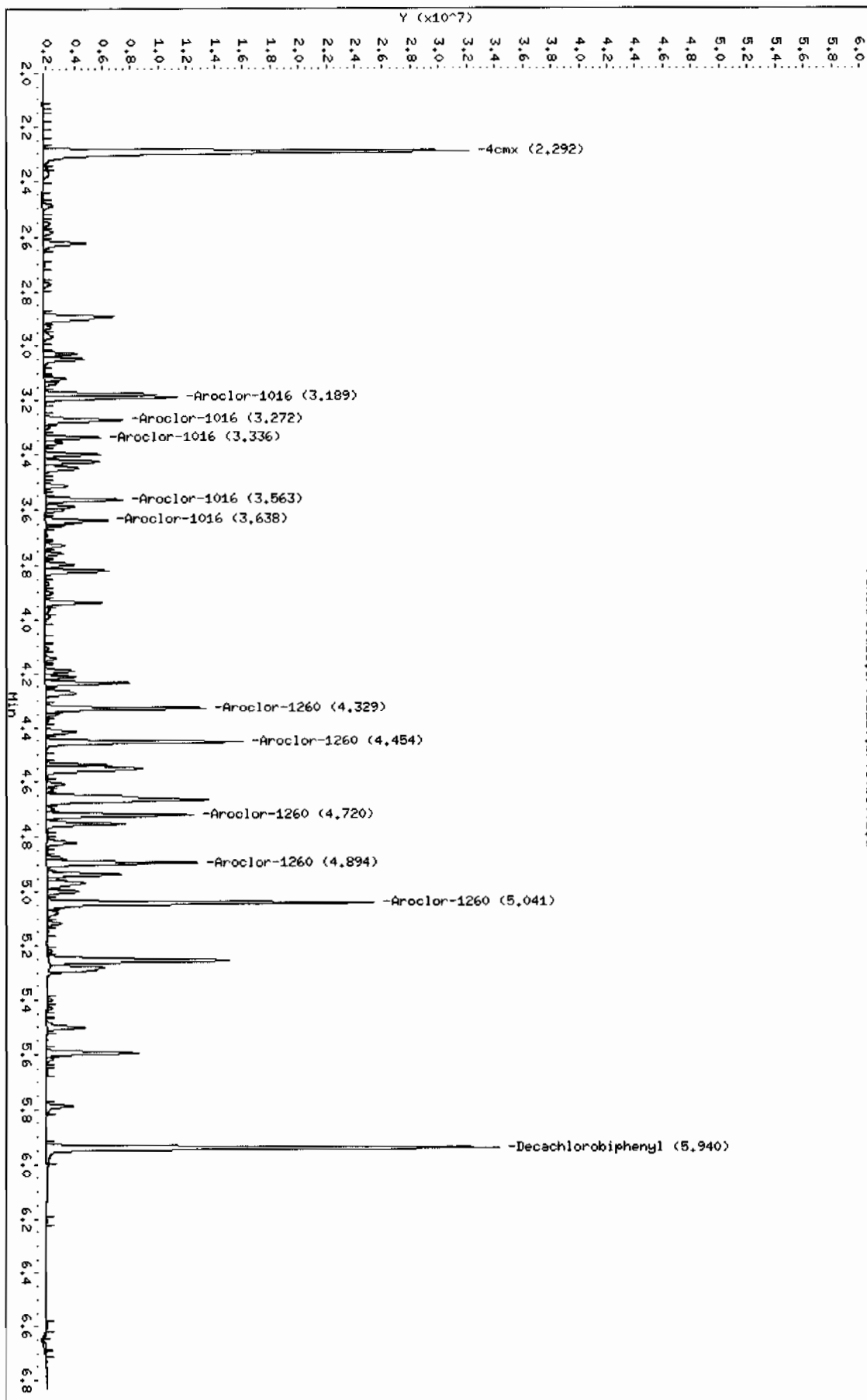
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/021110.b/0606001.d
Date: 11-FEB-2010 17:51
Client ID: RE15-10-812MSD
Sample Info: 1120203865111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdda.i
Operator: YSI
Column diameter: 0.25

/chem/ecdda.i/021110.b/0606001.d



Data File: /chem/ecdl1a.i/021110.b/060f6001.d
 Report Date: 12-Feb-2010 07:37

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/021110.b/060f6001.d
 Lab Smp Id: 1202038655 Client Smp ID: RE15-10-8122MSD
 Inj Date : 11-FEB-2010 17:51
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202038655|1|
 Misc Info : |ECD82P_1S|951299|SVA|QC A|SOIL|MSD|||
 Comment :
 Method : /chem/ecdl1a.i/021110.b/ECD1-F-8082-021110.m
 Meth Date : 12-Feb-2010 07:00 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 60 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1516.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1pl

Concentration Formula: Amt * DF * Uf * Vt / (Vi * Ws * (100 - M) / 100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	14.92870	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS								
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO		
==	=====	=====	RESPONSE (ug/L)	(ug/Kg)	=====	=====	=====	
\$ 11 4cmx				CAS #: 877-09-8				
1.961	1.962	-0.001	47847702	109.449	4.3	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
5.273	5.275	-0.002	39946971	119.763	4.7	80.00- 120.00	100.00	

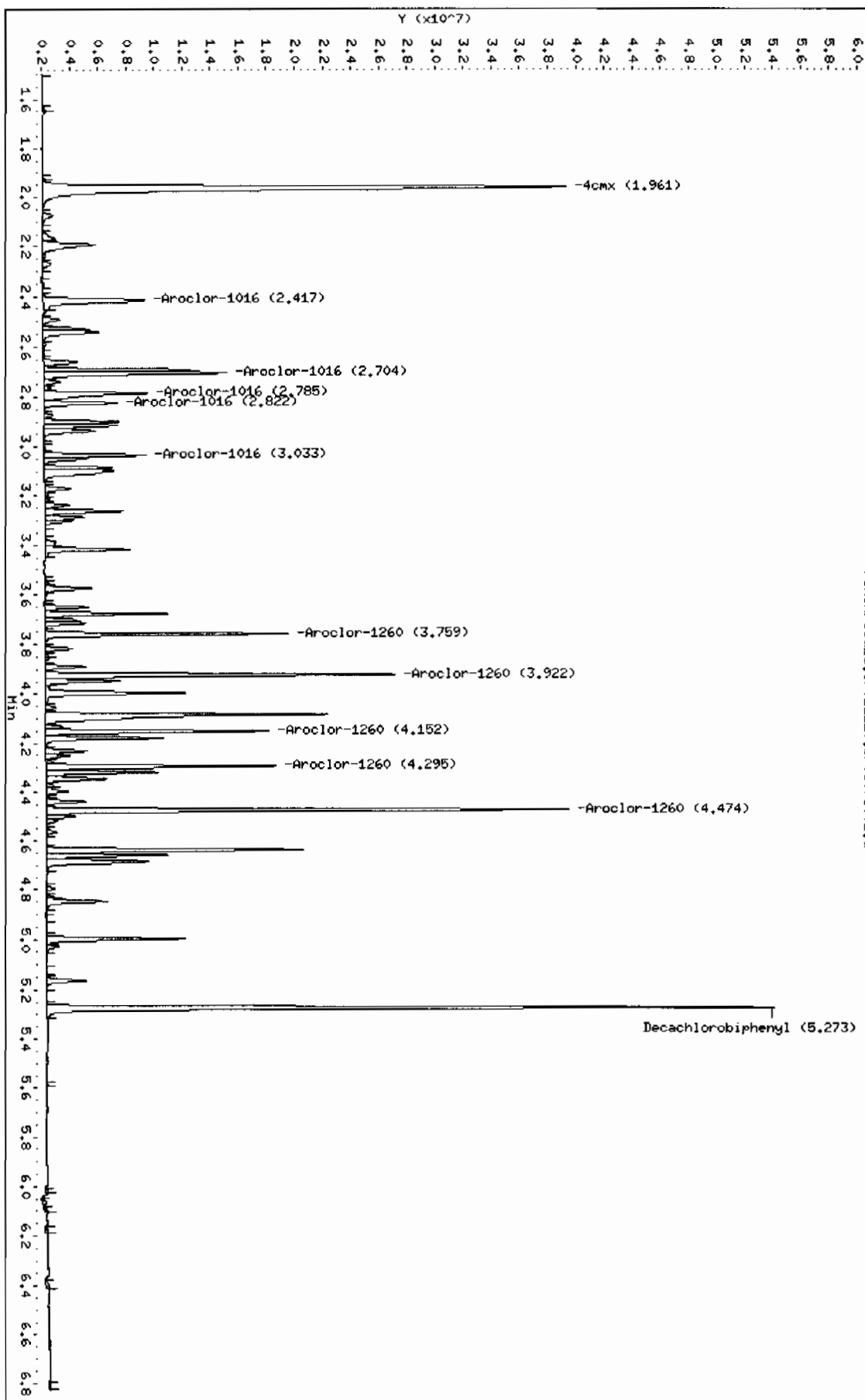
1 Aroclor-1016				CAS #: 12674-11-2				
2.417	2.418	-0.001	9089881	564.288	22.1	80.00- 120.00	100.00	
2.704	2.705	-0.001	11669389	589.881	23.1	107.74- 147.74	128.38	
2.785	2.786	-0.001	7445572	571.619	22.4	62.06- 102.06	81.91	
2.822	2.824	-0.002	4360354	560.349	21.9	29.56- 69.56	47.97	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET	RANGE	RATIO
==	==	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.033	3.035	-0.002	5866525	585.338	22.9	44.36-	84.36	64.54
Average of Peak Concentrations =					22.5			

7 Aroclor-1260					CAS #: 11096-82-5			
3.759	3.760	-0.001	12804280	672.839	26.3	80.00-	120.00	100.00
3.922	3.924	-0.002	19455220	686.168	26.8	130.55-	170.55	151.94
4.152	4.154	-0.002	11669407	684.639	26.8	69.92-	109.92	91.14
4.295	4.296	-0.001	12164544	679.881	26.6	76.48-	116.48	95.00
4.474	4.475	-0.001	27616502	710.839	27.8	190.91-	230.91	215.68
Average of Peak Concentrations					26.9			

Data File: /chem/ecdda.i/021110.b/0606001.d
Date: 11-FEB-2010 17:51
Client ID: RE15-10-812M5D
Sample Info: 1120203865111
Volume Injected (uL): 1.0
Column Phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25



Prep Logbook Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 951296 Verified by: _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202038652 MB	10-FEB-2010 21:22:00	30	H2SO4/KM2		2	9	1	0.03333
1202038653 LCS	10-FEB-2010 21:22:00	30	H2SO4/KM2		2	9	1	0.03333
245935001	10-FEB-2010 21:22:00	30.15	H2SO4/KM2		2	9	1	0.03317
245935002	10-FEB-2010 21:22:00	30.13	H2SO4/KM2		2	9	1	0.03319
245935003	10-FEB-2010 21:22:00	30.05	H2SO4/KM2		2	9	1	0.03328
245935004	10-FEB-2010 21:22:00	30.07	H2SO4/KM2		2	9	1	0.03326
245935005	10-FEB-2010 21:22:00	30.04	H2SO4/KM2		2	9	1	0.03329
245935006	10-FEB-2010 21:22:00	30.06	H2SO4/KM2		2	9	1	0.03327
245935008	10-FEB-2010 21:22:00	30.16	H2SO4/KM2		2	9	1	0.03316
245935009	10-FEB-2010 21:22:00	30.12	H2SO4/KM2		2	9	1	0.0332
245979013	10-FEB-2010 21:22:00	30.13	H2SO4/KM2		2	9	1	0.03319
245979014	10-FEB-2010 21:22:00	30.02	H2SO4/KM2		2	9	1	0.03331
245979015	10-FEB-2010 21:22:00	30.19	H2SO4/KM2		2	9	1	0.03312
245994001	10-FEB-2010 21:22:00	30.03	H2SO4/KM2		2	9	1	0.0333
1202038654 MS (245994001)	10-FEB-2010 21:22:00	30.1	H2SO4/KM2		2	9	1	0.03322
1202038655 MSD (245994001)	10-FEB-2010 21:22:00	30.03	H2SO4/KM2		2	9	1	0.0333
245994002	10-FEB-2010 21:22:00	30.19	H2SO4/KM2		2	9	1	0.03312
245994003	10-FEB-2010 21:22:00	30.02	H2SO4/KM2		2	9	1	0.03331
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202038653	PCB Laboratory Control	WEI100126-07	1	mL	Clean up Date: 2/10/10		
MS	1202038654	PCB Laboratory Control	WEI100126-07	1	mL	Clean up Initials: AJS		
MSD	1202038655	PCB Laboratory Control	WEI100126-07	1	mL	Verified By: AV		
SURR	ALL	PEST LOW LEVEL SURROGATE 200 U/G/L	UEI100127-15	1	mL	Final Solvent: Hexane		
REGENT	ALL	1:1 sulfuric acid	1260695a	5	mL	Clean Up SOP: GL-OA-E-037		
REGENT	ALL	Acetone	1264558	150	mL			
REGENT	ALL	Hexane	1264562-B2	150	mL			
REGENT	ALL	5% Potassium Permanganate	B1202457-F	5	mL			
SOURCE	ALL	SODIUM SULFATE	1265308	30	g			

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1514**

Sample Analysis

Sample ID	Client ID
245979001	RE15-10-7980
245979002	RE15-10-7958
245979003	RE15-10-7960
245979004	RE15-10-7979
245979005	RE15-10-7972
245979006	RE15-10-7957
245979007	RE15-10-7974
245979008	RE15-10-7961
245979009	RE15-10-7971
245979010	RE15-10-7966
245979011	RE15-10-7959
245979012	RE15-10-7969
245979013	RE15-10-8061
245979014	RE15-10-8063
245979015	RE15-10-8062
1202032610	Method Blank (MB) ICP
1202032615	Laboratory Control Sample (LCS)
1202032612	245979001(RE15-10-7980L) Serial Dilution (SD)
1202032611	245979001(RE15-10-7980D) Sample Duplicate (DUP)
1202032613	245979001(RE15-10-7980S) Matrix Spike (MS)

1202032614	245979001(RE15-10-7980SD) Matrix Spike Duplicate (MSD)
1202032619	Method Blank (MB) ICP-MS
1202032624	Laboratory Control Sample (LCS)
1202032621	245979001(RE15-10-7980L) Serial Dilution (SD)
1202032620	245979001(RE15-10-7980D) Sample Duplicate (DUP)
1202032622	245979001(RE15-10-7980S) Matrix Spike (MS)
1202032623	245979001(RE15-10-7980SD) Matrix Spike Duplicate (MSD)
1202039198	Method Blank (MB) CVAA
1202039199	Laboratory Control Sample (LCS)
1202039206	245979001(RE15-10-7980L) Serial Dilution (SD)
1202039200	245979001(RE15-10-7980D) Sample Duplicate (DUP)
1202039201	245979001(RE15-10-7980S) Matrix Spike (MS)
1202039207	245979001(RE15-10-7980SD) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Method/Analysis Information

Analytical Batch:	948764, 948769 and 951518
Prep Batch :	948763, 948768 and 951517
Standard Operating Procedures:	GL-MA-E-013 REV# 20, GL-MA-E-009 REV# 19, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23
Analytical Method:	SW846 3050B/6010B, SW846 3050B/6020 and SW846 7471A
Prep Method :	SW846 3050B and SW846 7471A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria for all applicable analytes except copper. These samples, 245979004 (RE15-10-7979), 245979005 (RE15-10-7972), 245979007 (RE15-10-7974), 245979014 (RE15-10-8063) and 245979015 (RE15-10-8062), were rerun for copper because the CCB failed for that analyte and those samples did not contain copper at greater than 10X or less than the PQL.

Continuing Calibration Verification (CCV) Requirements

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement

The following sample was selected as the quality control (QC) sample for this SDG: 245979001 (RE15-10-7980).

Matrix Spike (MS) Recovery Statement

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of calcium, magnesium, potassium and selenium, as indicated by the "N" qualifiers.

Matrix Spike Duplicate (MSD) Recovery Statement

The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MSD met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exceptions of calcium, magnesium, uranium and selenium, as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD between qualifying elements results in the MS and MSD were within the acceptance limits of 20% with the exception of uranium, as indicated by the "*" qualifier.

Duplicate Relative Percent Difference (RPD) Statement

The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements with the exceptions of chromium, beryllium and uranium, as indicated by the "*" qualifiers.

Serial Dilution % Difference Statement

The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The sample 245979006 (RE15-10-7957) required dilutions for copper, lead and zinc because copper and zinc were over range which affects lead. The samples in this SDG were diluted the standard 2x for solids on the ICPMS.

Preparation Information

The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DERs were generated for this SDG: 793840 and 796114. A copy of each DER is included in the Miscellaneous Data section of this package.

Additional Comments

Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Parson Date: 3/1/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979001

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7980

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 95.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3980000	ug/Kg		6430	18900	18900	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-36-0	Antimony	729	ug/Kg	J	312	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-38-2	Arsenic	1.51	mg/kg		0.195	0.973	0.973	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-39-3	Barium	46000	ug/Kg		94.6	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-41-7	Beryllium	0.554	mg/kg	*	0.0195	0.0973	0.0973	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-43-9	Cadmium	473	ug/Kg	U	94.6	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-70-2	Calcium	1490000	ug/Kg	N	7570	23700	23700	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-47-3	Chromium	16000	ug/Kg	*	142	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-48-4	Cobalt	3590	ug/Kg		142	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-50-8	Copper	3610	ug/Kg		284	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-89-6	Iron	11500000	ug/Kg		7570	23700	23700	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-92-1	Lead	7910	ug/Kg		237	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-95-4	Magnesium	791000	ug/Kg	N	8040	28400	28400	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-96-5	Manganese	214000	ug/Kg		189	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7439-97-6	Mercury	16.2	ug/kg		4.26	12.5	12.5	1	AV	JXL1	02/18/10 13:25	021810S1-4	951518
7440-02-0	Nickel	3.79	mg/kg		0.0973	0.389	0.389	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-09-7	Potassium	628000	ug/Kg	N	6060	23700	23700	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7782-49-2	Selenium	0.973	mg/kg	UN	0.486	0.973	0.973	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-22-4	Silver	473	ug/Kg	U	94.6	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-23-5	Sodium	244000	ug/Kg		6620	23700	23700	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-28-0	Thallium	0.0949	mg/kg	J	0.0584	0.195	0.195	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-61-1	Uranium	0.641	mg/kg	*N	0.0128	0.0389	0.0389	2	MS	PRB	02/25/10 20:28	100225-3	948769
7440-62-2	Vanadium	8750	ug/Kg		94.6	473	473	1	P	JWJ	02/20/10 03:07	021910A-1	948764
7440-66-6	Zinc	42700	ug/Kg		312	946	946	1	P	JWJ	02/20/10 03:07	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.554	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.539	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.502	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979002

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7958

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	10200000	ug/Kg		7800	23000	23000	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-36-0	Antimony	6770	ug/Kg		379	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-38-2	Arsenic	6.14	mg/kg		0.235	1.17	1.17	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-39-3	Barium	121000	ug/Kg		115	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-41-7	Beryllium	4.31	mg/kg	*	0.0235	0.117	0.117	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-43-9	Cadmium	574	ug/Kg	U	115	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-70-2	Calcium	3530000	ug/Kg	N	9180	28700	28700	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-47-3	Chromium	13100	ug/Kg	*	172	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-48-4	Cobalt	3400	ug/Kg		172	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-50-8	Copper	622000	ug/Kg		344	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-89-6	Iron	13400000	ug/Kg		9180	28700	28700	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-92-1	Lead	283000	ug/Kg		287	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-95-4	Magnesium	1610000	ug/Kg	N	9750	34400	34400	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-96-5	Manganese	172000	ug/Kg		230	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7439-97-6	Mercury	11.9	ug/kg	J	5.05	14.8	14.8	1	AV	JXL1	02/18/10 14:15	021810S1-4	951518
7440-02-0	Nickel	11.9	mg/kg		0.117	0.469	0.469	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-09-7	Potassium	1070000	ug/Kg	N	7340	28700	28700	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7782-49-2	Selenium	1.17	mg/kg	UN	0.587	1.17	1.17	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-22-4	Silver	438	ug/Kg	J	115	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-23-5	Sodium	63600	ug/Kg		8030	28700	28700	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-28-0	Thallium	0.262	mg/kg		0.0704	0.235	0.235	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-61-1	Uranium	515	mg/kg	*N	0.0155	0.0469	0.0469	2	MS	PRB	02/25/10 21:09	100225-3	948769
7440-62-2	Vanadium	22700	ug/Kg		115	574	574	1	P	JWJ	02/20/10 03:33	021910A-1	948764
7440-66-6	Zinc	91300	ug/Kg		379	1150	1150	1	P	JWJ	02/20/10 03:33	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.542	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.53	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.503	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979003

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7960

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 93.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2560000	ug/Kg		6740	19800	19800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-36-0	Antimony	4100	ug/Kg		327	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-38-2	Arsenic	1.44	mg/kg		0.207	1.03	1.03	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-39-3	Barium	44800	ug/Kg		99.1	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-41-7	Beryllium	4.02	mg/kg	*	0.0207	0.103	0.103	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-43-9	Cadmium	495	ug/Kg	U	99.1	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-70-2	Calcium	989000	ug/Kg	N	7920	24800	24800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-47-3	Chromium	11500	ug/Kg	*	149	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-48-4	Cobalt	16500	ug/Kg		149	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-50-8	Copper	187000	ug/Kg		297	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-89-6	Iron	10800000	ug/Kg		7920	24800	24800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-92-1	Lead	257000	ug/Kg		248	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-95-4	Magnesium	452000	ug/Kg	N	8420	29700	29700	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-96-5	Manganese	249000	ug/Kg		198	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7439-97-6	Mercury	12.5	ug/kg	U	4.25	12.5	12.5	1	AV	JXL	02/18/10 14:17	021810S1-4	951518
7440-02-0	Nickel	4	mg/kg		0.103	0.414	0.414	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-09-7	Potassium	436000	ug/Kg	N	6340	24800	24800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7782-49-2	Selenium	1.03	mg/kg	UN	0.517	1.03	1.03	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-22-4	Silver	495	ug/Kg	U	99.1	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-23-5	Sodium	142000	ug/Kg		6930	24800	24800	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-28-0	Thallium	0.207	mg/kg	U	0.0621	0.207	0.207	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-61-1	Uranium	143	mg/kg	*N	0.0137	0.0414	0.0414	2	MS	PRB	02/25/10 21:14	100225-3	948769
7440-62-2	Vanadium	7130	ug/Kg		99.1	495	495	1	P	JWJ	02/20/10 03:37	021910A-1	948764
7440-66-6	Zinc	53200	ug/Kg		327	991	991	1	P	JWJ	02/20/10 03:37	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.541	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.518	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.515	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979004

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7979

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4860000	ug/Kg		8090	23800	23800	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-36-0	Antimony	780	ug/Kg	J	393	1190	1190	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-38-2	Arsenic	1.75	mg/kg		0.266	1.33	1.33	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-39-3	Barium	71300	ug/Kg		119	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-41-7	Beryllium	0.793	mg/kg	*	0.0266	0.133	0.133	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-43-9	Cadmium	595	ug/Kg	U	119	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-70-2	Calcium	1130000	ug/Kg	N	9520	29700	29700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-47-3	Chromium	18300	ug/Kg	*	178	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-48-4	Cobalt	4710	ug/Kg		178	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-50-8	Copper	20300	ug/Kg		357	1190	1190	1	P	JWJ	02/21/10 05:21	022010C-2	948764
7439-89-6	Iron	11200000	ug/Kg		9520	29700	29700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7439-92-1	Lead	64200	ug/Kg		297	1190	1190	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7439-95-4	Magnesium	1050000	ug/Kg	N	10100	35700	35700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7439-96-5	Manganese	269000	ug/Kg		238	1190	1190	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7439-97-6	Mercury	13.5	ug/kg	U	4.59	13.5	13.5	1	AV	JXL1	02/18/10 14:19	021810S1-4	951518
7440-02-0	Nickel	4.77	mg/kg		0.133	0.531	0.531	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-09-7	Potassium	1110000	ug/Kg	N	7610	29700	29700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7782-49-2	Selenium	1.33	mg/kg	UN	0.664	1.33	1.33	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-22-4	Silver	595	ug/Kg	U	119	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-23-5	Sodium	47900	ug/Kg		8330	29700	29700	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-28-0	Thallium	0.102	mg/kg	J	0.0797	0.266	0.266	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-61-1	Uranium	11.4	mg/kg	*N	0.0175	0.0531	0.0531	2	MS	PRB	02/25/10 21:20	100225-3	948769
7440-62-2	Vanadium	22400	ug/Kg		119	595	595	1	P	JWJ	02/20/10 03:41	021910A-1	948764
7440-66-6	Zinc	27700	ug/Kg		393	1190	1190	1	P	JWJ	02/20/10 03:41	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.567	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.508	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.599	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979005

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7972

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 91.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4470000	ug/Kg		7180	21100	21100	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-36-0	Antimony	1060	ug/Kg	U	348	1060	1060	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-38-2	Arsenic	1.76	mg/kg		0.214	1.07	1.07	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-39-3	Barium	52600	ug/Kg		106	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-41-7	Beryllium	0.503	mg/kg	*	0.0214	0.107	0.107	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-43-9	Cadmium	528	ug/Kg	U	106	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-70-2	Calcium	952000	ug/Kg	N	8450	26400	26400	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-47-3	Chromium	9120	ug/Kg	*	158	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-48-4	Cobalt	7200	ug/Kg		158	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-50-8	Copper	6670	ug/Kg		317	1060	1060	1	P	JWJ	02/21/10 05:25	022010C-2	948764
7439-89-6	Iron	10200000	ug/Kg		8450	26400	26400	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7439-92-1	Lead	7570	ug/Kg		264	1060	1060	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7439-95-4	Magnesium	691000	ug/Kg	N	8970	31700	31700	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7439-96-5	Manganese	205000	ug/Kg		211	1060	1060	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7439-97-6	Mercury	15.4	ug/kg		4.36	12.8	12.8	1	AV	JXL1	02/18/10 14:21	021810S1-4	951518
7440-02-0	Nickel	4.32	mg/kg		0.107	0.428	0.428	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-09-7	Potassium	544000	ug/Kg	N	6760	26400	26400	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7782-49-2	Selenium	1.07	mg/kg	UN	0.535	1.07	1.07	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-22-4	Silver	528	ug/Kg	U	106	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-23-5	Sodium	159000	ug/Kg		7390	26400	26400	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-28-0	Thallium	0.214	mg/kg	U	0.0642	0.214	0.214	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-61-1	Uranium	8.19	mg/kg	*N	0.0141	0.0428	0.0428	2	MS	PRB	02/25/10 21:26	100225-3	948769
7440-62-2	Vanadium	6720	ug/Kg		106	528	528	1	P	JWJ	02/20/10 03:44	021910A-1	948764
7440-66-6	Zinc	29700	ug/Kg		348	1060	1060	1	P	JWJ	02/20/10 03:44	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt/vol.	Units	Final wt/vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.519	g	50	ml.	02/10/10	FGA
948769	948768	SW846 3050B	0.512	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.513	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979006

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7957

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 77

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2540000	ug/Kg		8650	25400	25400	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-36-0	Antimony	7900	ug/Kg		420	1270	1270	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-38-2	Arsenic	1.84	mg/kg		0.234	1.17	1.17	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-39-3	Barium	97900	ug/Kg		127	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-41-7	Beryllium	7.22	mg/kg	*	0.0234	0.117	0.117	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-43-9	Cadmium	636	ug/Kg	U	127	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-70-2	Calcium	1880000	ug/Kg	N	10200	31800	31800	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-47-3	Chromium	11700	ug/Kg	*	191	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-48-4	Cobalt	2690	ug/Kg		191	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-50-8	Copper	36400000	ug/Kg		19100	63600	63600	50	P	JWJ	02/21/10 05:39	022010C-2	948764
7439-89-6	Iron	8340000	ug/Kg		10200	31800	31800	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7439-92-1	Lead	473000	ug/Kg		15900	63600	63600	50	P	JWJ	02/21/10 05:39	022010C-2	948764
7439-95-4	Magnesium	707000	ug/Kg	N	10800	38200	38200	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7439-96-5	Manganese	122000	ug/Kg		254	1270	1270	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7439-97-6	Mercury	13.3	ug/kg	U	4.51	13.3	13.3	1	AV	JXL	02/18/10 14:23	021810S1-4	951518
7440-02-0	Nickel	7.12	mg/kg		0.117	0.468	0.468	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-09-7	Potassium	492000	ug/Kg	N	8140	31800	31800	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7782-49-2	Selenium	1.17	mg/kg	UN	0.585	1.17	1.17	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-22-4	Silver	6950	ug/Kg		127	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-23-5	Sodium	118000	ug/Kg		8900	31800	31800	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-28-0	Thallium	0.234	mg/kg	U	0.0702	0.234	0.234	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-61-1	Uranium	364	mg/kg	*N	0.0155	0.0468	0.0468	2	MS	PRB	02/25/10 21:32	100225-3	948769
7440-62-2	Vanadium	14700	ug/Kg		127	636	636	1	P	JWJ	02/20/10 03:48	021910A-1	948764
7440-66-6	Zinc	13300000	ug/Kg		21000	63600	63600	50	P	JWJ	02/21/10 05:39	022010C-2	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.509	g	50	ml.	02/10/10	FGA
948769	948768	SW846 3050B	0.553	g	50	ml.	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.585	g	30	ml.	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979007

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7974

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 94.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3250000	ug/Kg		6710	19700	19700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-36-0	Antimony	987	ug/Kg	U	326	987	987	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-38-2	Arsenic	2.13	mg/kg		0.201	1	1	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-39-3	Barium	28000	ug/Kg		98.7	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-41-7	Beryllium	0.412	mg/kg	*	0.0201	0.1	0.1	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-43-9	Cadmium	494	ug/Kg	U	98.7	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-70-2	Calcium	784000	ug/Kg	N	7900	24700	24700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-47-3	Chromium	15000	ug/Kg	*	148	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-48-4	Cobalt	3330	ug/Kg		148	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-50-8	Copper	2520	ug/Kg		296	987	987	1	P	JWJ	02/21/10 05:28	022010C-2	948764
7439-89-6	Iron	7760000	ug/Kg		7900	24700	24700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7439-92-1	Lead	4120	ug/Kg		247	987	987	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7439-95-4	Magnesium	567000	ug/Kg	N	8390	29600	29600	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7439-96-5	Manganese	224000	ug/Kg		197	987	987	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7439-97-6	Mercury	12.7	ug/kg		4.18	12.3	12.3	1	AV	JXL1	02/18/10 14:25	021810S1-4	951518
7440-02-0	Nickel	3.83	mg/kg		0.1	0.402	0.402	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-09-7	Potassium	454000	ug/Kg	N	6320	24700	24700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7782-49-2	Selenium	1	mg/kg	UN	0.502	1	1	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-22-4	Silver	494	ug/Kg	U	98.7	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-23-5	Sodium	120000	ug/Kg		6910	24700	24700	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-28-0	Thallium	0.201	mg/kg	U	0.0602	0.201	0.201	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-61-1	Uranium	0.622	mg/kg	*N	0.0133	0.0402	0.0402	2	MS	PRB	02/25/10 21:37	100225-3	948769
7440-62-2	Vanadium	6500	ug/Kg		98.7	494	494	1	P	JWJ	02/20/10 03:52	021910A-1	948764
7440-66-6	Zinc	20300	ug/Kg		326	987	987	1	P	JWJ	02/20/10 03:52	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.534	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.525	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.515	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979008

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7961

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3710000	ug/Kg		7310	21500	21500	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-36-0	Antimony	1910	ug/Kg		355	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-38-2	Arsenic	1.78	mg/kg		0.233	1.16	1.16	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-39-3	Barium	46500	ug/Kg		108	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-41-7	Beryllium	1.66	mg/kg	*	0.0233	0.116	0.116	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-43-9	Cadmium	538	ug/Kg	U	108	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-70-2	Calcium	1030000	ug/Kg	N	8600	26900	26900	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-47-3	Chromium	8570	ug/Kg	*	161	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-48-4	Cobalt	4990	ug/Kg		161	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-50-8	Copper	531000	ug/Kg		323	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-89-6	Iron	9470000	ug/Kg		8600	26900	26900	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-92-1	Lead	166000	ug/Kg		269	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-95-4	Magnesium	692000	ug/Kg	N	9140	32300	32300	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-96-5	Manganese	199000	ug/Kg		215	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7439-97-6	Mercury	14.1	ug/kg	U	4.78	14.1	14.1	1	AV	JXL1	02/18/10 14:27	021810S1-4	951518
7440-02-0	Nickel	8.02	mg/kg		0.116	0.465	0.465	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-09-7	Potassium	700000	ug/Kg	N	6880	26900	26900	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7782-49-2	Selenium	1.16	mg/kg	UN	0.581	1.16	1.16	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-22-4	Silver	129	ug/Kg	J	108	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-23-5	Sodium	42100	ug/Kg		7530	26900	26900	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-28-0	Thallium	0.0891	mg/kg	J	0.0698	0.233	0.233	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-61-1	Uranium	49.3	mg/kg	*N	0.0153	0.0465	0.0465	2	MS	PRB	02/25/10 21:55	100225-3	948769
7440-62-2	Vanadium	14600	ug/Kg		108	538	538	1	P	JWJ	02/20/10 03:56	021910A-1	948764
7440-66-6	Zinc	43600	ug/Kg		355	1080	1080	1	P	JWJ	02/20/10 03:56	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.545	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.504	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.5	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979009

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7971

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 74

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5600000	ug/Kg		8800	25900	25900	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-36-0	Antimony	1490	ug/Kg		427	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-38-2	Arsenic	1.4	mg/kg		0.264	1.32	1.32	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-39-3	Barium	70500	ug/Kg		129	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-41-7	Beryllium	0.885	mg/kg	*	0.0264	0.132	0.132	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-43-9	Cadmium	647	ug/Kg	U	129	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-70-2	Calcium	2010000	ug/Kg	N	10300	32300	32300	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-47-3	Chromium	9150	ug/Kg	*	194	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-48-4	Cobalt	4270	ug/Kg		194	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-50-8	Copper	1010000	ug/Kg		388	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-89-6	Iron	9970000	ug/Kg		10300	32300	32300	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-92-1	Lead	155000	ug/Kg		323	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-95-4	Magnesium	952000	ug/Kg	N	11000	38800	38800	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-96-5	Manganese	246000	ug/Kg		259	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7439-97-6	Mercury	6.71	ug/kg	J	4.59	13.5	13.5	1	AV	JXL1	02/18/10 14:33	021810S1-4	951518
7440-02-0	Nickel	3.4	mg/kg		0.132	0.528	0.528	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-09-7	Potassium	820000	ug/Kg	N	8280	32300	32300	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7782-49-2	Selenium	1.32	mg/kg	UN	0.659	1.32	1.32	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-22-4	Silver	313	ug/Kg	J	129	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-23-5	Sodium	64300	ug/Kg		9050	32300	32300	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-28-0	Thallium	0.264	mg/kg	U	0.0791	0.264	0.264	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-61-1	Uranium	45.9	mg/kg	*N	0.0174	0.0528	0.0528	2	MS	PRB	02/25/10 22:00	100225-3	948769
7440-62-2	Vanadium	19400	ug/Kg		129	647	647	1	P	JWJ	02/20/10 04:07	021910A-1	948764
7440-66-6	Zinc	42600	ug/Kg		427	1290	1290	1	P	JWJ	02/20/10 04:07	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.522	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.512	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.6	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979010

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7966

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1180000	ug/Kg		7150	21000	21000	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-36-0	Antimony	434	ug/Kg	J	347	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-38-2	Arsenic	0.796	mg/kg	J	0.214	1.07	1.07	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-39-3	Barium	20300	ug/Kg		105	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-41-7	Beryllium	1.59	mg/kg	*	0.0214	0.107	0.107	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-43-9	Cadmium	526	ug/Kg	U	105	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-70-2	Calcium	395000	ug/Kg	N	8410	26300	26300	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-47-3	Chromium	8430	ug/Kg	*	158	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-48-4	Cobalt	4860	ug/Kg		158	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-50-8	Copper	1410000	ug/Kg		315	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-89-6	Iron	7360000	ug/Kg		8410	26300	26300	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-92-1	Lead	6660	ug/Kg		263	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-95-4	Magnesium	213000	ug/Kg	N	8930	31500	31500	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-96-5	Manganese	205000	ug/Kg		210	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7439-97-6	Mercury	11.8	ug/kg	U	4.02	11.8	11.8	1	AV	JXL	02/18/10 14:35	021810S1-4	951518
7440-02-0	Nickel	3.61	mg/kg		0.107	0.428	0.428	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-09-7	Potassium	285000	ug/Kg	N	6730	26300	26300	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7782-49-2	Selenium	1.07	mg/kg	UN	0.535	1.07	1.07	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-22-4	Silver	526	ug/Kg	U	105	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-23-5	Sodium	166000	ug/Kg		7360	26300	26300	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-28-0	Thallium	0.214	mg/kg	U	0.0642	0.214	0.214	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-61-1	Uranium	11.2	mg/kg	*N	0.0141	0.0428	0.0428	2	MS	PRB	02/25/10 22:06	100225-3	948769
7440-62-2	Vanadium	3220	ug/Kg		105	526	526	1	P	JWJ	02/20/10 04:10	021910A-1	948764
7440-66-6	Zinc	39900	ug/Kg		347	1050	1050	1	P	JWJ	02/20/10 04:10	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.526	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.517	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.561	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979011

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7959

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 79

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4330000	ug/Kg		7730	22700	22700	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-36-0	Antimony	9560	ug/Kg		375	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-38-2	Arsenic	4.42	mg/kg		0.243	1.22	1.22	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-39-3	Barium	56700	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-41-7	Beryllium	7.52	mg/kg	*	0.0243	0.122	0.122	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-43-9	Cadmium	568	ug/Kg	U	114	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-70-2	Calcium	1190000	ug/Kg	N	9090	28400	28400	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-47-3	Chromium	11900	ug/Kg	*	170	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-48-4	Cobalt	3700	ug/Kg		170	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-50-8	Copper	618000	ug/Kg		341	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-89-6	Iron	7080000	ug/Kg		9090	28400	28400	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-92-1	Lead	777000	ug/Kg		284	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-95-4	Magnesium	602000	ug/Kg	N	9660	34100	34100	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-96-5	Manganese	156000	ug/Kg		227	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7439-97-6	Mercury	13.4	ug/kg	U	4.56	13.4	13.4	1	AV	JX1.1	02/18/10 14:37	021810S1-4	951518
7440-02-0	Nickel	5.5	mg/kg		0.122	0.486	0.486	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-09-7	Potassium	499000	ug/Kg	N	7270	28400	28400	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7782-49-2	Selenium	1.22	mg/kg	UN	0.608	1.22	1.22	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-22-4	Silver	1050	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-23-5	Sodium	53700	ug/Kg		7960	28400	28400	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-28-0	Thallium	0.243	mg/kg	U	0.0729	0.243	0.243	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-61-1	Uranium	249	mg/kg	*N	0.016	0.0486	0.0486	2	MS	PRB	02/25/10 22:12	100225-3	948769
7440-62-2	Vanadium	11300	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:14	021910A-1	948764
7440-66-6	Zinc	90600	ug/Kg		375	1140	1140	1	P	JWJ	02/20/10 04:14	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.556	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.52	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.565	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979012

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-7969

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 90.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5250000	ug/Kg		7390	21700	21700	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-36-0	Antimony	1630	ug/Kg		359	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-38-2	Arsenic	1.4	mg/kg		0.196	0.981	0.981	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-39-3	Barium	162000	ug/Kg		109	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-41-7	Beryllium	0.623	mg/kg	*	0.0196	0.0981	0.0981	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-43-9	Cadmium	543	ug/Kg	U	109	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-70-2	Calcium	1670000	ug/Kg	N	8690	27200	27200	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-47-3	Chromium	55800	ug/Kg	*	163	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-48-4	Cobalt	3450	ug/Kg		163	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-50-8	Copper	103000	ug/Kg		326	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-89-6	Iron	9300000	ug/Kg		8690	27200	27200	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-92-1	Lead	406000	ug/Kg		272	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-95-4	Magnesium	1260000	ug/Kg	N	9240	32600	32600	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-96-5	Manganese	248000	ug/Kg		217	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7439-97-6	Mercury	11.4	ug/kg	U	3.89	11.4	11.4	1	AV	JXL1	02/18/10 14:39	021810S1-4	951518
7440-02-0	Nickel	4.41	mg/kg		0.0981	0.392	0.392	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-09-7	Potassium	770000	ug/Kg	N	6950	27200	27200	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7782-49-2	Selenium	0.981	mg/kg	UN	0.49	0.981	0.981	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-22-4	Silver	167	ug/Kg	J	109	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-23-5	Sodium	59200	ug/Kg		7610	27200	27200	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-28-0	Thallium	0.0879	mg/kg	J	0.0588	0.196	0.196	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-61-1	Uranium	5.37	mg/kg	*N	0.0129	0.0392	0.0392	2	MS	PRB	02/25/10 22:18	100225-3	948769
7440-62-2	Vanadium	15800	ug/Kg		109	543	543	1	P	JWJ	02/20/10 04:18	021910A-1	948764
7440-66-6	Zinc	39000	ug/Kg		359	1090	1090	1	P	JWJ	02/20/10 04:18	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.509	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.564	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.58	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979013

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-8061

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 85

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7460000	ug/Kg		7730	22700	22700	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-36-0	Antimony	7380	ug/Kg		375	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-38-2	Arsenic	2	mg/kg		0.226	1.13	1.13	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-39-3	Barium	108000	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-41-7	Beryllium	2.99	mg/kg	*	0.0226	0.113	0.113	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-43-9	Cadmium	568	ug/Kg	U	114	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-70-2	Calcium	3270000	ug/Kg	N	9090	28400	28400	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-47-3	Chromium	11300	ug/Kg	*	170	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-48-4	Cobalt	2890	ug/Kg		170	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-50-8	Copper	547000	ug/Kg		341	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-89-6	Iron	10600000	ug/Kg		9090	28400	28400	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-92-1	Lead	294000	ug/Kg		284	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-95-4	Magnesium	1250000	ug/Kg	N	9660	34100	34100	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-96-5	Manganese	151000	ug/Kg		227	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7439-97-6	Mercury	10	ug/kg	J	4.21	12.4	12.4	1	AV	JXL1	02/18/10 14:41	021810S1-4	951518
7440-02-0	Nickel	6.79	mg/kg		0.113	0.452	0.452	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-09-7	Potassium	777000	ug/Kg	N	7270	28400	28400	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7782-49-2	Selenium	1.13	mg/kg	UN	0.565	1.13	1.13	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-22-4	Silver	513	ug/Kg	J	114	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-23-5	Sodium	52200	ug/Kg		7960	28400	28400	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-28-0	Thallium	0.085	mg/kg	J	0.0678	0.226	0.226	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-61-1	Uranium	80.1	mg/kg	*N	0.0149	0.0452	0.0452	2	MS	PRB	02/25/10 22:23	100225-3	948769
7440-62-2	Vanadium	18400	ug/Kg		114	568	568	1	P	JWJ	02/20/10 04:22	021910A-1	948764
7440-66-6	Zinc	86900	ug/Kg		375	1140	1140	1	P	JWJ	02/20/10 04:22	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.516	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.519	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.569	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979014

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-8063

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5600000	ug/Kg		8070	23700	23700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-36-0	Antimony	1560	ug/Kg		391	1190	1190	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-38-2	Arsenic	2.82	mg/kg		0.232	1.16	1.16	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-39-3	Barium	67500	ug/Kg		119	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-41-7	Beryllium	16.7	mg/kg	*	0.0232	0.116	0.116	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-43-9	Cadmium	593	ug/Kg	U	119	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-70-2	Calcium	1350000	ug/Kg	N	9490	29700	29700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-47-3	Chromium	15200	ug/Kg	*	178	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-48-4	Cobalt	4540	ug/Kg		178	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-50-8	Copper	17600	ug/Kg		356	1190	1190	1	P	JWJ	02/21/10 05:32	022010C-2	948764
7439-89-6	Iron	11300000	ug/Kg		9490	29700	29700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7439-92-1	Lead	158000	ug/Kg		297	1190	1190	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7439-95-4	Magnesium	1110000	ug/Kg	N	10100	35600	35600	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7439-96-5	Manganese	265000	ug/Kg		237	1190	1190	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7439-97-6	Mercury	12.8	ug/kg	U	4.34	12.8	12.8	1	AV	JXLJ	02/18/10 14:43	021810S1-4	951518
7440-02-0	Nickel	8.57	mg/kg		0.116	0.465	0.465	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-09-7	Potassium	978000	ug/Kg	N	7590	29700	29700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7782-49-2	Selenium	1.16	mg/kg	UN	0.581	1.16	1.16	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-22-4	Silver	593	ug/Kg	U	119	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-23-5	Sodium	52300	ug/Kg		8300	29700	29700	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-28-0	Thallium	0.0725	mg/kg	J	0.0697	0.232	0.232	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-61-1	Uranium	803	mg/kg	*N	0.0153	0.0465	0.0465	2	MS	PRB	02/25/10 22:29	100225-3	948769
7440-62-2	Vanadium	22700	ug/Kg		119	593	593	1	P	JWJ	02/20/10 04:25	021910A-1	948764
7440-66-6	Zinc	24200	ug/Kg		391	1190	1190	1	P	JWJ	02/20/10 04:25	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.517	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.528	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.577	g	30	mL	02/17/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245979015

BASIS: Dry Weight

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-8062

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: SOIL

%SOLIDS: 90.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1260000	ug/Kg		6960	20500	20500	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-36-0	Antimony	448	ug/Kg	J	338	1020	1020	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-38-2	Arsenic	0.561	mg/kg	J	0.215	1.07	1.07	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-39-3	Barium	21300	ug/Kg		102	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-41-7	Beryllium	0.353	mg/kg	*	0.0215	0.107	0.107	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-43-9	Cadmium	511	ug/Kg	U	102	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-70-2	Calcium	640000	ug/Kg	N	8180	25600	25600	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-47-3	Chromium	11000	ug/Kg	*	153	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-48-4	Cobalt	5860	ug/Kg		153	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-50-8	Copper	6170	ug/Kg		307	1020	1020	1	P	JWJ	02/21/10 05:36	022010C-2	948764
7439-89-6	Iron	9250000	ug/Kg		8180	25600	25600	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7439-92-1	Lead	8280	ug/Kg		256	1020	1020	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7439-95-4	Magnesium	238000	ug/Kg	N	8690	30700	30700	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7439-96-5	Manganese	226000	ug/Kg		205	1020	1020	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7439-97-6	Mercury	12.1	ug/kg	U	4.1	12.1	12.1	1	AV	JXL1	02/18/10 14:45	021810S1-4	951518
7440-02-0	Nickel	3.04	mg/kg		0.107	0.43	0.43	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-09-7	Potassium	310000	ug/Kg	N	6550	25600	25600	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7782-49-2	Selenium	1.07	mg/kg	UN	0.537	1.07	1.07	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-22-4	Silver	511	ug/Kg	U	102	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-23-5	Sodium	180000	ug/Kg		7160	25600	25600	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-28-0	Thallium	0.215	mg/kg	U	0.0645	0.215	0.215	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-61-1	Uranium	6.98	mg/kg	*N	0.0142	0.043	0.043	2	MS	PRB	02/25/10 22:35	100225-3	948769
7440-62-2	Vanadium	3700	ug/Kg		102	511	511	1	P	JWJ	02/20/10 04:29	021910A-1	948764
7440-66-6	Zinc	45900	ug/Kg		338	1020	1020	1	P	JWJ	02/20/10 04:29	021910A-1	948764

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948764	948763	SW846 3050B	0.54	g	50	mL	02/10/10	FGA
948769	948768	SW846 3050B	0.514	g	50	mL	02/10/10	FGA
951518	951517	SW846 7471A Prep	0.55	g	30	mL	02/17/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.13	ug/L	5	ug/L	102.6	90.0 – 110.0	AV	18-FEB-10 09:57	021810S1-4
	Aluminum	5190	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Antimony	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Barium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Cadmium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Calcium	5050	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Chromium	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Cobalt	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Copper	507	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Magnesium	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Manganese	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Potassium	2560	ug/L	2500	ug/L	102.4	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Silver	262	ug/L	250	ug/L	104.9	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Sodium	2570	ug/L	2500	ug/L	102.8	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Zinc	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-FEB-10 16:40	021910A-1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	20-FEB-10 21:07	022010C-2
	Lead	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	20-FEB-10 21:07	022010C-2
	Zinc	475	ug/L	500	ug/L	95	90.0 – 110.0	P	20-FEB-10 21:07	022010C-2
	Arsenic	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	25-FEB-10 18:09	100225-3
	Beryllium	50.8	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	25-FEB-10 18:09	100225-3
	Nickel	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	25-FEB-10 18:09	100225-3
	Selenium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	25-FEB-10 18:09	100225-3
	Thallium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	25-FEB-10 18:09	100225-3
	Uranium	53.1	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	25-FEB-10 18:09	100225-3
CCV01										
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	18-FEB-10 10:03	021810S1-4
	Aluminum	5300	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Antimony	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Barium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Cadmium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Calcium	5280	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Copper	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Iron	5350	ug/L	5000	ug/L	107.1	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Lead	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Magnesium	5420	ug/L	5000	ug/L	108.5	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Manganese	516	ug/L	500	ug/L	103.1	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Potassium	5360	ug/L	5000	ug/L	107.2	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Silver	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Sodium	10700	ug/L	10000	ug/L	106.9	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Vanadium	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Zinc	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	19-FEB-10 17:03	021910A-1
	Copper	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	20-FEB-10 21:30	022010C-2
	Lead	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	20-FEB-10 21:30	022010C-2
	Zinc	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	20-FEB-10 21:30	022010C-2
	Arsenic	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	25-FEB-10 18:38	100225-3
	Beryllium	51	ug/L	50	ug/L	102.1	90.0 – 110.0	MS	25-FEB-10 18:38	100225-3
	Nickel	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	25-FEB-10 18:38	100225-3
	Selenium	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	25-FEB-10 18:38	100225-3
	Thallium	48.5	ug/L	50	ug/L	97	90.0 – 110.0	MS	25-FEB-10 18:38	100225-3
	Uranium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	25-FEB-10 18:38	100225-3
CCV02										
	Mercury	5.07	ug/L	5	ug/L	101.4	80.0 – 120.0	AV	18-FEB-10 10:27	021810S1-4
	Aluminum	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Antimony	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Barium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cadmium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Calcium	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Copper	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Iron	5390	ug/L	5000	ug/L	107.7	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Lead	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Manganese	515	ug/L	500	ug/L	103	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Potassium	5260	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Silver	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Sodium	10700	ug/L	10000	ug/L	106.9	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Zinc	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-FEB-10 17:21	021910A-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	20-FEB-10 22:12	022010C-2
	Lead	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	20-FEB-10 22:12	022010C-2
	Zinc	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	20-FEB-10 22:12	022010C-2
	Arsenic	48.9	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	25-FEB-10 18:55	100225-3
	Beryllium	52.7	ug/L	50	ug/L	105.3	90.0 – 110.0	MS	25-FEB-10 18:55	100225-3
	Nickel	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	25-FEB-10 18:55	100225-3
	Selenium	54.4	ug/L	50	ug/L	108.8	90.0 – 110.0	MS	25-FEB-10 18:55	100225-3
	Thallium	48.9	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	25-FEB-10 18:55	100225-3
	Uranium	52.9	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	25-FEB-10 18:55	100225-3
CCV03	Mercury	5.22	ug/L	5	ug/L	104.5	80.0 – 120.0	AV	18-FEB-10 10:51	021810S1-4
	Aluminum	5210	ug/L	5000	ug/L	104.2	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Antimony	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Barium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Cadmium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Calcium	5140	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (% R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Cobalt	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Copper	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Iron	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Lead	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Magnesium	5340	ug/L	5000	ug/L	106.8	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Manganese	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Potassium	5180	ug/L	5000	ug/L	103.6	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Silver	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Sodium	10500	ug/L	10000	ug/L	105.5	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Vanadium	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-FEB-10 17:52	021910A-1
	Copper	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	20-FEB-10 23:26	022010C-2
	Lead	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	20-FEB-10 23:26	022010C-2
	Zinc	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	20-FEB-10 23:26	022010C-2
	Arsenic	46.7	ug/L	50	ug/L	93.5	90.0 – 110.0	MS	25-FEB-10 20:04	100225-3
	Beryllium	53	ug/L	50	ug/L	106	90.0 – 110.0	MS	25-FEB-10 20:04	100225-3
	Nickel	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	25-FEB-10 20:04	100225-3
	Selenium	48.7	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	25-FEB-10 20:04	100225-3
	Thallium	48	ug/L	50	ug/L	96	90.0 – 110.0	MS	25-FEB-10 20:04	100225-3
	Uranium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	25-FEB-10 20:04	100225-3
CCV04	Mercury	5.15	ug/L	5	ug/L	103	80.0 – 120.0	AV	18-FEB-10 11:15	021810S1-4
	Aluminum	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Antimony	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Barium	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Cadmium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Chromium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1
	Cobalt	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	19-FEB-10 18:24	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (% R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Copper	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Lead	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Magnesium	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Manganesec	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Potassium	4920	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Silver	490	ug/L	500	ug/L	98	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Sodium	9990	ug/L	10000	ug/L	99.9	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Vanadium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Zinc	489	ug/L	500	ug/L	97.9	90.0 - 110.0	P	19-FEB-10 18:24	021910A-1
	Copper	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	21-FEB-10 00:03	022010C-2
	Lead	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	21-FEB-10 00:03	022010C-2
	Zinc	496	ug/L	500	ug/L	99.3	90.0 - 110.0	P	21-FEB-10 00:03	022010C-2
	Arsenic	47.2	ug/L	50	ug/L	94.4	90.0 - 110.0	MS	25-FEB-10 20:57	100225-3
	Beryllium	51.8	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	25-FEB-10 20:57	100225-3
	Nickel	50.7	ug/L	50	ug/L	101.5	90.0 - 110.0	MS	25-FEB-10 20:57	100225-3
	Selenium	47.9	ug/L	50	ug/L	95.8	90.0 - 110.0	MS	25-FEB-10 20:57	100225-3
	Thallium	48	ug/L	50	ug/L	96	90.0 - 110.0	MS	25-FEB-10 20:57	100225-3
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	25-FEB-10 20:57	100225-3
CCV05	Mercury	5.01	ug/L	5	ug/L	100.2	80.0 - 120.0	AV	18-FEB-10 11:39	021810S1-4
	Aluminum	4920	ug/L	5000	ug/L	98.4	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1
	Antimony	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1
	Barium	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1
	Cadmium	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1
	Calcium	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1
	Chromium	478	ug/L	500	ug/L	95.6	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1
	Cobalt	483	ug/L	500	ug/L	96.5	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1
	Copper	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1
	Iron	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	19-FEB-10 18:57	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	475	ug/L	500	ug/L	95	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Magnesium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Manganese	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Potassium	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Silver	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Sodium	9910	ug/L	10000	ug/L	99.1	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Vanadium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Zinc	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 18:57	021910A-1
	Copper	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	21-FEB-10 00:40	022010C-2
	Lead	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	21-FEB-10 00:40	022010C-2
	Zinc	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	21-FEB-10 00:40	022010C-2
	Arsenic	47.7	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	25-FEB-10 21:43	100225-3
	Beryllium	51.9	ug/L	50	ug/L	103.8	90.0 – 110.0	MS	25-FEB-10 21:43	100225-3
	Nickel	49.9	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	25-FEB-10 21:43	100225-3
	Selenium	47.3	ug/L	50	ug/L	94.5	90.0 – 110.0	MS	25-FEB-10 21:43	100225-3
	Thallium	47.3	ug/L	50	ug/L	94.5	90.0 – 110.0	MS	25-FEB-10 21:43	100225-3
	Uranium	52.1	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	25-FEB-10 21:43	100225-3
CCV06										
	Mercury	5.02	ug/L	5	ug/L	100.3	80.0 – 120.0	AV	18-FEB-10 12:03	021810S1-4
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Antimony	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Barium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Cadmium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Calcium	4940	ug/L	5000	ug/L	98.7	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Chromium	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Copper	480	ug/L	500	ug/L	96	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Lead	480	ug/L	500	ug/L	96	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1
	Magnesium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	19-FEB-10 19:26	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	19-FEB-10 19:26	021910A-1
	Potassium	4890	ug/L	5000	ug/L	97.8	90.0 - 110.0	P	19-FEB-10 19:26	021910A-1
	Silver	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	19-FEB-10 19:26	021910A-1
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 - 110.0	P	19-FEB-10 19:26	021910A-1
	Vanadium	485	ug/L	500	ug/L	97	90.0 - 110.0	P	19-FEB-10 19:26	021910A-1
	Zinc	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	19-FEB-10 19:26	021910A-1
	Copper	493	ug/L	500	ug/L	98.6	90.0 - 110.0	P	21-FEB-10 01:19	022010C-2
	Lead	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	21-FEB-10 01:19	022010C-2
	Zinc	494	ug/L	500	ug/L	98.9	90.0 - 110.0	P	21-FEB-10 01:19	022010C-2
	Arsenic	47.4	ug/L	50	ug/L	94.8	90.0 - 110.0	MS	25-FEB-10 22:41	100225-3
	Beryllium	51.3	ug/L	50	ug/L	102.5	90.0 - 110.0	MS	25-FEB-10 22:41	100225-3
	Nickel	48.6	ug/L	50	ug/L	97.3	90.0 - 110.0	MS	25-FEB-10 22:41	100225-3
	Selenium	46.6	ug/L	50	ug/L	93.3	90.0 - 110.0	MS	25-FEB-10 22:41	100225-3
	Thallium	47.5	ug/L	50	ug/L	95.1	90.0 - 110.0	MS	25-FEB-10 22:41	100225-3
	Uranium	52	ug/L	50	ug/L	104.1	90.0 - 110.0	MS	25-FEB-10 22:41	100225-3
CCV07	Mercury	5.07	ug/L	5	ug/L	101.3	80.0 - 120.0	AV	18-FEB-10 12:26	021810S1-4
	Aluminum	4840	ug/L	5000	ug/L	96.8	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Antimony	468	ug/L	500	ug/L	93.7	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Barium	478	ug/L	500	ug/L	95.7	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Cadmium	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Calcium	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Chromium	476	ug/L	500	ug/L	95.1	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Cobalt	480	ug/L	500	ug/L	96	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Copper	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Iron	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Lead	472	ug/L	500	ug/L	94.4	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Magnesium	4940	ug/L	5000	ug/L	98.9	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Manganese	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Potassium	4790	ug/L	5000	ug/L	95.8	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Vanadium	478	ug/L	500	ug/L	95.5	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Zinc	478	ug/L	500	ug/L	95.6	90.0 - 110.0	P	19-FEB-10 19:59	021910A-1
	Copper	483	ug/L	500	ug/L	96.5	90.0 - 110.0	P	21-FEB-10 02:00	022010C-2
	Lead	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	21-FEB-10 02:00	022010C-2
	Zinc	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	21-FEB-10 02:00	022010C-2
CCV08										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 - 120.0	AV	18-FEB-10 12:50	021810S1-4
	Aluminum	4980	ug/L	5000	ug/L	99.7	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Antimony	480	ug/L	500	ug/L	96	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Barium	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Cadmium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Calcium	4980	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Chromium	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Cobalt	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Copper	476	ug/L	500	ug/L	95.3	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Iron	5130	ug/L	5000	ug/L	102.7	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Lead	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Magnesium	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Manganese	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Potassium	4930	ug/L	5000	ug/L	98.6	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Silver	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Sodium	9960	ug/L	10000	ug/L	99.6	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Vanadium	484	ug/L	500	ug/L	96.7	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Zinc	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	19-FEB-10 20:35	021910A-1
	Copper	479	ug/L	500	ug/L	95.9	90.0 - 110.0	P	21-FEB-10 02:37	022010C-2
	Lead	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	21-FEB-10 02:37	022010C-2
	Zinc	482	ug/L	500	ug/L	96.3	90.0 - 110.0	P	21-FEB-10 02:37	022010C-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV09										
	Mercury	4.93	ug/L	5	ug/L	98.6	80.0 – 120.0	AV	18-FEB-10 13:07	021810S1-4
	Aluminum	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Antimony	468	ug/L	500	ug/L	93.7	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Barium	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Cadmium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Chromium	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Cobalt	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Copper	467	ug/L	500	ug/L	93.5	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Iron	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Lead	472	ug/L	500	ug/L	94.5	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Magnesium	4980	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Manganese	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Potassium	4800	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Silver	474	ug/L	500	ug/L	94.7	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Sodium	9700	ug/L	10000	ug/L	97	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Vanadium	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Zinc	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 21:08	021910A-1
	Copper	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	21-FEB-10 03:16	022010C-2
	Lead	478	ug/L	500	ug/L	95.6	90.0 – 110.0	P	21-FEB-10 03:16	022010C-2
	Zinc	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	21-FEB-10 03:16	022010C-2
CCV10										
	Mercury	4.88	ug/L	5	ug/L	97.6	80.0 – 120.0	AV	18-FEB-10 13:31	021810S1-4
	Aluminum	4860	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Antimony	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Barium	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Cadmium	489	ug/L	500	ug/L	97.9	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Calcium	4890	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Chromium	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Cobalt	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Copper	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Iron	5030	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Lead	481	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Magnesium	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Potassium	4800	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Silver	484	ug/L	500	ug/L	96.8	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Vanadium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	19-FEB-10 21:52	021910A-1
	Copper	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	21-FEB-10 03:57	022010C-2
	Lead	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	21-FEB-10 03:57	022010C-2
	Zinc	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	21-FEB-10 03:57	022010C-2
CCV11										
	Mercury	2.33	ug/L	5	ug/L	46.5	80.0 – 120.0	AV	18-FEB-10 13:54	021810S1-4
	Aluminum	4880	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Antimony	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Barium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Cadmium	483	ug/L	500	ug/L	96.5	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Calcium	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Chromium	477	ug/L	500	ug/L	95.5	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Cobalt	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Copper	473	ug/L	500	ug/L	94.7	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Iron	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Lead	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Magnesium	4950	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Manganese	491	ug/L	500	ug/L	98.1	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Potassium	4820	ug/L	5000	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Silver	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Sodium	9730	ug/L	10000	ug/L	97.3	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Vanadium	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Zinc	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	19-FEB-10 22:28	021910A-1
	Copper	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	21-FEB-10 04:37	022010C-2
	Lead	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	21-FEB-10 04:37	022010C-2
	Zinc	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	21-FEB-10 04:37	022010C-2
CCV12										
	Mercury	5.32	ug/L	5	ug/L	106.5	80.0 – 120.0	AV	18-FEB-10 14:05	021810S1-4
	Aluminum	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Antimony	478	ug/L	500	ug/L	95.7	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Barium	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Cadmium	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Calcium	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Chromium	477	ug/L	500	ug/L	95.3	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Cobalt	479	ug/L	500	ug/L	95.8	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Copper	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Lead	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Magnesium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Manganese	490	ug/L	500	ug/L	98	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Potassium	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Silver	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Vanadium	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Zinc	479	ug/L	500	ug/L	95.7	90.0 – 110.0	P	19-FEB-10 23:05	021910A-1
	Copper	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	21-FEB-10 05:13	022010C-2
	Lead	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	21-FEB-10 05:13	022010C-2
	Zinc	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	21-FEB-10 05:13	022010C-2
CCV13										
	Mercury	5.09	ug/L	5	ug/L	101.9	80.0 – 120.0	AV	18-FEB-10 14:29	021810S1-4
	Aluminum	4790	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	19-FEB-10 23:38	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3_MER536.OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Antimony	466	ug/L	500	ug/L	93.1	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Barium	473	ug/L	500	ug/L	94.7	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Cadmium	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Calcium	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Chromium	470	ug/L	500	ug/L	94	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Cobalt	473	ug/L	500	ug/L	94.7	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Copper	467	ug/L	500	ug/L	93.4	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Iron	4920	ug/L	5000	ug/L	98.5	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Lead	467	ug/L	500	ug/L	93.5	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Magnesium	4880	ug/L	5000	ug/L	97.5	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Manganese	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Potassium	4760	ug/L	5000	ug/L	95.2	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Silver	475	ug/L	500	ug/L	95.1	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Sodium	9590	ug/L	10000	ug/L	95.9	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Vanadium	473	ug/L	500	ug/L	94.6	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Zinc	472	ug/L	500	ug/L	94.5	90.0 - 110.0	P	19-FEB-10 23:38	021910A-1
	Copper	490	ug/L	500	ug/L	98	90.0 - 110.0	P	21-FEB-10 05:43	022010C-2
	Lead	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	21-FEB-10 05:43	022010C-2
	Zinc	493	ug/L	500	ug/L	98.5	90.0 - 110.0	P	21-FEB-10 05:43	022010C-2
CCV14	Mercury	4.97	ug/L	5	ug/L	99.4	80.0 - 120.0	AV	18-FEB-10 14:47	021810S1-4
	Aluminum	4880	ug/L	5000	ug/L	97.6	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Antimony	474	ug/L	500	ug/L	94.8	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Barium	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Cadmium	482	ug/L	500	ug/L	96.3	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Calcium	4860	ug/L	5000	ug/L	97.2	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Chromium	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Cobalt	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Copper	475	ug/L	500	ug/L	95	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1
	Iron	5000	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	20-FEB-10 00:11	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	475	ug/L	500	ug/L	95	90.0 – 110.0	P	20-FEB-10 00:11	021910A-1
	Magnesium	4950	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	20-FEB-10 00:11	021910A-1
	Manganese	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	20-FEB-10 00:11	021910A-1
	Potassium	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	20-FEB-10 00:11	021910A-1
	Silver	482	ug/L	500	ug/L	96.3	90.0 – 110.0	P	20-FEB-10 00:11	021910A-1
	Sodium	9770	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	20-FEB-10 00:11	021910A-1
	Vanadium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	20-FEB-10 00:11	021910A-1
	Zinc	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	20-FEB-10 00:11	021910A-1
CCV15	Aluminum	4850	ug/L	5000	ug/L	97	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Antimony	470	ug/L	500	ug/L	94	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Barium	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Cadmium	474	ug/L	500	ug/L	94.9	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Calcium	4790	ug/L	5000	ug/L	95.7	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Chromium	471	ug/L	500	ug/L	94.1	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Cobalt	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Copper	471	ug/L	500	ug/L	94.1	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Iron	4980	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Lead	470	ug/L	500	ug/L	94	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Magnesium	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Manganese	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Potassium	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Silver	478	ug/L	500	ug/L	95.5	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Sodium	9770	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Vanadium	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
	Zinc	472	ug/L	500	ug/L	94.4	90.0 – 110.0	P	20-FEB-10 00:47	021910A-1
CCV16	Aluminum	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	20-FEB-10 01:35	021910A-1
	Antimony	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	20-FEB-10 01:35	021910A-1
	Barium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	20-FEB-10 01:35	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cadmium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Calcium	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Chromium	483	ug/L	500	ug/L	96.5	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Cobalt	485	ug/L	500	ug/L	97	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Copper	478	ug/L	500	ug/L	95.6	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Iron	5080	ug/L	5000	ug/L	101.5	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Lead	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Magnesium	5040	ug/L	5000	ug/L	100.8	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Manganese	495	ug/L	500	ug/L	99	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Potassium	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Silver	485	ug/L	500	ug/L	97	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Vanadium	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
	Zinc	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	20-FEB-10 01:35	021910A-1
CCV17	Aluminum	4910	ug/L	5000	ug/L	98.2	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Antimony	476	ug/L	500	ug/L	95.1	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Barium	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Cadmium	482	ug/L	500	ug/L	96.5	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Calcium	4920	ug/L	5000	ug/L	98.4	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Chromium	477	ug/L	500	ug/L	95.4	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Cobalt	481	ug/L	500	ug/L	96.1	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Copper	473	ug/L	500	ug/L	94.7	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Iron	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Lead	474	ug/L	500	ug/L	94.9	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Magnesium	4970	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Manganese	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Potassium	4840	ug/L	5000	ug/L	96.9	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Silver	481	ug/L	500	ug/L	96.2	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1
	Sodium	9830	ug/L	10000	ug/L	98.3	90.0 - 110.0	P	20-FEB-10 02:15	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Vanadium	480	ug/L	500	ug/L	95.9	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
	Zinc	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	20-FEB-10 02:15	021910A-1
CCV18										
	Aluminum	4870	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Antimony	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Barium	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Cadmium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Calcium	4860	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Chromium	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Cobalt	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Copper	469	ug/L	500	ug/L	93.7	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Iron	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Lead	475	ug/L	500	ug/L	95.1	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Magnesium	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Manganese	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Potassium	4860	ug/L	5000	ug/L	97.2	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Silver	477	ug/L	500	ug/L	95.4	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Sodium	9790	ug/L	10000	ug/L	97.9	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Vanadium	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
	Zinc	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	20-FEB-10 02:52	021910A-1
CCV19										
	Aluminum	4970	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Antimony	477	ug/L	500	ug/L	95.5	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Barium	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Cadmium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Calcium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Chromium	485	ug/L	500	ug/L	97	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Cobalt	487	ug/L	500	ug/L	97.3	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Copper	482	ug/L	500	ug/L	96.5	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Iron	5050	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Lead	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Magnesium	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Manganese	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Potassium	4940	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Silver	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Sodium	9950	ug/L	10000	ug/L	99.5	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Vanadium	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
	Zinc	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	20-FEB-10 03:26	021910A-1
CCV20	Aluminum	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Antimony	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Barium	490	ug/L	500	ug/L	97.9	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Cadmium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Calcium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Chromium	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Copper	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Lead	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Magnesium	5060	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Potassium	4960	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Silver	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Sodium	10000	ug/L	10000	ug/L	100.1	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Vanadium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
	Zinc	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	20-FEB-10 03:59	021910A-1
CCV21	Aluminum	4900	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Antimony	460	ug/L	500	ug/L	92	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Barium	466	ug/L	500	ug/L	93.2	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: JCPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cadmium	469	ug/L	500	ug/L	93.8	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Calcium	4870	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Chromium	464	ug/L	500	ug/L	92.7	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Cobalt	467	ug/L	500	ug/L	93.5	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Copper	467	ug/L	500	ug/L	93.4	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Iron	4990	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Lead	466	ug/L	500	ug/L	93.2	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Magnesium	4940	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Manganese	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Potassium	4860	ug/L	5000	ug/L	97.3	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Silver	470	ug/L	500	ug/L	94	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Sodium	9840	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Vanadium	467	ug/L	500	ug/L	93.5	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1
	Zinc	466	ug/L	500	ug/L	93.3	90.0 – 110.0	P	20-FEB-10 04:33	021910A-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS3,MER536,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.218	ug/L	.2	ug/L	109	70.0 – 130.0	AV	18-FEB-10 10:01	021810S1-4
	Nickel	2.09	ug/L	2	ug/L	104.5	70.0 – 130.0	MS	25-FEB-10 18:21	100225-3
	Thallium	1.09	ug/L	1	ug/L	109.2	70.0 – 130.0	MS	25-FEB-10 18:21	100225-3
	Beryllium	.542	ug/L	.5	ug/L	108.4	70.0 – 130.0	MS	25-FEB-10 18:21	100225-3
	Uranium	.218	ug/L	.2	ug/L	109	70.0 – 130.0	MS	25-FEB-10 18:21	100225-3
	Selenium	5.37	ug/L	5	ug/L	107.3	70.0 – 130.0	MS	25-FEB-10 18:21	100225-3
	Arsenic	5.88	ug/L	5	ug/L	117.7	70.0 – 130.0	MS	25-FEB-10 18:21	100225-3
PQL01										
	Aluminum	198	ug/L	200	ug/L	98.8	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Iron	101	ug/L	100	ug/L	100.9	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Lead	10.5	ug/L	10	ug/L	105.2	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Magnesium	305	ug/L	300	ug/L	101.7	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Manganese	10.3	ug/L	10	ug/L	102.7	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Potassium	157	ug/L	150	ug/L	104.4	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Silver	4.8	ug/L	5	ug/L	96.1	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Sodium	312	ug/L	300	ug/L	104	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Antimony	10.8	ug/L	10	ug/L	108.3	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Barium	4.87	ug/L	5	ug/L	97.4	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Cadmium	5	ug/L	5	ug/L	99.9	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Chromium	5.48	ug/L	5	ug/L	109.5	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Cobalt	4.54	ug/L	5	ug/L	90.9	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Copper	10.1	ug/L	10	ug/L	100.7	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Vanadium	5.03	ug/L	5	ug/L	100.5	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Zinc	9.76	ug/L	10	ug/L	97.6	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Calcium	188	ug/L	200	ug/L	94.2	70.0 – 130.0	P	19-FEB-10 16:47	021910A-1
	Lead	8.54	ug/L	10	ug/L	85.4	70.0 – 130.0	P	20-FEB-10 21:14	022010C-2
	Copper	10.7	ug/L	10	ug/L	106.7	70.0 – 130.0	P	20-FEB-10 21:14	022010C-2
	Zinc	10.5	ug/L	10	ug/L	104.8	70.0 – 130.0	P	20-FEB-10 21:14	022010C-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
ICB01										
	Mercury	-0.129	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 09:59	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 16:44	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 16:44	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 16:44	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 16:44	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 16:44	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 16:44	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 16:44	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 16:44	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 21:10	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 21:10	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 21:10	022010C-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	25-FEB-10 18:15	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-FEB-10 18:15	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	25-FEB-10 18:15	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	25-FEB-10 18:15	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	25-FEB-10 18:15	100225-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-FEB-10 18:15	100225-3
CCB01										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 10:05	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 17:07	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:07	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ng/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:07	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:07	021910A-1
	Lead	5.21	+/-10	J	2.5	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 17:07	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Potassium	80.96	+/-250	J	64.0	250	SOL	P	19-FEB-10 17:07	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Sodium	72.13	+/-250	J	70.0	250	SOL	P	19-FEB-10 17:07	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:07	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:07	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 21:34	022010C-2
	Lead	6.22	+/-10	J	2.5	10.0	SOL	P	20-FEB-10 21:34	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 21:34	022010C-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	25-FEB-10 18:44	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-FEB-10 18:44	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	25-FEB-10 18:44	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	25-FEB-10 18:44	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	25-FEB-10 18:44	100225-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-FEB-10 18:44	100225-3
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 10:29	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 17:25	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:25	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:25	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 17:25	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 17:25	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 17:25	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:25	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:25	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 22:16	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 22:16	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 22:16	022010C-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	25-FEB-10 19:01	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-FEB-10 19:01	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	25-FEB-10 19:01	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	25-FEB-10 19:01	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	25-FEB-10 19:01	100225-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-FEB-10 19:01	100225-3
CCB03	Mercury	-0.08	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 10:53	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 17:55	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:55	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:55	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 17:55	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 17:55	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 17:55	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 17:55	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 17:55	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 17:55	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 17:55	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 17:55	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 17:55	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 23:30	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 23:30	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 23:30	022010C-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	25-FEB-10 20:10	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-FEB-10 20:10	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	25-FEB-10 20:10	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	25-FEB-10 20:10	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	25-FEB-10 20:10	100225-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-FEB-10 20:10	100225-3
CCB04	Mercury	-0.106	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 11:17	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 18:28	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 18:28	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 18:28	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 18:28	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Manganese	2.04	+/-10	J	2.0	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 18:28	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 18:28	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 18:28	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 18:28	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 00:07	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 00:07	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 00:07	022010C-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	25-FEB-10 21:03	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-FEB-10 21:03	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	25-FEB-10 21:03	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	25-FEB-10 21:03	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	25-FEB-10 21:03	100225-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-FEB-10 21:03	100225-3
CCB05	Mercury	-0.154	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 11:41	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 19:01	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 19:01	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 19:01	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 19:01	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 19:01	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:01	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 19:01	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:01	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 19:01	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 00:44	022010C-2
	Lead	-2.8	+/-10	J	2.5	10.0	SOL	P	21-FEB-10 00:44	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 00:44	022010C-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	25-FEB-10 21:49	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-FEB-10 21:49	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	25-FEB-10 21:49	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	25-FEB-10 21:49	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	25-FEB-10 21:49	100225-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-FEB-10 21:49	100225-3
CCB06	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 12:05	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 19:30	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 19:30	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 19:30	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 19:30	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 19:30	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 19:30	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 19:30	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 19:30	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 19:30	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 19:30	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 19:30	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 19:30	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

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<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 01:23	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 01:23	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 01:23	022010C-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	25-FEB-10 22:46	100225-3
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	25-FEB-10 22:46	100225-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	25-FEB-10 22:46	100225-3
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	25-FEB-10 22:46	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	25-FEB-10 22:46	100225-3
	Uranium	0.066	+/-2	U	0.066	0.2	SOL	MS	25-FEB-10 22:46	100225-3
CCB07	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 12:28	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 20:02	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 20:02	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 20:02	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 20:02	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 20:02	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 20:02	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:02	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 20:02	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 02:03	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 02:03	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 02:03	022010C-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB08										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 12:52	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 20:39	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 20:39	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 20:39	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 20:39	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 20:39	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 20:39	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 20:39	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 20:39	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 02:40	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 02:40	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 02:40	022010C-2
CCB09										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	18-FEB-10 13:09	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 21:12	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 21:12	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 21:12	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 21:12	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 21:12	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 21:12	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 21:12	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 21:12	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 21:12	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 21:12	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:12	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 21:12	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 03:20	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 03:20	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 03:20	022010C-2
CCB10	Mercury	-0.083	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 13:33	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 21:55	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 21:55	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 21:55	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 21:55	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 21:55	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 21:55	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 21:55	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 21:55	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 21:55	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 21:55	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 21:55	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 21:55	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 04:00	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 04:00	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 04:00	022010C-2
CCB11	Mercury	-0.241	+/- .2		0.068	0.2	SOL	AV	18-FEB-10 13:56	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 22:32	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 22:32	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 22:32	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 22:32	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 22:32	021910A-1
	Lead	-3.7	+/-10	J	2.5	10.0	SOL	P	19-FEB-10 22:32	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 22:32	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 22:32	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 22:32	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 22:32	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 22:32	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 22:32	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 04:41	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 04:41	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 04:41	022010C-2
CCB12	Mercury	-0.094	+/- .2	J	0.068	0.2	SOL	AV	18-FEB-10 14:08	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 23:09	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:09	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 23:09	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 23:09	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 23:09	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 23:09	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 23:09	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:09	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 23:09	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 05:17	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 05:17	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 05:17	022010C-2
CCB13	Mercury	-0.091	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 14:31	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-FEB-10 23:41	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 23:41	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-FEB-10 23:41	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-FEB-10 23:41	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-FEB-10 23:41	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-FEB-10 23:41	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-FEB-10 23:41	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-FEB-10 23:41	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	21-FEB-10 05:47	022010C-2
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	21-FEB-10 05:47	022010C-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	21-FEB-10 05:47	022010C-2
CCB14	Mercury	-0.111	+/-2	J	0.068	0.2	SOL	AV	18-FEB-10 14:49	021810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 00:15	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 00:15	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 00:15	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 00:15	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 00:15	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 00:15	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 00:15	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 00:15	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 00:15	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 00:15	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:15	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 00:15	021910A-1
CCB15	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 00:51	021910A-1
	Antimony	-4.24	+/-10	J	3.3	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:51	021910A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

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<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB16	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 00:51	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 00:51	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 00:51	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 00:51	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 00:51	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 00:51	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 00:51	021910A-1
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 01:38	021910A-1
CCB16	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 01:38	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 01:38	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 01:38	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 01:38	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 01:38	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 01:38	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 01:38	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 01:38	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 01:38	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 01:38	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 01:38	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result ug/L</u>	<u>Acceptance</u>	<u>Conc Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run</u>
CCB17										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 02:19	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 02:19	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 02:19	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 02:19	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 02:19	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 02:19	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 02:19	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 02:19	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 02:19	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 02:19	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:19	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 02:19	021910A-1
CCB18										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 02:56	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 02:56	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:56	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:56	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 02:56	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 02:56	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 02:56	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 02:56	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 02:56	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 02:56	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 02:56	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 02:56	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 02:56	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:56	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 02:56	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 02:56	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 02:56	021910A-1
CCB19	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 03:29	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 03:29	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 03:29	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 03:29	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 03:29	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 03:29	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 03:29	021910A-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	20-FEB-10 03:29	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 03:29	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 03:29	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 03:29	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 03:29	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 03:29	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 03:29	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 03:29	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 03:29	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 03:29	021910A-1
CCB20	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 04:03	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 04:03	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 04:03	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 04:03	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 04:03	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 04:03	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 04:03	021910A-1
	Copper	18.29	+/-10		3.0	10.0	SOL	P	20-FEB-10 04:03	021910A-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 04:03	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 04:03	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 04:03	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 04:03	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 04:03	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 04:03	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 04:03	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 04:03	021910A-1
	Zinc	6.49	+/-10	J	3.3	10.0	SOL	P	20-FEB-10 04:03	021910A-1
CCB21	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	20-FEB-10 04:36	021910A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 04:36	021910A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 04:36	021910A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 04:36	021910A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 04:36	021910A-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 04:36	021910A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	20-FEB-10 04:36	021910A-1
	Copper	4.67	+/-10	J	3.0	10.0	SOL	P	20-FEB-10 04:36	021910A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	20-FEB-10 04:36	021910A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	20-FEB-10 04:36	021910A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	20-FEB-10 04:36	021910A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	20-FEB-10 04:36	021910A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	20-FEB-10 04:36	021910A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 04:36	021910A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	20-FEB-10 04:36	021910A-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	20-FEB-10 04:36	021910A-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	20-FEB-10 04:36	021910A-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1514
Contract: LANL01004
Matrix: SOIL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202032610	Aluminum	5920	ug/Kg	+/-17400	U	P	5920	17400
	Antimony	287	ug/Kg	+/-871	U	P	287	871
	Barium	87.1	ug/Kg	+/-436	U	P	87.1	436
	Calcium	6970	ug/Kg	+/-21800	U	P	6970	21800
	Cobalt	131	ug/Kg	+/-436	U	P	131	436
	Iron	6970	ug/Kg	+/-21800	U	P	6970	21800
	Magnesium	7400	ug/Kg	+/-26100	U	P	7400	26100
	Potassium	5570	ug/Kg	+/-21800	U	P	5570	21800
	Sodium	6100	ug/Kg	+/-21800	U	P	6100	21800
	Zinc	287	ug/Kg	+/-871	U	P	287	871
	Vanadium	87.1	ug/Kg	+/-436	U	P	87.1	436
	Silver	87.1	ug/Kg	+/-436	U	P	87.1	436
	Manganese	174	ug/Kg	+/-871	U	P	174	871
	Lead	218	ug/Kg	+/-871	U	P	218	871
	Copper	261	ug/Kg	+/-871	U	P	261	871
	Chromium	293	ug/Kg	+/-436	J	P	131	436
	Cadmium	87.1	ug/Kg	+/-436	U	P	87.1	436
1202032619	Arsenic	0.181	mg/kg	+/-0.904	U	MS	0.181	0.904
	Nickel	0.0904	mg/kg	+/-0.362	U	MS	0.0904	0.362
	Selenium	0.452	mg/kg	+/-0.904	U	MS	0.452	0.904
	Uranium	0.0119	mg/kg	+/-0.0362	U	MS	0.0119	0.0362
	Thallium	0.0543	mg/kg	+/-0.181	U	MS	0.0543	0.181
	Beryllium	0.0181	mg/kg	+/-0.0904	U	MS	0.0181	0.0904
1202039198	Mercury	-11.2	ug/kg	+/-11.9	J	AV	4.06	11.9

METALS
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Interference Check Sample

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	515000	ug/L	500000	ug/L	103	80.0 – 120.0	19-FEB-10 16:51	021910A-1
	Antimony	-14.6	ug/L					19-FEB-10 16:51	021910A-1
	Barium	7.73	ug/L					19-FEB-10 16:51	021910A-1
	Cadmium	-6.35	ug/L					19-FEB-10 16:51	021910A-1
	Calcium	489000	ug/L	500000	ug/L	97.8	80.0 – 120.0	19-FEB-10 16:51	021910A-1
	Chromium	-0.312	ug/L					19-FEB-10 16:51	021910A-1
	Cobalt	2.17	ug/L					19-FEB-10 16:51	021910A-1
	Copper	-2.01	ug/L					19-FEB-10 16:51	021910A-1
	Iron	191000	ug/L	200000	ug/L	95.7	80.0 – 120.0	19-FEB-10 16:51	021910A-1
	Lead	7.77	ug/L					19-FEB-10 16:51	021910A-1
	Magnesium	494000	ug/L	500000	ug/L	98.8	80.0 – 120.0	19-FEB-10 16:51	021910A-1
	Manganese	8.98	ug/L					19-FEB-10 16:51	021910A-1
	Potassium	-20.1	ug/L					19-FEB-10 16:51	021910A-1
	Silver	-6.6	ug/L					19-FEB-10 16:51	021910A-1
	Sodium	30.3	ug/L					19-FEB-10 16:51	021910A-1
	Vanadium	-3.3	ug/L					19-FEB-10 16:51	021910A-1
	Zinc	-9.41	ug/L					19-FEB-10 16:51	021910A-1
ICSAB01									
	Aluminum	510000	ug/L	500000	ug/L	102	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Antimony	505	ug/L	500	ug/L	101	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Barium	503	ug/L	500	ug/L	101	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Cadmium	459	ug/L	500	ug/L	91.9	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Calcium	485000	ug/L	500000	ug/L	97	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Chromium	489	ug/L	500	ug/L	97.8	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Cobalt	435	ug/L	500	ug/L	87.1	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Copper	543	ug/L	500	ug/L	109	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Iron	189000	ug/L	200000	ug/L	94.4	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Lead	484	ug/L	500	ug/L	96.8	80.0 – 120.0	19-FEB-10 16:54	021910A-1
	Magnesium	489000	ug/L	500000	ug/L	97.8	80.0 – 120.0	19-FEB-10 16:54	021910A-1

METALS
-4-
Interference Check Sample

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	489	ug/L	500	ug/L	97.8	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Potassium	5060	ug/L	5000	ug/L	101	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Silver	257	ug/L	250	ug/L	103	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Sodium	5160	ug/L	5000	ug/L	103	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Vanadium	520	ug/L	500	ug/L	104	80.0 - 120.0	19-FEB-10 16:54	021910A-1
	Zinc	466	ug/L	500	ug/L	93.3	80.0 - 120.0	19-FEB-10 16:54	021910A-1

METALS
-4-
Interference Check Sample

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Copper	-0.461	ug/L					20-FEB-10 21:18	022010C-2
	Lead	4.99	ug/L					20-FEB-10 21:18	022010C-2
	Zinc	-9.25	ug/L					20-FEB-10 21:18	022010C-2
ICSAB01									
	Copper	527	ug/L	500	ug/L	105	80.0 - 120.0	20-FEB-10 21:20	022010C-2
	Lead	472	ug/L	500	ug/L	94.4	80.0 - 120.0	20-FEB-10 21:20	022010C-2
	Zinc	454	ug/L	500	ug/L	90.8	80.0 - 120.0	20-FEB-10 21:20	022010C-2

METALS
-4-
Interference Check Sample

SDG No: 10-1514

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	1.17	ug/L					25-FEB-10 18:26	100225-3
	Beryllium	0.048	ug/L					25-FEB-10 18:26	100225-3
	Nickel	3.19	ug/L					25-FEB-10 18:26	100225-3
	Selenium	1.83	ug/L					25-FEB-10 18:26	100225-3
	Thallium	0.023	ug/L					25-FEB-10 18:26	100225-3
	Uranium	-0.021	ug/L					25-FEB-10 18:26	100225-3
ICSAB01									
	Arsenic	21.0	ug/L	20	ug/L	105	80.0 - 120.0	25-FEB-10 18:32	100225-3
	Beryllium	16.3	ug/L	20	ug/L	81.5	80.0 - 120.0	25-FEB-10 18:32	100225-3
	Nickel	21.5	ug/L	23.31	ug/L	92.2	80.0 - 120.0	25-FEB-10 18:32	100225-3
	Selenium	20.9	ug/L	20	ug/L	105	80.0 - 120.0	25-FEB-10 18:32	100225-3
	Thallium	19.4	ug/L	20	ug/L	97	80.0 - 120.0	25-FEB-10 18:32	100225-3
	Uranium	22.3	ug/L	20	ug/L	112	80.0 - 120.0	25-FEB-10 18:32	100225-3

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1514

Client ID RE15-10-7980S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 95.4

Sample ID: 245979001

Spike ID: 1202032613

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		7090000		3980000		488000	637	N/A	P
Antimony	ug/Kg	75-125	41300		729	J	48800	83.1		P
Barium	ug/Kg	75-125	93900		46000		48800	98.3		P
Cadmium	ug/Kg	75-125	46500		94.6	U	48800	95.3		P
Calcium	ug/Kg	75-125	1830000		1490000		488000	68.9	N	P
Chromium	ug/Kg	75-125	55500		16000		48800	80.9		P
Cobalt	ug/Kg	75-125	49300		3590		48800	93.7		P
Copper	ug/Kg	75-125	52500		3610		48800	100		P
Iron	ug/Kg		12200000		11500000		488000	133	N/A	P
Lead	ug/Kg	75-125	54600		7910		48800	95.7		P
Magnesium	ug/Kg	75-125	1540000		791000		488000	154	N	P
Manganese	ug/Kg		265000		214000		48800	103	N/A	P
Potassium	ug/Kg	75-125	1240000		628000		488000	126	N	P
Silver	ug/Kg	75-125	46800		94.6	U	48800	95.9		P
Sodium	ug/Kg	75-125	691000		244000		488000	91.6		P
Vanadium	ug/Kg	75-125	56800		8750		48800	98.4		P
Zinc	ug/Kg	75-125	89400		42700		48800	95.6		P

METALS

--5a--

Matrix Spike Duplicate Summary

SDG NO. 10-1514 Client ID RE15-10-7980SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 95.4

Sample ID: 245979001 Spike ID: 1202032614

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		6670000		3980000		497000	541	N/A	P
Antimony	ug/Kg	75-125	42800		729	J	49700	84.5		P
Barium	ug/Kg	75-125	94300		46000		49700	97.1		P
Cadmium	ug/Kg	75-125	47300		94.6	U	49700	95.1		P
Calcium	ug/Kg	75-125	1740000		1490000		497000	49.1	N	P
Chromium	ug/Kg	75-125	56400		16000		49700	81.2		P
Cobalt	ug/Kg	75-125	49800		3590		49700	93		P
Copper	ug/Kg	75-125	53200		3610		49700	99.7		P
Iron	ug/Kg		11600000		11500000		497000	15.6	N/A	P
Lead	ug/Kg	75-125	55300		7910		49700	95.2		P
Magnesium	ug/Kg	75-125	1430000		791000		497000	128	N	P
Manganese	ug/Kg		276000		214000		49700	124	N/A	P
Potassium	ug/Kg	75-125	1200000		628000		497000	114		P
Silver	ug/Kg	75-125	47700		94.6	U	49700	95.9		P
Sodium	ug/Kg	75-125	678000		244000		497000	87.4		P
Vanadium	ug/Kg	75-125	57200		8750		49700	97.5		P
Zinc	ug/Kg	75-125	88800		42700		49700	92.6		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1514

Client ID RE15-10-7980S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 95.4

Sample ID: 245979001

Spike ID: 1202032622

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	7.69		1.51		7.64	80.9		MS
Beryllium	mg/kg	75-125	4.39		0.554		4.77	80.3		MS
Nickel	mg/kg	75-125	8.39		3.79		4.77	96.3		MS
Selenium	mg/kg	75-125	1.33		0.486	U	1.91	58.9	N	MS
Thallium	mg/kg	75-125	8.36		0.0949	J	9.55	86.6		MS
Uranium	mg/kg	75-125	5.24		0.641		4.77	96.4		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1514 Client ID RE15-10-7980SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 95.4

Sample ID: 245979001 Spike ID: 1202032623

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	8.4		1.51		7.88	87.3		MS
Beryllium	mg/kg	75-125	4.46		0.554		4.93	79.3		MS
Nickel	mg/kg	75-125	8.4		3.79		4.93	93.6		MS
Selenium	mg/kg	75-125	1.44		0.486	U	1.97	62.6	N	MS
Thallium	mg/kg	75-125	8.82		0.0949	J	9.85	88.5		MS
Uranium	mg/kg	75-125	6.84		0.641		4.93	126	N	MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1514 Client ID RE15-10-7980S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 95.4

Sample ID: 245979001 Spike ID: 1202039201

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	144		16.2		112	115		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1514 **Client ID** RE15-10-7980SD**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 95.4**Sample ID:** 245979001 **Spike ID:** 1202039207

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	144		16.2		110	116		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7980D

Sample ID: 245979001

Duplicate ID: 1202032611

Percent Solids for Dup: 95.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20%	3980000		3770000		5.48		P
Antimony	ug/Kg	+/-982	729 J		571 J		24.4		P
Barium	ug/Kg	+/-20%	46000		40200		13.4		P
Cadmium	ug/Kg		94.6 U		98.2 U				P
Calcium	ug/Kg	+/-20%	1490000		1540000		3.21		P
Chromium	ug/Kg	+/-20%	16000		9100		55	*	P
Cobalt	ug/Kg	+/-20%	3590		2940		20		P
Copper	ug/Kg	+/-982	3610		3560		1.4		P
Iron	ug/Kg	+/-20%	11500000		12300000		6.34		P
Lead	ug/Kg	+/-20%	7910		8180		3.44		P
Magnesium	ug/Kg	+/-20%	791000		778000		1.61		P
Manganese	ug/Kg	+/-20%	214000		229000		6.56		P
Potassium	ug/Kg	+/-20%	628000		622000		1.05		P
Silver	ug/Kg		94.6 U		98.2 U				P
Sodium	ug/Kg	+/-20%	244000		232000		4.98		P
Vanadium	ug/Kg	+/-20%	8750		8870		1.28		P
Zinc	ug/Kg	+/-20%	42700		43400		1.57		P

Metals

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Duplicate Sample Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7980SD

Sample ID: 1202032613

Duplicate ID: 1202032614

Percent Solids for Dup: 95.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/-20	7090000		6670000		6.07		P
Antimony	ug/Kg	+/-20	41300		42800		3.49		P
Barium	ug/Kg	+/-20	93900		94300		.352		P
Cadmium	ug/Kg	+/-20	46500		47300		1.69		P
Calcium	ug/Kg	+/-20	1830000		1740000		5.18		P
Chromium	ug/Kg	+/-20	55500		56400		1.65		P
Cobalt	ug/Kg	+/-20	49300		49800		.98		P
Copper	ug/Kg	+/-20	52500		53200		1.27		P
Iron	ug/Kg	+/-20	12200000		11600000		4.8		P
Lead	ug/Kg	+/-20	54600		55300		1.22		P
Magnesium	ug/Kg	+/-20	1540000		1430000		7.79		P
Manganese	ug/Kg	+/-20	265000		276000		4.2		P
Potassium	ug/Kg	+/-20	1240000		1200000		3.68		P
Silver	ug/Kg	+/-20	46800		47700		1.9		P
Sodium	ug/Kg	+/-20	691000		678000		1.79		P
Vanadium	ug/Kg	+/-20	56800		57200		.806		P
Zinc	ug/Kg	+/-20	89400		88800		.705		P

Metals

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Duplicate Sample Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7980D

Sample ID: 245979001

Duplicate ID: 1202032620

Percent Solids for Dup: 95.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/- .997	1.51		1.28		16.2		MS
Beryllium	mg/kg	+/- .0997	0.554		0.442		22.3	*	MS
Nickel	mg/kg	+/- 20%	3.79		3.15		18.3		MS
Selenium	mg/kg		0.486 U		0.498 U				MS
Thallium	mg/kg		0.0949 J		0.0598 U		200		MS
Uranium	mg/kg	+/- 20%	0.641		0.878		31.2	*	MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7980SD

Sample ID: 1202032622

Duplicate ID: 1202032623

Percent Solids for Dup: 95.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/-20	7.69		8.4		8.75		MS
Beryllium	mg/kg	+/-20	4.39		4.46		1.72		MS
Nickel	mg/kg	+/-20	8.39		8.4		.183		MS
Selenium	mg/kg	+/-20	1.33		1.44		7.98		MS
Thallium	mg/kg	+/-20	8.36		8.82		5.3		MS
Uranium	mg/kg	+/-20	5.24		6.84		26.5	*	MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7980D

Sample ID: 245979001

Duplicate ID: 1202039200

Percent Solids for Dup: 95.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-11	16.2		19.7		19.5		AV

Metals

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Duplicate Sample Summary

SDG No.: 10-1514

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-7980SD

Sample ID: 1202039201

Duplicate ID: 1202039207

Percent Solids for Dup: 95.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	144		144		.0309		AV

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1514

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202032615								
	Aluminum	ug/Kg	10500000	8620000		82.1	56-144	P
	Antimony	ug/Kg	173000	138000		79.9	71-130	P
	Barium	ug/Kg	198000	191000		96.2	80-120	P
	Cadmium	ug/Kg	60700	59700		98.3	81-120	P
	Calcium	ug/Kg	9870000	9830000		99.6	83-117	P
	Chromium	ug/Kg	236000	245000		104	80-120	P
	Cobalt	ug/Kg	91200	94000		103	81-120	P
	Copper	ug/Kg	174000	182000		104	81-118	P
	Iron	ug/Kg	18000000	18700000		104	51-149	P
	Lead	ug/Kg	86000	83600		97.3	79-121	P
	Magnesium	ug/Kg	4000000	3820000		95.6	79-122	P
	Manganese	ug/Kg	558000	582000		104	81-119	P
	Potassium	ug/Kg	4300000	3910000		91	74-127	P
	Silver	ug/Kg	30100	30400		101	66-134	P
	Sodium	ug/Kg	1020000	994000		97.5	74-127	P
	Vanadium	ug/Kg	115000	124000		107	79-121	P
	Zinc	ug/Kg	594000	584000		98.3	80-121	P

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1514

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202032624	Arsenic	mg/kg	104	96.3		92.6	78-123	MS
	Beryllium	mg/kg	77.6	79.4		102	84-116	MS
	Nickel	mg/kg	134	125		93.3	78-123	MS
	Selenium	mg/kg	286	266		93	77-123	MS
	Thallium	mg/kg	121	111		91.9	78-122	MS
	Uranium	mg/kg	2.13	1.7		79.8	73-127	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1514

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202039199	Mercury	ug/kg	5150	5810		113	71.6-128.3	AV

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1514 Client ID RE15-10-7980L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 245979001 Serial Dilution ID: 1202032612

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	42000		43400		3.21		10	P
Antimony	7.71	J	16.5	U	100			P
Barium	486		487		.103		10	P
Cadmium	1	U	5	U				P
Calcium	15800		15900		.316		10	P
Chromium	169		171		.888		10	P
Cobalt	37.9		38.1		.528			P
Copper	38.2		36.5	J	4.58			P
Iron	122000		125000		2.46		10	P
Lead	83.6		69		17.5			P
Magnesium	8350		8600		2.99		10	P
Manganese	2270		2310		1.54		10	P
Potassium	6640		6800		2.41		10	P
Silver	1	U	5	U				P
Sodium	2580		2640		2.13			P
Vanadium	92.5		93		.541		10	P
Zinc	452		453		.221		10	P

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1514 **Client ID** RE15-10-7980L**Contract:** LANL01004**Matrix:** SOLID **Level:** Low**Sample ID:** 245979001 **Serial Dilution ID:** 1202032621

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	7.77		5.8	J	25.4			MS
Beryllium	2.85		3.02		5.96			MS
Nickel	19.5		22.4		14.9			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.488	J	1.5	U	100			MS
Uranium	3.3		3.26		1.21			MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1514 Client ID RE15-10-7980L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 245979001 Serial Dilution ID: 1202039206

Analyte	Initial Value ng/L	C	Serial Value ng/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.259		.34	U	100			AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1514

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 948763							
1202032610	MB for batch 948763	MB	S	10-FEB-10	.574g	50mL	
1202032615	LCS for batch 948763	LCS	S	10-FEB-10	.525g	50mL	
1202032613	RE15-10-7980S	MS	S	10-FEB-10	.537g	50mL	
1202032614	RE15-10-7980SD	MSD	S	10-FEB-10	.527g	50mL	
1202032611	RE15-10-7980D	DUP	S	10-FEB-10	.534g	50mL	
245979001	RE15-10-7980	SAMPLE	S	10-FEB-10	.554g	50mL	
245979002	RE15-10-7958	SAMPLE	S	10-FEB-10	.542g	50mL	
245979003	RE15-10-7960	SAMPLE	S	10-FEB-10	.541g	50mL	
245979004	RE15-10-7979	SAMPLE	S	10-FEB-10	.567g	50mL	
245979005	RE15-10-7972	SAMPLE	S	10-FEB-10	.519g	50mL	
245979006	RE15-10-7957	SAMPLE	S	10-FEB-10	.509g	50mL	
245979007	RE15-10-7974	SAMPLE	S	10-FEB-10	.534g	50mL	
245979008	RE15-10-7961	SAMPLE	S	10-FEB-10	.545g	50mL	
245979009	RE15-10-7971	SAMPLE	S	10-FEB-10	.522g	50mL	
245979010	RE15-10-7966	SAMPLE	S	10-FEB-10	.526g	50mL	
245979011	RE15-10-7959	SAMPLE	S	10-FEB-10	.556g	50mL	
245979012	RE15-10-7969	SAMPLE	S	10-FEB-10	.509g	50mL	
245979013	RE15-10-8061	SAMPLE	S	10-FEB-10	.516g	50mL	
245979014	RE15-10-8063	SAMPLE	S	10-FEB-10	.517g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1514

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
245979015	RE15-10-8062	SAMPLE	S	10-FEB-10	.54g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1514

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 948768							
1202032619	MB for batch 948768	MB	S	10-FEB-10	.553g	50mL	
1202032624	LCS for batch 948768	LCS	S	10-FEB-10	.52g	50mL	
1202032622	RE15-10-7980S	MS	S	10-FEB-10	.549g	50mL	
1202032623	RE15-10-7980SD	MSD	S	10-FEB-10	.532g	50mL	
1202032620	RE15-10-7980D	DUP	S	10-FEB-10	.526g	50mL	
245979001	RE15-10-7980	SAMPLE	S	10-FEB-10	.539g	50mL	
245979002	RE15-10-7958	SAMPLE	S	10-FEB-10	.53g	50mL	
245979003	RE15-10-7960	SAMPLE	S	10-FEB-10	.518g	50mL	
245979004	RE15-10-7979	SAMPLE	S	10-FEB-10	.508g	50mL	
245979005	RE15-10-7972	SAMPLE	S	10-FEB-10	.512g	50mL	
245979006	RE15-10-7957	SAMPLE	S	10-FEB-10	.553g	50mL	
245979007	RE15-10-7974	SAMPLE	S	10-FEB-10	.525g	50mL	
245979008	RE15-10-7961	SAMPLE	S	10-FEB-10	.504g	50mL	
245979009	RE15-10-7971	SAMPLE	S	10-FEB-10	.512g	50mL	
245979010	RE15-10-7966	SAMPLE	S	10-FEB-10	.517g	50mL	
245979011	RE15-10-7959	SAMPLE	S	10-FEB-10	.52g	50mL	
245979012	RE15-10-7969	SAMPLE	S	10-FEB-10	.564g	50mL	
245979013	RE15-10-8061	SAMPLE	S	10-FEB-10	.519g	50mL	
245979014	RE15-10-8063	SAMPLE	S	10-FEB-10	.528g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1514

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
245979015	RE15-10-8062	SAMPLE	S	10-FEB-10	.514g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1514

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 951517							
1202039198	MB for batch 951517	MB	S	17-FEB-10	.503g	30mL	
1202039199	LCS for batch 951517	LCS	S	17-FEB-10	.2g	30mL	
1202039201	RE15-10-7980S	MS	S	17-FEB-10	.564g	30mL	
1202039207	RE15-10-7980SD	MSD	S	17-FEB-10	.572g	30mL	
1202039200	RE15-10-7980D	DUP	S	17-FEB-10	.574g	30mL	
245979001	RE15-10-7980	SAMPLE	S	17-FEB-10	.502g	30mL	
245979002	RE15-10-7958	SAMPLE	S	17-FEB-10	.503g	30mL	
245979003	RE15-10-7960	SAMPLE	S	17-FEB-10	.515g	30mL	
245979004	RE15-10-7979	SAMPLE	S	17-FEB-10	.599g	30mL	
245979005	RE15-10-7972	SAMPLE	S	17-FEB-10	.513g	30mL	
245979006	RE15-10-7957	SAMPLE	S	17-FEB-10	.585g	30mL	
245979007	RE15-10-7974	SAMPLE	S	17-FEB-10	.515g	30mL	
245979008	RE15-10-7961	SAMPLE	S	17-FEB-10	.5g	30mL	
245979009	RE15-10-7971	SAMPLE	S	17-FEB-10	.6g	30mL	
245979010	RE15-10-7966	SAMPLE	S	17-FEB-10	.561g	30mL	
245979011	RE15-10-7959	SAMPLE	S	17-FEB-10	.565g	30mL	
245979012	RE15-10-7969	SAMPLE	S	17-FEB-10	.58g	30mL	
245979013	RE15-10-8061	SAMPLE	S	17-FEB-10	.569g	30mL	
245979014	RE15-10-8063	SAMPLE	S	17-FEB-10	.577g	30mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1514

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
245979015	RE15-10-8062	SAMPLE	S	17-FEB-10	.55g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: MER536

Start Date: 18-FEB-10

End Date: 18-FEB-10

Client Sdg: 10-1514

Method: AV

Data File: 021810S1-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:45															X									
S0.2	1	09:47															X									
S0.5	1	09:49															X									
S2.0	1	09:51															X									
S5.0	1	09:53															X									
S10	1	09:55															X									
ICV01	1	09:57															X									
ICB01	1	09:59															X									
CRDL01	1	10:01															X									
CCV01	1	10:03															X									
CCB01	1	10:05															X									
ZZZZZZ	1	10:07																								
ZZZZZZ	10	10:09																								
ZZZZZZ	1	10:11																								
ZZZZZZ	1	10:13																								
ZZZZZZ	1	10:15																								
ZZZZZZ	1	10:17																								
ZZZZZZ	5	10:19																								
ZZZZZZ	1	10:21																								
ZZZZZZ	1	10:23																								
ZZZZZZ	1	10:25																								
CCV02	1	10:27															X									
CCB02	1	10:29															X									
ZZZZZZ	1	10:31																								
ZZZZZZ	1	10:33																								
ZZZZZZ	1	10:35																								
ZZZZZZ	1	10:37																								
ZZZZZZ	1	10:39																								
ZZZZZZ	1	10:41																								
ZZZZZZ	1	10:43																								
ZZZZZZ	1	10:45																								
ZZZZZZ	1	10:47																								
ZZZZZZ	1	10:49																								
CCV03	1	10:51															X									
CCB03	1	10:53															X									
ZZZZZZ	1	10:55																								
ZZZZZZ	1	10:57																								
ZZZZZZ	10	10:59																								
ZZZZZZ	1	11:01																								
ZZZZZZ	1	11:03																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time
ZZZZZZ	1	11:05
ZZZZZZ	1	11:07
ZZZZZZ	5	11:09
ZZZZZZ	1	11:11
ZZZZZZ	1	11:13
CCV04	1	11:15
CCB04	1	11:17
ZZZZZZ	1	11:19
ZZZZZZ	1	11:21
ZZZZZZ	1	11:23
ZZZZZZ	1	11:25
ZZZZZZ	1	11:27
ZZZZZZ	1	11:29
ZZZZZZ	1	11:31
ZZZZZZ	1	11:33
ZZZZZZ	1	11:35
ZZZZZZ	1	11:37
CCV05	1	11:39
CCB05	1	11:41
ZZZZZZ	1	11:43
ZZZZZZ	1	11:45
ZZZZZZ	1	11:47
ZZZZZZ	1	11:49
ZZZZZZ	1	11:51
ZZZZZZ	1	11:53
ZZZZZZ	1	11:55
ZZZZZZ	1	11:57
ZZZZZZ	10	11:59
ZZZZZZ	1	12:01
CCV06	1	12:03
CCB06	1	12:05
ZZZZZZ	1	12:07
ZZZZZZ	1	12:09
ZZZZZZ	1	12:11
ZZZZZZ	1	12:12
ZZZZZZ	1	12:14
ZZZZZZ	1	12:16
ZZZZZZ	1	12:18
ZZZZZZ	1	12:20
ZZZZZZ	1	12:22

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	12:24																								
CCV07	1	12:26															X									
CCB07	1	12:28															X									
ZZZZZZ	1	12:30																								
ZZZZZZ	1	12:32																								
ZZZZZZ	1	12:34																								
ZZZZZZ	1	12:36																								
ZZZZZZ	5	12:38																								
ZZZZZZ	1	12:40																								
ZZZZZZ	1	12:42																								
ZZZZZZ	1	12:44																								
ZZZZZZ	1	12:46																								
ZZZZZZ	1	12:48																								
CCV08	1	12:50															X									
CCB08	1	12:52															X									
ZZZZZZ	1	12:54																								
ZZZZZZ	1	12:56																								
ZZZZZZ	1	12:58																								
CCV09	1	13:07															X									
CCB09	1	13:09															X									
ZZZZZZ	50	13:11																								
ZZZZZZ	10	13:13																								
ZZZZZZ	200	13:15																								
ZZZZZZ	1	13:17																								
ZZZZZZ	200	13:19																								
1202039198	1	13:21															X									
1202039199	10	13:23															X									
245979001	1	13:25															X									
1202039200	1	13:27															X									
1202039201	1	13:29															X									
CCV10	1	13:31															X									
CCB10	1	13:33															X									
ZZZZZZ	1	13:35																								
ZZZZZZ	5	13:37																								
ZZZZZZ	1	13:39																								
ZZZZZZ	1	13:41																								
ZZZZZZ	1	13:43																								
ZZZZZZ	1	13:45																								
ZZZZZZ	1	13:47																								
ZZZZZZ	1	13:49																								

Samp No.	D/F	Run Time
ZZZZZZ	1	13:50
ZZZZZZ	1	13:52
CCV11	1	13:54
CCB11	1	13:56
CCV12	1	14:05
CCB12	1	14:08
ZZZZZZ	400	14:09
1202039207	1	14:11
1202039206	5	14:13
245979002	1	14:15
245979003	1	14:17
245979004	1	14:19
245979005	1	14:21
245979006	1	14:23
245979007	1	14:25
245979008	1	14:27
CCV13	1	14:29
CCB13	1	14:31
245979009	1	14:33
245979010	1	14:35
245979011	1	14:37
245979012	1	14:39
245979013	1	14:41
245979014	1	14:43
245979015	1	14:45
CCV14	1	14:47
CCB14	1	14:49

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS3

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1514

Method MS

Data File: 100225-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	17:52			X		X											X	X			X	X			
S10	1	17:58			X		X											X	X			X	X			
S100	1	18:04			X		X											X	X			X	X			
ICV01	1	18:09			X		X											X	X			X	X			
ICB01	1	18:15			X		X											X	X			X	X			
CRDL01	1	18:21			X		X											X	X			X	X			
ICSA01	1	18:26			X		X											X	X			X	X			
ICSAB01	1	18:32			X		X											X	X			X	X			
CCV01	1	18:38			X		X											X	X			X	X			
CCB01	1	18:44			X		X											X	X			X	X			
LR01	1	18:49			X		X											X	X			X	X			
CCV02	1	18:55			X		X											X	X			X	X			
CCB02	1	19:01			X		X											X	X			X	X			
ZZZZZZ	1	19:07																								
ZZZZZZ	1	19:12																								
ZZZZZZ	1	19:18																								
ZZZZZZ	1	19:24																								
ZZZZZZ	1	19:30																								
ZZZZZZ	1	19:35																								
ZZZZZZ	1	19:41																								
ZZZZZZ	1	19:47																								
ZZZZZZ	1	19:53																								
ZZZZZZ	1	19:58																								
CCV03	1	20:04			X		X											X	X			X	X			
CCB03	1	20:10			X		X											X	X			X	X			
1202032619	2	20:17			X		X											X	X			X	X			
1202032624	40	20:23			X		X											X	X			X	X			
245979001	2	20:28			X		X											X	X			X	X			
1202032620	2	20:34			X		X											X	X			X	X			
1202032622	2	20:40			X		X											X	X			X	X			
1202032623	2	20:46			X		X											X	X			X	X			
1202032621	10	20:51			X		X											X	X			X	X			
CCV04	1	20:57			X		X											X	X			X	X			
CCB04	1	21:03			X		X											X	X			X	X			
245979002	2	21:09			X		X											X	X			X	X			
245979003	2	21:14			X		X											X	X			X	X			
245979004	2	21:20			X		X											X	X			X	X			
245979005	2	21:26			X		X											X	X			X	X			
245979006	2	21:32			X		X											X	X			X	X			
245979007	2	21:37			X		X											X	X			X	X			

Samp No.	D/F	Run Time
CCV05	1	21:43
CCB05	1	21:49
245979008	2	21:55
245979009	2	22:00
245979010	2	22:06
245979011	2	22:12
245979012	2	22:18
245979013	2	22:23
245979014	2	22:29
245979015	2	22:35
CCV06	1	22:41
CCB06	1	22:46

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 19-FEB-10

End Date: 20-FEB-10

Client Sdg: 10-1514

Method P

Data File: 021910A-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	16:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S0.1	1	16:28		X		X		X		X	X	X		X		X			X		X				X	X
S0.5	1	16:30	X	X		X		X	X	X	X	X		X	X	X			X		X				X	X
SCAL	1	16:34	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
S10	1	16:38	X					X					X		X							X				
ICV01	1	16:40	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICB01	1	16:44	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
PQL01	1	16:47	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSA01	1	16:51	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ICSAB01	1	16:54	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR01	1	16:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR02	1	16:59	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV01	1	17:03	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB01	1	17:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
LR03	1	17:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV02	1	17:21	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB02	1	17:25	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	17:30																								
ZZZZZZ	1	17:34																								
ZZZZZZ	1	17:37																								
ZZZZZZ	1	17:41																								
ZZZZZZ	1	17:44																								
ZZZZZZ	1	17:48																								
CCV03	1	17:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB03	1	17:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	17:59																								
ZZZZZZ	1	18:03																								
ZZZZZZ	1	18:06																								
ZZZZZZ	1	18:09																								
ZZZZZZ	1	18:13																								
ZZZZZZ	1	18:17																								
ZZZZZZ	5	18:20																								
CCV04	1	18:24	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB04	1	18:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	18:31																								
ZZZZZZ	1	18:35																								
ZZZZZZ	1	18:39																								
ZZZZZZ	1	18:42																								
ZZZZZZ	1	18:46																								
ZZZZZZ	1	18:50																								

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																						
ZZZZZZ	1	18:53																						
CCV05	1	18:57	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
CCB05	1	19:01	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	19:04																						
ZZZZZZ	1	19:08																						
ZZZZZZ	1	19:12																						
ZZZZZZ	1	19:15																						
ZZZZZZ	1	19:19																						
ZZZZZZ	1	19:23																						
CCV06	1	19:26	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
CCB06	1	19:30	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	19:34																						
ZZZZZZ	1	19:37																						
ZZZZZZ	1	19:40																						
ZZZZZZ	1	19:44																						
ZZZZZZ	1	19:48																						
ZZZZZZ	1	19:51																						
ZZZZZZ	5	19:55																						
CCV07	1	19:59	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
CCB07	1	20:02	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	20:06																						
ZZZZZZ	1	20:10																						
ZZZZZZ	1	20:13																						
ZZZZZZ	1	20:17																						
ZZZZZZ	1	20:21																						
ZZZZZZ	1	20:24																						
ZZZZZZ	1	20:28																						
ZZZZZZ	1	20:32																						
CCV08	1	20:35	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
CCB08	1	20:39	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	20:43																						
ZZZZZZ	1	20:46																						
ZZZZZZ	1	20:50																						
ZZZZZZ	1	20:53																						
ZZZZZZ	1	20:57																						
ZZZZZZ	5	21:01																						
ZZZZZZ	1	21:04																						
CCV09	1	21:08	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
CCB09	1	21:12	X	X		X		X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	21:19																						

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	21:23																								
ZZZZZZ	1	21:26																								
ZZZZZZ	1	21:30																								
ZZZZZZ	1	21:33																								
ZZZZZZ	1	21:37																								
ZZZZZZ	5	21:41																								
ZZZZZZ	1	21:44																								
ZZZZZZ	1	21:48																								
CCV10	1	21:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB10	1	21:55	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	21:59																								
ZZZZZZ	1	22:03																								
ZZZZZZ	1	22:06																								
ZZZZZZ	1	22:10																								
ZZZZZZ	1	22:14																								
ZZZZZZ	1	22:17																								
ZZZZZZ	1	22:21																								
ZZZZZZ	1	22:25																								
CCV11	1	22:28	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB11	1	22:32	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	22:36																								
ZZZZZZ	1	22:39																								
ZZZZZZ	1	22:43																								
ZZZZZZ	1	22:47																								
ZZZZZZ	1	22:50																								
ZZZZZZ	1	22:54																								
ZZZZZZ	1	22:58																								
ZZZZZZ	1	23:01																								
CCV12	1	23:05	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB12	1	23:09	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	23:12																								
ZZZZZZ	1	23:16																								
ZZZZZZ	1	23:19																								
ZZZZZZ	1	23:23																								
ZZZZZZ	1	23:26																								
ZZZZZZ	1	23:30																								
ZZZZZZ	5	23:34																								
CCV13	1	23:38	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB13	1	23:41	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
ZZZZZZ	1	23:45																								

Samp No.	D/F	Run Time																								
ZZZZZZ	1	23:49																								
ZZZZZZ	1	23:52																								
ZZZZZZ	1	23:56																								
ZZZZZZ	1	00:00																								
ZZZZZZ	1	00:03																								
ZZZZZZ	1	00:07																								
CCV14	1	00:11	X	X		X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	
CCB14	1	00:15	X	X		X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	
ZZZZZZ	1	00:18																								
ZZZZZZ	1	00:22																								
ZZZZZZ	1	00:26																								
ZZZZZZ	1	00:29																								
ZZZZZZ	1	00:33																								
ZZZZZZ	1	00:37																								
ZZZZZZ	1	00:40																								
ZZZZZZ	1	00:44																								
CCV15	1	00:47	X	X		X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	
CCB15	1	00:51	X	X		X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	
ZZZZZZ	1	01:03																								
ZZZZZZ	1	01:07																								
ZZZZZZ	1	01:10																								
ZZZZZZ	1	01:13																								
ZZZZZZ	1	01:17																								
ZZZZZZ	1	01:21																								
ZZZZZZ	5	01:24																								
ZZZZZZ	1	01:27																								
ZZZZZZ	1	01:31																								
CCV16	1	01:35	X	X		X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	
CCB16	1	01:38	X	X		X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	
ZZZZZZ	1	01:42																								
ZZZZZZ	1	01:46																								
ZZZZZZ	1	01:49																								
ZZZZZZ	1	01:53																								
ZZZZZZ	1	01:57																								
ZZZZZZ	1	02:00																								
ZZZZZZ	1	02:04																								
ZZZZZZ	1	02:08																								
ZZZZZZ	1	02:11																								
CCV17	1	02:15	X	X		X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	
CCB17	1	02:19	X	X		X		X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	02:22																								
ZZZZZZ	1	02:26																								
ZZZZZZ	1	02:30																								
ZZZZZZ	1	02:33																								
ZZZZZZ	1	02:37																								
ZZZZZZ	1	02:41																								
ZZZZZZ	1	02:44																								
ZZZZZZ	1	02:48																								
CCV18	1	02:52	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB18	1	02:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202032610	1	03:01	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202032615	1	03:04	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979001	1	03:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202032611	1	03:11	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202032613	1	03:15	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202032614	1	03:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
1202032612	5	03:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV19	1	03:26	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB19	1	03:29	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979002	1	03:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979003	1	03:37	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979004	1	03:41	X	X		X		X	X	X	X		X	X	X	X			X		X	X			X	X
245979005	1	03:44	X	X		X		X	X	X	X		X	X	X	X			X		X	X			X	X
245979006	1	03:48	X	X		X		X	X	X	X		X		X	X			X		X	X			X	
245979007	1	03:52	X	X		X		X	X	X	X		X	X	X	X			X		X	X			X	X
245979008	1	03:56	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCV20	1	03:59	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB20	1	04:03	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979009	1	04:07	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979010	1	04:10	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979011	1	04:14	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979012	1	04:18	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979013	1	04:22	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
245979014	1	04:25	X	X		X		X	X	X	X		X	X	X	X			X		X	X			X	X
245979015	1	04:29	X	X		X		X	X	X	X		X	X	X	X			X		X	X			X	X
CCV21	1	04:33	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X
CCB21	1	04:36	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X			X	X

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 20-FEB-10

End Date: 21-FEB-10

Client Sdg: 10-1514

Method: P

Data File: 022010C-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	20:51										X	X													X
S0.1	1	20:54										X	X													X
S0.5	1	20:57										X	X													X
SCAL	1	21:01										X	X													X
S10	1	21:04																								
ICV01	1	21:07										X	X													X
ICB01	1	21:10										X	X													X
PQL01	1	21:14										X	X													X
ICSA01	1	21:18										X	X													X
ICSAB01	1	21:20										X	X													X
LR01	1	21:23										X	X													X
LR02	1	21:26										X	X													X
CCV01	1	21:30										X	X													X
CCB01	1	21:34										X	X													X
CCV02	1	22:12										X	X													X
CCB02	1	22:16										X	X													X
ZZZZZZ	1	22:58																								
ZZZZZZ	1	23:01																								
ZZZZZZ	1	23:04																								
ZZZZZZ	1	23:08																								
ZZZZZZ	1	23:12																								
ZZZZZZ	1	23:15																								
ZZZZZZ	5	23:19																								
ZZZZZZ	1	23:23																								
CCV03	1	23:26										X	X													X
CCB03	1	23:30										X	X													X
ZZZZZZ	1	23:34																								
ZZZZZZ	1	23:37																								
ZZZZZZ	1	23:41																								
ZZZZZZ	1	23:45																								
ZZZZZZ	1	23:48																								
ZZZZZZ	1	23:52																								
ZZZZZZ	1	23:56																								
ZZZZZZ	1	23:59																								
CCV04	1	00:03										X	X													X
CCB04	1	00:07										X	X													X
ZZZZZZ	1	00:10																								
ZZZZZZ	1	00:14																								
ZZZZZZ	1	00:18																								
ZZZZZZ	1	00:21																								

SW846

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
ZZZZZZ	1	02:50																								
ZZZZZZ	1	02:54																								
ZZZZZZ	1	02:58																								
ZZZZZZ	1	03:01																								
ZZZZZZ	5	03:05																								
ZZZZZZ	1	03:09																								
ZZZZZZ	1	03:12																								
CCV09	1	03:16										X	X													X
CCB09	1	03:20										X	X													X
ZZZZZZ	1	03:23																								
ZZZZZZ	1	03:27																								
ZZZZZZ	1	03:31																								
ZZZZZZ	1	03:35																								
ZZZZZZ	1	03:38																								
ZZZZZZ	1	03:42																								
ZZZZZZ	1	03:46																								
ZZZZZZ	1	03:49																								
ZZZZZZ	1	03:53																								
CCV10	1	03:57										X	X													X
CCB10	1	04:00										X	X													X
ZZZZZZ	1	04:04																								
ZZZZZZ	1	04:08																								
ZZZZZZ	1	04:11																								
ZZZZZZ	1	04:15																								
ZZZZZZ	1	04:19																								
ZZZZZZ	1	04:22																								
ZZZZZZ	5	04:26																								
ZZZZZZ	1	04:30																								
ZZZZZZ	1	04:33																								
CCV11	1	04:37										X	X													X
CCB11	1	04:41										X	X													X
ZZZZZZ	1	04:44																								
ZZZZZZ	1	04:48																								
ZZZZZZ	1	04:52																								
ZZZZZZ	1	04:55																								
ZZZZZZ	1	04:59																								
ZZZZZZ	1	05:03																								
ZZZZZZ	1	05:06																								
ZZZZZZ	1	05:10																								
CCV12	1	05:13										X	X													X

Metals
-14-
Analysis Run Log

[illegible]

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1514

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength (nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum		15.0	50
	Antimony		0.5	3
	Arsenic		1.0	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Cadmium		0.1	1
	Calcium		33.0	100
	Chromium		1.0	3
	Cobalt		0.3	1
	Copper		0.33	1
	Iron		25.0	100
	Lead		0.5	2
	Magnesium		7.5	25
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.066	.2
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1514

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

		<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY	<u>Analyte</u>			
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1514

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No:

10-1514

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates:

01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Aluminum	Antimony	Arsenic	Barium	Beryllium
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.05500	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1514

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Boron	Cadmium	Chromium	Cobalt	Copper
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	11.3250	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	-1.59900	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1514**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Iron	Lead	Magnesium	Manganese	Molybdenum
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	20.5430
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-16.3320
Arsenic	188.979	-0.05800	0.00000	0.00000	0.00000	1.97700
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.13300	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-0.90500
Copper	324.752	-0.13900	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.03800	-2.87600	0.00000	0.00000	0.00000
Magnesium	279.077	1.07300	0.00000	0.00000	0.00000	-16.8110
Manganese	257.61	-0.13900	0.00000	0.04000	0.00000	0.00000
Molybdenum	202.031	-0.03800	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-0.01300	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.81200	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.88200	0.00000	0.28200	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.06300	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.03900	0.00000	0.00000	-4.11700	0.00000
Tin	189.927	-0.09200	0.00000	-0.19600	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.07900	0.00000	0.00000
Uranium	409.014	0.13900	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.05300	0.00000	0.00000	0.00000	-7.71400
Zinc	213.857	0.14460	0.00000	0.02030	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1514**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Nickel	Phosphorous	Selenium	Silicon	Silver
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.99900	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	4.41600	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1514**Contract: LANL01004Instrument: OPTIMA1Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1514

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Vanadium	Zinc
Parmname	Wavelength		
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1514

Contract: LANL01004

Lab Code: GEL

Instrument IDICPMS3

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1514

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA I

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10

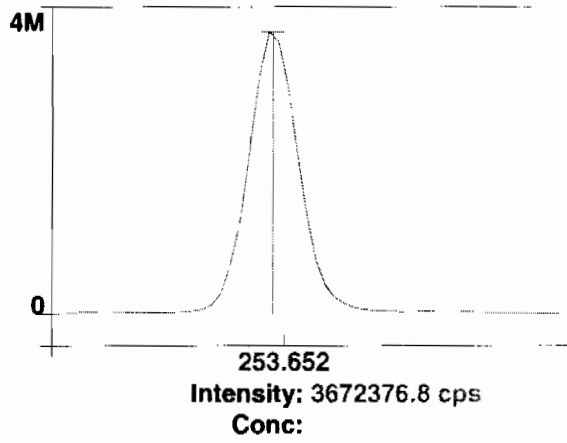
Raw Data

Method: Hg_ReAlign
Result: 022710B

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

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Analysis Begun

Start Time: 2/19/2010 16:24:40

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\021910E.sif

Batch ID:

Results Data Set: 021910A

Results Library: c:\pe\optimal\Results\Results.mdb

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Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 2/19/2010 15:19:26

IEC File: 011510.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

=====

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/19/2010 16:24:43

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	56379.0	56379.0	99.8 %	16:25:17
1	Al 396.153Radial†	16.2	16.2	[0.00] µg/L	16:25:17
1	Ca 317.933Radial†	214.7	215.2	[0.00] µg/L	16:25:38
1	Fe 238.204 Radial†	18.4	18.4	[0.00] µg/L	16:25:38

1	K 766.490 Radial†	170.1	170.5	[0.00]	µg/L	16:25:17
1	Mg 279.077 IEC†	12.4	12.5	[0.00]	µg/L	16:25:38
1	Na 589.592 Radial†	471.3	472.3	[0.00]	µg/L	16:25:17
1	Sr 421.552†	12.0	12.0	[0.00]	µg/L	16:25:17
1	Sc 361.383	1972868.2	1972868.2	100.50	%	16:26:40
1	Y 371.029	1358545.8	1358545.8	100.43	%	16:26:40
1	Ag 328.068†	-377.9	-376.0	[0.00]	µg/L	16:26:45
1	As 188.979†	2.0	2.0	[0.00]	µg/L	16:27:06
1	B 249.677†	379.3	377.5	[0.00]	µg/L	16:27:06
1	Ba 233.527†	-13.3	-13.3	[0.00]	µg/L	16:27:06
1	Be 313.107†	-2914.6	-2900.2	[0.00]	µg/L	16:26:45
1	Cd 226.502†	-140.3	-139.6	[0.00]	µg/L	16:27:06
1	Co 228.616†	-4.5	-4.5	[0.00]	µg/L	16:27:06
1	Cr 267.716†	-50.8	-50.6	[0.00]	µg/L	16:26:45
1	Cu 324.752†	2545.0	2532.4	[0.00]	µg/L	16:26:45
1	Mn 257.610†	-255.0	-253.7	[0.00]	µg/L	16:27:06
1	Mo 202.031†	-2.4	-2.3	[0.00]	µg/L	16:27:06
1	Ni 231.604†	320.7	319.1	[0.00]	µg/L	16:27:06
1	P 214.914†	15.8	15.8	[0.00]	µg/L	16:27:06
1	Pb 220.353†	88.6	88.2	[0.00]	µg/L	16:27:06
1	S 181.975 Axial†	19.1	19.1	[0.00]	µg/L	16:27:06
1	Sb 206.836†	17.4	17.3	[0.00]	µg/L	16:27:06
1	Se 196.026†	20.3	20.2	[0.00]	µg/L	16:27:06
1	SiO2†	1396.5	1389.6	[0.00]	µg/L	16:26:45
1	Si 251.611†	308.1	306.6	[0.00]	µg/L	16:27:06
1	Sn 189.927†	0.6	0.6	[0.00]	µg/L	16:27:06
1	Ti 334.940†	185.3	184.3	[0.00]	µg/L	16:26:45
1	Tl 190.801†	-23.5	-23.3	[0.00]	µg/L	16:27:06
1	U 409.014†	-92.6	-92.1	[0.00]	µg/L	16:26:45
1	V 292.402†	-67.1	-66.8	[0.00]	µg/L	16:26:45
1	Zn 213.857†	537.3	534.6	[0.00]	µg/L	16:27:06
2	Sc RADIAL	56755.6	56755.6	100	%	16:25:43
2	Al 396.153Radial†	-1.8	-1.8	[0.00]	µg/L	16:25:43
2	Ca 317.933Radial†	215.5	214.5	[0.00]	µg/L	16:26:04
2	Fe 238.204 Radial†	16.5	16.4	[0.00]	µg/L	16:26:04
2	K 766.490 Radial†	182.5	181.6	[0.00]	µg/L	16:25:43
2	Mg 279.077 IEC†	11.4	11.3	[0.00]	µg/L	16:26:04
2	Na 589.592 Radial†	457.5	455.4	[0.00]	µg/L	16:25:43
2	Sr 421.552†	48.2	48.0	[0.00]	µg/L	16:25:43
2	Sc 361.383	1966863.7	1966863.7	100.19	%	16:27:12
2	Y 371.029	1355430.0	1355430.0	100.20	%	16:27:12
2	Ag 328.068†	-456.1	-455.2	[0.00]	µg/L	16:27:17
2	As 188.979†	1.0	0.9	[0.00]	µg/L	16:27:38
2	B 249.677†	393.1	392.3	[0.00]	µg/L	16:27:38
2	Ba 233.527†	-22.9	-22.8	[0.00]	µg/L	16:27:38
2	Be 313.107†	-2829.8	-2824.4	[0.00]	µg/L	16:27:17
2	Cd 226.502†	-143.7	-143.4	[0.00]	µg/L	16:27:38
2	Co 228.616†	5.2	5.2	[0.00]	µg/L	16:27:38
2	Cr 267.716†	-56.7	-56.6	[0.00]	µg/L	16:27:17
2	Cu 324.752†	2525.9	2521.0	[0.00]	µg/L	16:27:17
2	Mn 257.610†	-246.3	-245.8	[0.00]	µg/L	16:27:38
2	Mo 202.031†	-7.2	-7.2	[0.00]	µg/L	16:27:38
2	Ni 231.604†	311.9	311.3	[0.00]	µg/L	16:27:38
2	P 214.914†	14.8	14.8	[0.00]	µg/L	16:27:38
2	Pb 220.353†	93.7	93.5	[0.00]	µg/L	16:27:38
2	S 181.975 Axial†	14.7	14.7	[0.00]	µg/L	16:27:38
2	Sb 206.836†	27.4	27.4	[0.00]	µg/L	16:27:38
2	Se 196.026†	17.0	16.9	[0.00]	µg/L	16:27:38
2	SiO2†	1365.2	1362.6	[0.00]	µg/L	16:27:17
2	Si 251.611†	311.7	311.1	[0.00]	µg/L	16:27:38
2	Sn 189.927†	0.1	0.1	[0.00]	µg/L	16:27:38
2	Ti 334.940†	147.4	147.1	[0.00]	µg/L	16:27:17
2	Tl 190.801†	-23.8	-23.8	[0.00]	µg/L	16:27:38
2	U 409.014†	-39.1	-39.0	[0.00]	µg/L	16:27:17
2	V 292.402†	-66.7	-66.6	[0.00]	µg/L	16:27:17
2	Zn 213.857†	535.6	534.6	[0.00]	µg/L	16:27:38
3	Sc RADIAL	56352.2	56352.2	99.7	%	16:26:09
3	Al 396.153Radial†	7.7	7.7	[0.00]	µg/L	16:26:09
3	Ca 317.933Radial†	203.6	204.1	[0.00]	µg/L	16:26:29
3	Fe 238.204 Radial†	14.9	14.9	[0.00]	µg/L	16:26:29
3	K 766.490 Radial†	142.5	142.8	[0.00]	µg/L	16:26:09

3	Mg 279.077 IEC†	14.6	14.7	[0.00]	µg/L	16:26:29
3	Na 589.592 Radial†	487.6	488.9	[0.00]	µg/L	16:26:09
3	Sr 421.552†	26.3	26.4	[0.00]	µg/L	16:26:09
3	Sc 361.383	1949627.5	1949627.5	99.313	%	16:27:44
3	Y 371.029	1344291.5	1344291.5	99.374	%	16:27:44
3	Ag 328.068†	-371.1	-373.6	[0.00]	µg/L	16:27:50
3	As 188.979†	-4.3	-4.4	[0.00]	µg/L	16:28:10
3	B 249.677†	380.0	382.6	[0.00]	µg/L	16:28:10
3	Ba 233.527†	-15.0	-15.1	[0.00]	µg/L	16:28:10
3	Be 313.107†	-2823.0	-2842.5	[0.00]	µg/L	16:27:50
3	Cd 226.502†	-141.0	-142.0	[0.00]	µg/L	16:28:10
3	Co 228.616†	5.0	5.1	[0.00]	µg/L	16:28:10
3	Cr 267.716†	-43.6	-43.9	[0.00]	µg/L	16:27:50
3	Cu 324.752†	2560.1	2577.8	[0.00]	µg/L	16:27:50
3	Mn 257.610†	-266.7	-268.5	[0.00]	µg/L	16:28:10
3	Mo 202.031†	-6.5	-6.5	[0.00]	µg/L	16:28:10
3	Ni 231.604†	304.5	306.6	[0.00]	µg/L	16:28:10
3	P 214.914†	15.4	15.5	[0.00]	µg/L	16:28:10
3	Pb 220.353†	90.5	91.1	[0.00]	µg/L	16:28:10
3	S 181.975 Axial†	22.9	23.0	[0.00]	µg/L	16:28:10
3	Sb 206.836†	22.7	22.8	[0.00]	µg/L	16:28:10
3	Se 196.026†	20.7	20.8	[0.00]	µg/L	16:28:10
3	SiO2†	1412.7	1422.5	[0.00]	µg/L	16:27:50
3	Si 251.611†	312.1	314.3	[0.00]	µg/L	16:28:10
3	Sn 189.927†	0.4	0.4	[0.00]	µg/L	16:28:10
3	Ti 334.940†	192.3	193.6	[0.00]	µg/L	16:27:50
3	Tl 190.801†	-19.9	-20.0	[0.00]	µg/L	16:28:10
3	U 409.014†	-99.5	-100.1	[0.00]	µg/L	16:27:50
3	V 292.402†	-0.9	-0.9	[0.00]	µg/L	16:27:50
3	Zn 213.857†	530.3	534.0	[0.00]	µg/L	16:28:10

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1963119.8	12064.22	0.61%	100.00	%
Sc RADIAL	56495.6	225.58	0.40%	100	%
Y 371.029	1352755.8	7494.01	0.55%	100.00	%
Ag 328.068†	-401.6	46.42	11.56%	[0.00]	µg/L
Al 396.153Radial†	7.4	9.00	122.22%	[0.00]	µg/L
As 188.979†	-0.5	3.42	746.44%	[0.00]	µg/L
B 249.677†	384.1	7.56	1.97%	[0.00]	µg/L
Ba 233.527†	-17.1	5.08	29.78%	[0.00]	µg/L
Be 313.107†	-2855.7	39.56	1.39%	[0.00]	µg/L
Ca 317.933Radial†	211.3	6.18	2.93%	[0.00]	µg/L
Cd 226.502†	-141.7	1.91	1.35%	[0.00]	µg/L
Co 228.616†	1.9	5.56	287.58%	[0.00]	µg/L
Cr 267.716†	-50.4	6.37	12.65%	[0.00]	µg/L
Cu 324.752†	2543.7	30.02	1.18%	[0.00]	µg/L
Fe 238.204 Radial†	16.6	1.77	10.70%	[0.00]	µg/L
K 766.490 Radial†	165.0	19.97	12.10%	[0.00]	µg/L
Mg 279.077 IEC†	12.8	1.69	13.22%	[0.00]	µg/L
Mn 257.610†	-256.0	11.55	4.51%	[0.00]	µg/L
Mo 202.031†	-5.3	2.62	48.99%	[0.00]	µg/L
Na 589.592 Radial†	472.2	16.73	3.54%	[0.00]	µg/L
Ni 231.604†	312.3	6.29	2.01%	[0.00]	µg/L
P 214.914†	15.3	0.52	3.38%	[0.00]	µg/L
Pb 220.353†	90.9	2.66	2.92%	[0.00]	µg/L
S 181.975 Axial†	18.9	4.16	21.98%	[0.00]	µg/L
Sb 206.836†	22.5	5.03	22.34%	[0.00]	µg/L
Se 196.026†	19.3	2.09	10.80%	[0.00]	µg/L
SiO2†	1391.6	29.99	2.16%	[0.00]	µg/L
Si 251.611†	310.6	3.86	1.24%	[0.00]	µg/L
Sn 189.927†	0.4	0.26	71.28%	[0.00]	µg/L
Sr 421.552†	28.8	18.10	62.83%	[0.00]	µg/L
Ti 334.940†	175.0	24.62	14.06%	[0.00]	µg/L
Tl 190.801†	-22.4	2.06	9.20%	[0.00]	µg/L
U 409.014†	-77.1	33.23	43.11%	[0.00]	µg/L
V 292.402†	-44.8	37.98	84.87%	[0.00]	µg/L
Zn 213.857†	534.4	0.37	0.07%	[0.00]	µg/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 2/19/2010 16:28:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	56547.7	56547.7	100 %		16:28:54
1	K 766.490 Radial†	1729.4	1562.9	[1000] µg/L		16:28:54
1	Sr 421.552†	10915.2	10876.4	[100] µg/L		16:28:54
1	Sc 361.383	1958657.5	1958657.5	99.773 %		16:29:16
1	Y 371.029	1350548.9	1350548.9	99.837 %		16:29:16
1	Ag 328.068†	13553.9	13986.4	[100] µg/L		16:29:22
1	As 188.979†	59.6	60.2	[100] µg/L		16:29:42
1	B 249.677†	2836.9	2459.2	[100] µg/L		16:29:22
1	Ba 233.527†	4355.0	4382.0	[100] µg/L		16:29:22
1	Be 313.107†	171130.8	174376.3	[100] µg/L		16:29:16
1	Cd 226.502†	4124.2	4275.2	[100] µg/L		16:29:22
1	Co 228.616†	2298.0	2301.3	[100] µg/L		16:29:42
1	Cr 267.716†	5258.9	5321.2	[100] µg/L		16:29:22
1	Cu 324.752†	18781.5	16280.6	[100] µg/L		16:29:22
1	Mn 257.610†	33738.0	34070.9	[100] µg/L		16:29:22
1	Mo 202.031†	1103.1	1111.0	[100] µg/L		16:29:42
1	Ni 231.604†	2464.7	2158.0	[100] µg/L		16:29:22
1	P 214.914†	279.5	264.8	[500] µg/L		16:29:42
1	Pb 220.353†	532.5	442.7	[100] µg/L		16:29:42
1	S 181.975 Axial†	65.4	46.6	[200] µg/L		16:29:42
1	Sb 206.836†	134.3	112.1	[100] µg/L		16:29:42
1	Se 196.026†	91.1	72.0	[100] µg/L		16:29:42
1	SiO2†	6958.0	5582.3	[1069.5] µg/L		16:29:22
1	Si 251.611†	7026.5	6731.9	[500] µg/L		16:29:22
1	Sn 189.927†	255.8	256.0	[100] µg/L		16:29:42
1	Ti 334.940†	46558.0	46489.0	[100] µg/L		16:29:22
1	Tl 190.801†	54.5	77.1	[100] µg/L		16:29:42
1	U 409.014†	1252.7	1332.6	[100] µg/L		16:29:22
1	V 292.402†	10759.4	10828.7	[100] µg/L		16:29:22
1	Zn 213.857†	5084.1	4561.2	[100] µg/L		16:29:22
2	Sc RADIAL	56202.9	56202.9	99.5 %		16:29:00
2	K 766.490 Radial†	1727.4	1571.4	[1000] µg/L		16:29:00
2	Sr 421.552†	10846.6	10874.3	[100] µg/L		16:29:00
2	Sc 361.383	1969774.0	1969774.0	100.34 %		16:29:48
2	Y 371.029	1358589.1	1358589.1	100.43 %		16:29:48
2	Ag 328.068†	13626.3	13981.9	[100] µg/L		16:29:54
2	As 188.979†	59.0	59.2	[100] µg/L		16:30:15
2	B 249.677†	2870.2	2476.3	[100] µg/L		16:29:54
2	Ba 233.527†	4352.8	4355.2	[100] µg/L		16:29:54
2	Be 313.107†	172207.8	174481.8	[100] µg/L		16:29:48
2	Cd 226.502†	4144.1	4271.8	[100] µg/L		16:29:54
2	Co 228.616†	2299.6	2289.9	[100] µg/L		16:30:15
2	Cr 267.716†	5267.7	5300.2	[100] µg/L		16:29:54
2	Cu 324.752†	18798.4	16191.1	[100] µg/L		16:29:54
2	Mn 257.610†	33750.8	33892.8	[100] µg/L		16:29:54
2	Mo 202.031†	1093.5	1095.1	[100] µg/L		16:30:15
2	Ni 231.604†	2441.8	2121.3	[100] µg/L		16:29:54
2	P 214.914†	278.5	262.2	[500] µg/L		16:30:15
2	Pb 220.353†	534.1	441.4	[100] µg/L		16:30:15
2	S 181.975 Axial†	68.1	49.0	[200] µg/L		16:30:15
2	Sb 206.836†	141.3	118.3	[100] µg/L		16:30:15
2	Se 196.026†	84.6	65.0	[100] µg/L		16:30:15
2	SiO2†	6950.3	5535.3	[1069.5] µg/L		16:29:54
2	Si 251.611†	7046.5	6712.0	[500] µg/L		16:29:54
2	Sn 189.927†	257.8	256.5	[100] µg/L		16:30:15
2	Ti 334.940†	46408.5	46076.6	[100] µg/L		16:29:54
2	Tl 190.801†	53.9	76.1	[100] µg/L		16:30:15
2	U 409.014†	1326.1	1398.7	[100] µg/L		16:29:54
2	V 292.402†	10708.8	10717.4	[100] µg/L		16:29:54

2	Zn 213.857†	5067.8	4516.3	[100] µg/L	16:29:54
3	Sc RADIAL	55976.7	55976.7	99.1 %	16:29:05
3	K 766.490 Radial†	1714.6	1565.5	[1000] µg/L	16:29:05
3	Sr 421.552†	10778.8	10849.9	[100] µg/L	16:29:05
3	Sc 361.383	1959694.8	1959694.8	99.826 %	16:30:21
3	Y 371.029	1350466.2	1350466.2	99.831 %	16:30:21
3	Ag 328.068†	13514.1	13939.3	[100] µg/L	16:30:27
3	As 188.979†	60.6	61.1	[100] µg/L	16:30:47
3	B 249.677†	2823.5	2444.3	[100] µg/L	16:30:27
3	Ba 233.527†	4346.0	4370.6	[100] µg/L	16:30:27
3	Be 313.107†	170786.2	173940.4	[100] µg/L	16:30:21
3	Cd 226.502†	4105.4	4254.3	[100] µg/L	16:30:27
3	Co 228.616†	2321.1	2323.2	[100] µg/L	16:30:47
3	Cr 267.716†	5182.0	5241.4	[100] µg/L	16:30:27
3	Cu 324.752†	18775.8	16264.9	[100] µg/L	16:30:27
3	Mn 257.610†	33438.9	33753.4	[100] µg/L	16:30:27
3	Mo 202.031†	1103.0	1110.3	[100] µg/L	16:30:47
3	Ni 231.604†	2473.4	2165.4	[100] µg/L	16:30:27
3	P 214.914†	282.4	267.5	[500] µg/L	16:30:47
3	Pb 220.353†	529.2	439.2	[100] µg/L	16:30:47
3	S 181.975 Axial†	72.1	53.3	[200] µg/L	16:30:47
3	Sb 206.836†	136.5	114.2	[100] µg/L	16:30:47
3	Se 196.026†	86.4	67.3	[100] µg/L	16:30:47
3	SiO2†	6918.8	5539.3	[1069.5] µg/L	16:30:27
3	Si 251.611†	6976.1	6677.7	[500] µg/L	16:30:27
3	Sn 189.927†	259.9	260.0	[100] µg/L	16:30:47
3	Ti 334.940†	46135.2	46040.8	[100] µg/L	16:30:27
3	Tl 190.801†	63.1	85.5	[100] µg/L	16:30:47
3	U 409.014†	1279.4	1358.7	[100] µg/L	16:30:27
3	V 292.402†	10662.6	10726.0	[100] µg/L	16:30:27
3	Zn 213.857†	5060.1	4534.5	[100] µg/L	16:30:27

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1962708.8	6140.62	0.31%	99.979 %
Sc RADIAL	56242.4	287.56	0.51%	99.6 %
Y 371.029	1353201.4	4666.07	0.34%	100.03 %
Ag 328.068†	13969.2	25.98	0.19%	[100] µg/L
As 188.979†	60.2	0.95	1.58%	[100] µg/L
B 249.677†	2459.9	16.02	0.65%	[100] µg/L
Ba 233.527†	4369.3	13.48	0.31%	[100] µg/L
Be 313.107†	174266.2	287.04	0.16%	[100] µg/L
Cd 226.502†	4267.1	11.24	0.26%	[100] µg/L
Co 228.616†	2304.8	16.95	0.74%	[100] µg/L
Cr 267.716†	5287.6	41.38	0.78%	[100] µg/L
Cu 324.752†	16245.5	47.76	0.29%	[100] µg/L
K 766.490 Radial†	1566.6	4.37	0.28%	[1000] µg/L
Mn 257.610†	33905.7	159.14	0.47%	[100] µg/L
Mo 202.031†	1105.5	8.97	0.81%	[100] µg/L
Ni 231.604†	2148.2	23.63	1.10%	[100] µg/L
P 214.914†	264.9	2.64	1.00%	[500] µg/L
Pb 220.353†	441.1	1.78	0.40%	[100] µg/L
S 181.975 Axial†	49.6	3.39	6.83%	[200] µg/L
Sb 206.836†	114.9	3.15	2.74%	[100] µg/L
Se 196.026†	68.1	3.58	5.25%	[100] µg/L
SiO2†	5552.3	26.07	0.47%	[1069.5] µg/L
Si 251.611†	6707.2	27.43	0.41%	[500] µg/L
Sn 189.927†	257.5	2.17	0.84%	[100] µg/L
Sr 421.552†	10866.8	14.72	0.14%	[100] µg/L
Ti 334.940†	46202.1	249.08	0.54%	[100] µg/L
Tl 190.801†	79.6	5.19	6.52%	[100] µg/L
U 409.014†	1363.3	33.25	2.44%	[100] µg/L
V 292.402†	10757.4	61.94	0.58%	[100] µg/L
Zn 213.857†	4537.3	22.62	0.50%	[100] µg/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 2/19/2010 16:30:56
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	56525.4	56525.4	100	%	16:31:29
1	Al 396.153Radial†	7453.5	7442.2	[5000]	µg/L	16:31:29
1	Ca 317.933Radial†	6221.9	6007.4	[5000]	µg/L	16:31:49
1	K 766.490 Radial†	7933.1	7763.9	[5000]	µg/L	16:31:29
1	Mg 279.077 IEC†	599.2	586.0	[5000]	µg/L	16:31:49
1	Sr 421.552†	54754.2	54696.6	[500]	µg/L	16:31:29
1	Sc 361.383	1991566.8	1991566.8	101.45	%	16:32:53
1	Y 371.029	1367918.2	1367918.2	101.12	%	16:32:53
1	Ag 328.068†	68503.2	67926.3	[500]	µg/L	16:32:58
1	As 188.979†	299.0	295.2	[500]	µg/L	16:33:19
1	B 249.677†	12863.6	12295.7	[500]	µg/L	16:32:58
1	Ba 233.527†	21495.8	21205.8	[500]	µg/L	16:32:58
1	Be 313.107†	866518.5	856997.1	[500]	µg/L	16:32:53
1	Cd 226.502†	20677.7	20524.0	[500]	µg/L	16:32:58
1	Co 228.616†	11538.9	11372.2	[500]	µg/L	16:32:58
1	Cr 267.716†	25928.5	25608.5	[500]	µg/L	16:32:58
1	Cu 324.752†	81773.4	78061.6	[500]	µg/L	16:32:58
1	Mn 257.610†	167098.7	164967.9	[500]	µg/L	16:32:53
1	Mo 202.031†	5532.6	5459.0	[500]	µg/L	16:33:19
1	Ni 231.604†	10768.1	10301.9	[500]	µg/L	16:32:58
1	P 214.914†	1359.0	1324.3	[2500]	µg/L	16:33:19
1	Pb 220.353†	2302.4	2178.6	[500]	µg/L	16:33:19
1	S 181.975 Axial†	272.4	249.5	[1000]	µg/L	16:33:19
1	Sb 206.836†	599.4	568.4	[500]	µg/L	16:33:19
1	Se 196.026†	396.8	371.8	[500]	µg/L	16:33:19
1	SiO2†	29409.8	27598.2	[5347.5]	µg/L	16:32:58
1	Si 251.611†	34329.7	33528.7	[2500]	µg/L	16:32:58
1	Sn 189.927†	1299.8	1280.9	[500]	µg/L	16:33:19
1	Ti 334.940†	233565.9	230054.7	[500]	µg/L	16:32:53
1	Tl 190.801†	385.4	402.3	[500]	µg/L	16:33:19
1	U 409.014†	6215.4	6203.7	[500]	µg/L	16:32:58
1	V 292.402†	53048.0	52335.0	[500]	µg/L	16:32:58
1	Zn 213.857†	22866.4	22005.3	[500]	µg/L	16:32:58
2	Sc RADIAL	57277.6	57277.6	101	%	16:31:55
2	Al 396.153Radial†	7395.5	7287.2	[5000]	µg/L	16:31:55
2	Ca 317.933Radial†	6211.2	5915.2	[5000]	µg/L	16:32:15
2	K 766.490 Radial†	7980.6	7706.7	[5000]	µg/L	16:31:55
2	Mg 279.077 IEC†	604.0	583.0	[5000]	µg/L	16:32:15
2	Sr 421.552†	54765.5	53989.0	[500]	µg/L	16:31:55
2	Sc 361.383	1976796.7	1976796.7	100.70	%	16:33:26
2	Y 371.029	1357513.2	1357513.2	100.35	%	16:33:26
2	Ag 328.068†	68789.6	68715.3	[500]	µg/L	16:33:31
2	As 188.979†	285.8	284.2	[500]	µg/L	16:33:52
2	B 249.677†	12976.0	12502.1	[500]	µg/L	16:33:31
2	Ba 233.527†	21626.4	21493.9	[500]	µg/L	16:33:31
2	Be 313.107†	874707.4	871511.2	[500]	µg/L	16:33:26
2	Cd 226.502†	20785.1	20783.0	[500]	µg/L	16:33:31
2	Co 228.616†	11579.6	11497.5	[500]	µg/L	16:33:31
2	Cr 267.716†	26128.8	25998.4	[500]	µg/L	16:33:31
2	Cu 324.752†	82210.9	79098.3	[500]	µg/L	16:33:31
2	Mn 257.610†	168624.9	167714.3	[500]	µg/L	16:33:26
2	Mo 202.031†	5307.9	5276.5	[500]	µg/L	16:33:52
2	Ni 231.604†	10841.5	10454.2	[500]	µg/L	16:33:31
2	P 214.914†	1330.2	1305.6	[2500]	µg/L	16:33:52
2	Pb 220.353†	2234.1	2127.7	[500]	µg/L	16:33:52
2	S 181.975 Axial†	262.6	241.9	[1000]	µg/L	16:33:52
2	Sb 206.836†	590.7	564.1	[500]	µg/L	16:33:52
2	Se 196.026†	389.5	367.5	[500]	µg/L	16:33:52
2	SiO2†	29539.9	27943.9	[5347.5]	µg/L	16:33:31

2	Si 251.611†	34501.4	33952.0	[2500] µg/L	16:33:31
2	Sn 189.927†	1233.2	1224.3	[500] µg/L	16:33:52
2	Ti 334.940†	235746.0	233939.9	[500] µg/L	16:33:26
2	Tl 190.801†	379.0	398.8	[500] µg/L	16:33:52
2	U 409.014†	6274.1	6307.8	[500] µg/L	16:33:31
2	V 292.402†	53430.8	53105.9	[500] µg/L	16:33:31
2	Zn 213.857†	22993.9	22300.4	[500] µg/L	16:33:31
3	Sc RADIAL	57058.8	57058.8	101 %	16:32:20
3	Al 396.153Radial†	7492.8	7411.5	[5000] µg/L	16:32:20
3	Ca 317.933Radial†	6205.9	5933.4	[5000] µg/L	16:32:41
3	K 766.490 Radial†	8033.0	7788.8	[5000] µg/L	16:32:20
3	Mg 279.077 IEC†	601.3	582.5	[5000] µg/L	16:32:41
3	Sr 421.552†	55478.9	54902.6	[500] µg/L	16:32:20
3	Sc 361.383	1973452.3	1973452.3	100.53 %	16:33:59
3	Y 371.029	1355765.1	1355765.1	100.22 %	16:33:59
3	Ag 328.068†	62917.4	62989.6	[500] µg/L	16:34:05
3	As 188.979†	237.6	236.8	[500] µg/L	16:34:25
3	B 249.677†	11812.4	11366.4	[500] µg/L	16:34:05
3	Ba 233.527†	19002.6	18920.2	[500] µg/L	16:34:05
3	Be 313.107†	778040.5	776822.6	[500] µg/L	16:33:59
3	Cd 226.502†	18161.8	18208.4	[500] µg/L	16:34:05
3	Co 228.616†	9999.7	9945.4	[500] µg/L	16:34:05
3	Cr 267.716†	21799.1	21735.4	[500] µg/L	16:34:05
3	Cu 324.752†	71681.4	68762.3	[500] µg/L	16:34:05
3	Mn 257.610†	150744.1	150210.9	[500] µg/L	16:33:59
3	Mo 202.031†	4242.5	4225.7	[500] µg/L	16:34:25
3	Ni 231.604†	9432.3	9070.6	[500] µg/L	16:34:05
3	P 214.914†	1083.7	1062.7	[2500] µg/L	16:34:25
3	Pb 220.353†	1851.4	1750.7	[500] µg/L	16:34:25
3	S 181.975 Axial†	228.1	208.0	[1000] µg/L	16:34:25
3	Sb 206.836†	487.0	461.9	[500] µg/L	16:34:25
3	Se 196.026†	331.3	310.2	[500] µg/L	16:34:25
3	SiO2†	26534.1	25003.6	[5347.5] µg/L	16:34:05
3	Si 251.611†	30910.4	30437.9	[2500] µg/L	16:34:05
3	Sn 189.927†	970.3	964.9	[500] µg/L	16:34:25
3	Ti 334.940†	207765.1	206502.3	[500] µg/L	16:33:59
3	Tl 190.801†	318.1	338.8	[500] µg/L	16:34:25
3	U 409.014†	5271.8	5321.3	[500] µg/L	16:34:05
3	V 292.402†	45729.0	45534.4	[500] µg/L	16:34:05
3	Zn 213.857†	20028.6	19389.3	[500] µg/L	16:34:05

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1980605.3	9639.15	0.49%	100.89	%
Sc RADIAL	56953.9	386.91	0.68%	101	%
Y 371.029	1360398.8	6570.38	0.48%	100.57	%
Ag 328.068†	66543.7	3103.16	4.66%	[500]	µg/L
Al 396.153Radial†	7380.3	82.09	1.11%	[5000]	µg/L
As 188.979†	272.1	31.03	11.41%	[500]	µg/L
B 249.677†	12054.7	604.97	5.02%	[500]	µg/L
Ba 233.527†	20540.0	1410.14	6.87%	[500]	µg/L
Be 313.107†	835110.3	50997.60	6.11%	[500]	µg/L
Ca 317.933Radial†	5952.0	48.84	0.82%	[5000]	µg/L
Cd 226.502†	19838.5	1417.61	7.15%	[500]	µg/L
Co 228.616†	10938.4	862.20	7.88%	[500]	µg/L
Cr 267.716†	24447.5	2356.79	9.64%	[500]	µg/L
Cu 324.752†	75307.4	5691.88	7.56%	[500]	µg/L
K 766.490 Radial†	7753.1	42.12	0.54%	[5000]	µg/L
Mg 279.077 IEC†	583.8	1.92	0.33%	[5000]	µg/L
Mn 257.610†	160964.4	9413.47	5.85%	[500]	µg/L
Mo 202.031†	4987.0	665.66	13.35%	[500]	µg/L
Ni 231.604†	9942.2	758.69	7.63%	[500]	µg/L
P 214.914†	1230.9	145.94	11.86%	[2500]	µg/L
Pb 220.353†	2019.0	233.71	11.58%	[500]	µg/L
S 181.975 Axial†	233.1	22.09	9.48%	[1000]	µg/L
Sb 206.836†	531.5	60.25	11.34%	[500]	µg/L
Se 196.026†	349.9	34.37	9.82%	[500]	µg/L
SiO2†	26848.6	1607.13	5.99%	[5347.5]	µg/L
Si 251.611†	32639.5	1918.39	5.88%	[2500]	µg/L

Sn 189.927†	1156.7	168.51	14.57%	[500] µg/L
Sr 421.552†	54529.4	479.17	0.88%	[500] µg/L
Ti 334.940†	223499.0	14847.21	6.64%	[500] µg/L
Tl 190.801†	380.0	35.70	9.40%	[500] µg/L
U 409.014†	5944.2	542.02	9.12%	[500] µg/L
V 292.402†	50325.1	4166.77	8.28%	[500] µg/L
Zn 213.857†	21231.7	1602.33	7.55%	[500] µg/L

Sequence No.: 4
 Sample ID: SCAL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 2/19/2010 16:34:34
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc RADIAL	57422.3	57422.3	102 %		16:35:07
1	Al 396.153Radial†	14869.0	14621.7	[10000] µg/L		16:35:07
1	Ca 317.933Radial†	12244.2	11835.4	[10000] µg/L		16:35:27
1	Fe 238.204 Radial†	1337.9	1299.7	[10000] µg/L		16:35:27
1	K 766.490 Radial†	15761.0	15341.7	[10000] µg/L		16:35:07
1	Mg 279.077 IEC†	1192.0	1159.9	[10000] µg/L		16:35:27
1	Na 589.592 Radial†	34164.4	33140.9	[10000] µg/L		16:35:07
1	Sr 421.552†	110392.2	108581.9	[1000] µg/L		16:35:07
1	Sc 361.383	1976099.1	1976099.1	100.66 %		16:36:31
1	Y 371.029	1355904.7	1355904.7	100.23 %		16:36:31
1	Ag 328.068†	139743.4	139227.2	[1000] µg/L		16:36:37
1	As 188.979†	605.1	601.6	[1000] µg/L		16:36:57
1	B 249.677†	26002.4	25447.4	[1000] µg/L		16:36:37
1	Ba 233.527†	43710.4	43440.4	[1000] µg/L		16:36:37
1	Be 313.107†	1745428.1	1736819.7	[1000] µg/L		16:36:31
1	Cd 226.502†	41933.9	41800.2	[1000] µg/L		16:36:37
1	Co 228.616†	23253.7	23099.0	[1000] µg/L		16:36:37
1	Cr 267.716†	53002.6	52704.8	[1000] µg/L		16:36:37
1	Cu 324.752†	163999.7	160378.8	[1000] µg/L		16:36:37
1	Mn 257.610†	334533.8	332592.5	[1000] µg/L		16:36:37
1	Mo 202.031†	11127.7	11059.9	[1000] µg/L		16:36:57
1	Ni 231.604†	21437.9	20984.7	[1000] µg/L		16:36:37
1	P 214.914†	2747.0	2713.6	[5000] µg/L		16:36:57
1	Pb 220.353†	4519.4	4398.7	[1000] µg/L		16:36:57
1	S 181.975 Axial†	537.0	514.5	[2000] µg/L		16:36:57
1	Sb 206.836†	1201.1	1170.7	[1000] µg/L		16:36:57
1	Se 196.026†	778.4	754.0	[1000] µg/L		16:36:57
1	SiO2†	57839.1	56067.6	[10695] µg/L		16:36:37
1	Si 251.611†	68811.8	68049.2	[5000] µg/L		16:36:37
1	Sn 189.927†	2603.2	2585.7	[1000] µg/L		16:36:57
1	Ti 334.940†	470528.6	467263.1	[1000] µg/L		16:36:31
1	Tl 190.801†	793.2	810.4	[1000] µg/L		16:36:57
1	U 409.014†	12617.6	12611.8	[1000] µg/L		16:36:37
1	V 292.402†	108523.0	107854.9	[1000] µg/L		16:36:37
1	Zn 213.857†	45321.2	44489.2	[1000] µg/L		16:36:37
2	Sc RADIAL	58102.6	58102.6	103 %		16:35:33
2	Al 396.153Radial†	14960.9	14539.8	[10000] µg/L		16:35:33
2	Ca 317.933Radial†	12189.3	11640.9	[10000] µg/L		16:35:53
2	Fe 238.204 Radial†	1332.7	1279.3	[10000] µg/L		16:35:53
2	K 766.490 Radial†	15805.1	15203.0	[10000] µg/L		16:35:33
2	Mg 279.077 IEC†	1183.6	1138.1	[10000] µg/L		16:35:53
2	Na 589.592 Radial†	34301.4	32880.5	[10000] µg/L		16:35:33
2	Sr 421.552†	111111.1	108009.2	[1000] µg/L		16:35:33
2	Sc 361.383	1983646.2	1983646.2	101.05 %		16:37:04
2	Y 371.029	1360206.5	1360206.5	100.55 %		16:37:04
2	Ag 328.068†	139094.6	138056.9	[1000] µg/L		16:37:10
2	As 188.979†	587.5	581.9	[1000] µg/L		16:37:30
2	B 249.677†	25898.4	25246.3	[1000] µg/L		16:37:10
2	Ba 233.527†	43616.3	43182.0	[1000] µg/L		16:37:10
2	Be 313.107†	1746219.5	1731005.6	[1000] µg/L		16:37:04
2	Cd 226.502†	41774.2	41483.6	[1000] µg/L		16:37:10
2	Co 228.616†	23185.1	22943.2	[1000] µg/L		16:37:10
2	Cr 267.716†	52660.4	52165.9	[1000] µg/L		16:37:10
2	Cu 324.752†	163246.9	159013.9	[1000] µg/L		16:37:10
2	Mn 257.610†	333323.0	330129.8	[1000] µg/L		16:37:10
2	Mo 202.031†	10856.0	10749.0	[1000] µg/L		16:37:30
2	Ni 231.604†	21396.9	20863.1	[1000] µg/L		16:37:10
2	P 214.914†	2695.8	2652.5	[5000] µg/L		16:37:30
2	Pb 220.353†	4439.8	4303.0	[1000] µg/L		16:37:30

2	S 181.975 Axial†	528.4	504.0	[2000]	µg/L	16:37:30
2	Sb 206.836†	1179.2	1144.5	[1000]	µg/L	16:37:30
2	Se 196.026†	773.9	746.5	[1000]	µg/L	16:37:30
2	SiO2†	57827.3	55837.4	[10695]	µg/L	16:37:10
2	Si 251.611†	68760.8	67738.7	[5000]	µg/L	16:37:10
2	Sn 189.927†	2530.7	2504.2	[1000]	µg/L	16:37:30
2	Ti 334.940†	470622.3	465577.3	[1000]	µg/L	16:37:04
2	Tl 190.801†	781.8	796.1	[1000]	µg/L	16:37:30
2	U 409.014†	12629.7	12576.1	[1000]	µg/L	16:37:10
2	V 292.402†	108044.3	106971.0	[1000]	µg/L	16:37:10
2	Zn 213.857†	45147.6	44146.0	[1000]	µg/L	16:37:10
3	Sc RADIAL	57759.7	57759.7	102	%	16:35:59
3	Al 396.153Radial†	14873.5	14540.6	[10000]	µg/L	16:35:59
3	Ca 317.933Radial†	12176.6	11698.9	[10000]	µg/L	16:36:19
3	Fe 238.204 Radial†	1332.4	1286.7	[10000]	µg/L	16:36:19
3	K 766.490 Radial†	15741.4	15231.9	[10000]	µg/L	16:35:59
3	Mg 279.077 IEC†	1190.1	1151.2	[10000]	µg/L	16:36:19
3	Na 589.592 Radial†	34189.4	32969.0	[10000]	µg/L	16:35:59
3	Sr 421.552†	110552.5	108104.4	[1000]	µg/L	16:35:59
3	Sc 361.383	1985078.6	1985078.6	101.12	%	16:37:37
3	Y 371.029	1363323.6	1363323.6	100.78	%	16:37:37
3	Ag 328.068†	130033.0	128996.2	[1000]	µg/L	16:37:43
3	As 188.979†	504.5	499.3	[1000]	µg/L	16:38:03
3	B 249.677†	23878.6	23230.3	[1000]	µg/L	16:37:43
3	Ba 233.527†	39125.7	38709.9	[1000]	µg/L	16:37:43
3	Be 313.107†	1611138.8	1596172.2	[1000]	µg/L	16:37:37
3	Cd 226.502†	37509.7	37236.5	[1000]	µg/L	16:37:43
3	Co 228.616†	20554.3	20325.0	[1000]	µg/L	16:37:43
3	Cr 267.716†	45522.8	45069.6	[1000]	µg/L	16:37:43
3	Cu 324.752†	146020.7	141861.7	[1000]	µg/L	16:37:43
3	Mn 257.610†	295756.2	292740.6	[1000]	µg/L	16:37:43
3	Mo 202.031†	9074.4	8979.3	[1000]	µg/L	16:38:03
3	Ni 231.604†	18944.4	18422.5	[1000]	µg/L	16:37:43
3	P 214.914†	2295.1	2254.3	[5000]	µg/L	16:38:03
3	Pb 220.353†	3820.6	3687.4	[1000]	µg/L	16:38:03
3	S 181.975 Axial†	464.0	439.9	[2000]	µg/L	16:38:03
3	Sb 206.836†	1004.3	970.7	[1000]	µg/L	16:38:03
3	Se 196.026†	672.5	645.8	[1000]	µg/L	16:38:03
3	SiO2†	52945.1	50967.8	[10695]	µg/L	16:37:43
3	Si 251.611†	62859.1	61853.1	[5000]	µg/L	16:37:43
3	Sn 189.927†	2084.7	2061.2	[1000]	µg/L	16:38:03
3	Ti 334.940†	431690.8	426740.5	[1000]	µg/L	16:37:37
3	Tl 190.801†	695.2	709.9	[1000]	µg/L	16:38:03
3	U 409.014†	11027.6	10982.7	[1000]	µg/L	16:37:43
3	V 292.402†	95350.9	94340.9	[1000]	µg/L	16:37:43
3	Zn 213.857†	40251.0	39271.3	[1000]	µg/L	16:37:43

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1981608.0	4824.30	0.24%	100.94 %
Sc RADIAL	57761.5	340.17	0.59%	102 %
Y 371.029	1359811.6	3725.20	0.27%	100.52 %
Ag 328.068†	135426.8	5599.70	4.13%	[1000] µg/L
Al 396.153Radial†	14567.3	47.07	0.32%	[10000] µg/L
As 188.979†	560.9	54.25	9.67%	[1000] µg/L
B 249.677†	24641.4	1226.12	4.98%	[1000] µg/L
Ba 233.527†	41777.5	2659.67	6.37%	[1000] µg/L
Be 313.107†	1687999.2	79577.59	4.71%	[1000] µg/L
Ca 317.933Radial†	11725.1	99.83	0.85%	[10000] µg/L
Cd 226.502†	40173.4	2548.40	6.34%	[1000] µg/L
Co 228.616†	22122.4	1558.58	7.05%	[1000] µg/L
Cr 267.716†	49980.1	4261.16	8.53%	[1000] µg/L
Cu 324.752†	153751.5	10319.43	6.71%	[1000] µg/L
Fe 238.204 Radial†	1288.5	10.35	0.80%	[10000] µg/L
K 766.490 Radial†	15258.9	73.17	0.48%	[10000] µg/L
Mg 279.077 IEC†	1149.7	11.01	0.96%	[10000] µg/L
Mn 257.610†	318487.6	22331.56	7.01%	[1000] µg/L
Mo 202.031†	10262.8	1122.29	10.94%	[1000] µg/L
Na 589.592 Radial†	32996.8	132.37	0.40%	[10000] µg/L

Ni 231.604†	20090.1	1445.49	7.20%	[1000] µg/L
P 214.914†	2540.1	249.38	9.82%	[5000] µg/L
Pb 220.353†	4129.7	386.03	9.35%	[1000] µg/L
S 181.975 Axial†	486.1	40.36	8.30%	[2000] µg/L
Sb 206.836†	1095.3	108.69	9.92%	[1000] µg/L
Se 196.026†	715.4	60.44	8.45%	[1000] µg/L
SiO2†	54290.9	2880.22	5.31%	[10695] µg/L
Si 251.611†	65880.3	3491.15	5.30%	[5000] µg/L
Sn 189.927†	2383.7	282.23	11.84%	[1000] µg/L
Sr 421.552†	108231.8	306.90	0.28%	[1000] µg/L
Ti 334.940†	453193.6	22924.60	5.06%	[1000] µg/L
Tl 190.801†	772.1	54.39	7.04%	[1000] µg/L
U 409.014†	12056.9	930.42	7.72%	[1000] µg/L
V 292.402†	103055.6	7560.10	7.34%	[1000] µg/L
Zn 213.857†	42635.5	2918.50	6.85%	[1000] µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/19/2010 16:38:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	57539.5	57539.5	102 %	16:38:46
1	Al 396.153Radial†	72990.6	71659.1	[50000] µg/L	16:38:46
1	Ca 317.933Radial†	59650.4	58357.0	[50000] µg/L	16:38:46
1	Fe 238.204 Radial†	2601.5	2537.7	[20000] µg/L	16:39:06
1	Mg 279.077 IEC†	5707.4	5591.1	[50000] µg/L	16:39:06
1	Na 589.592 Radial†	66487.5	64809.1	[20000] µg/L	16:38:46
1	Sc 361.383	1991346.9	1991346.9	101.44 %	16:40:10
1	Y 371.029	1361642.8	1361642.8	100.66 %	16:40:10
2	Sc RADIAL	57692.4	57692.4	102 %	16:39:12
2	Al 396.153Radial†	73669.2	72133.7	[50000] µg/L	16:39:12
2	Ca 317.933Radial†	60236.2	58775.4	[50000] µg/L	16:39:12
2	Fe 238.204 Radial†	2575.9	2505.9	[20000] µg/L	16:39:32
2	Mg 279.077 IEC†	5682.3	5551.6	[50000] µg/L	16:39:32
2	Na 589.592 Radial†	66913.0	65052.7	[20000] µg/L	16:39:12
2	Sc 361.383	1994513.8	1994513.8	101.60 %	16:40:18
2	Y 371.029	1362831.0	1362831.0	100.74 %	16:40:18
3	Sc RADIAL	57518.8	57518.8	102 %	16:39:38
3	Al 396.153Radial†	72963.9	71658.6	[50000] µg/L	16:39:38
3	Ca 317.933Radial†	59707.9	58434.6	[50000] µg/L	16:39:38
3	Fe 238.204 Radial†	2595.7	2533.0	[20000] µg/L	16:39:58
3	Mg 279.077 IEC†	5726.3	5611.7	[50000] µg/L	16:39:58
3	Na 589.592 Radial†	66483.6	64828.8	[20000] µg/L	16:39:38
3	Sc 361.383	1986414.7	1986414.7	101.19 %	16:40:26
3	Y 371.029	1358035.0	1358035.0	100.39 %	16:40:26

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1990758.5	4081.49	0.21%	101.41 %
Sc RADIAL	57583.6	94.84	0.16%	102 %
Y 371.029	1360836.3	2497.65	0.18%	100.60 %
Al 396.153Radial†	71817.1	274.12	0.38%	[50000] µg/L
Ca 317.933Radial†	58522.3	222.58	0.38%	[50000] µg/L
Fe 238.204 Radial†	2525.5	17.19	0.68%	[20000] µg/L
Mg 279.077 IEC†	5584.8	30.54	0.55%	[50000] µg/L
Na 589.592 Radial†	64896.9	135.34	0.21%	[20000] µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	135.0	0.00000	0.999971	
Al 396.153Radial	3	Lin Thru 0	0.0	1.437	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	0.5579	0.00000	0.999904	
B 249.677	3	Lin Thru 0	0.0	24.54	0.00000	0.999963	
Ba 233.527	3	Lin Thru 0	0.0	41.65	0.00000	0.999968	
Be 313.107	3	Lin Thru 0	0.0	1685	0.00000	0.999986	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.171	0.00000	0.999999	
Cd 226.502	3	Lin Thru 0	0.0	40.09	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	22.08	0.00000	0.999983	
Cr 267.716	3	Lin Thru 0	0.0	49.79	0.00000	0.999947	
Cu 324.752	3	Lin Thru 0	0.0	153.2	0.00000	0.999952	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1268	0.00000	0.999967	
K 766.490 Radial	3	Lin Thru 0	0.0	1.531	0.00000	0.999977	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1119	0.00000	0.999975	
Mn 257.610	3	Lin Thru 0	0.0	319.3	0.00000	0.999976	
Mo 202.031	3	Lin Thru 0	0.0	10.21	0.00000	0.999909	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.256	0.00000	0.999977	

Ni 231.604	3	Lin Thru 0	0.0	20.06	0.00000	0.999972
P 214.914	3	Lin Thru 0	0.0	0.5051	0.00000	0.999914
Pb 220.353	3	Lin Thru 0	0.0	4.114	0.00000	0.999940
S 181.975 Axial	3	Lin Thru 0	0.0	0.2411	0.00000	0.999862
Sb 206.836	3	Lin Thru 0	0.0	1.089	0.00000	0.999918
Se 196.026	3	Lin Thru 0	0.0	0.7120	0.00000	0.999954
SiO2	3	Lin Thru 0	0.0	5.066	0.00000	0.999988
Si 251.611	3	Lin Thru 0	0.0	13.15	0.00000	0.999992
Sn 189.927	3	Lin Thru 0	0.0	2.371	0.00000	0.999901
Sr 421.552	3	Lin Thru 0	0.0	108.4	0.00000	0.999995
Ti 334.940	3	Lin Thru 0	0.0	452.0	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	0.7699	0.00000	0.999976
U 409.014	3	Lin Thru 0	0.0	12.04	0.00000	0.999914
V 292.402	3	Lin Thru 0	0.0	102.6	0.00000	0.999947
Zn 213.857	3	Lin Thru 0	0.0	42.62	0.00000	0.999982

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/19/2010 16:40:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57359.3	57359.3	102 %			16:41:09
1	Al 396.153Radial†	7610.3	7488.4	5197.5 µg/L		5197.5 ppb	16:41:09
1	Ca 317.933Radial†	6222.8	5917.8	5054.9 µg/L		5054.9 ppb	16:41:29
1	Fe 238.204 Radial†	692.6	665.6	5260.8 µg/L		5260.8 ppb	16:41:29
1	K 766.490 Radial†	4130.5	3903.3	2549.3 µg/L		2549.3 ppb	16:41:09
1	Mg 279.077 IEC†	619.9	597.8	5347.7 µg/L		5347.7 ppb	16:41:29
1	Na 589.592 Radial†	9010.6	8402.7	2580.8 µg/L		2580.8 ppb	16:41:09
1	Sr 421.552†	58315.4	57408.5	529.60 µg/L		529.60 ppb	16:41:09
1	Sc 361.383	2000166.2	2000166.2	101.89 %			16:42:33
1	Y 371.029	1374985.6	1374985.6	101.64 %			16:42:33
1	Ag 328.068†	36064.6	35798.3	269.00 µg/L		269.00 ppb	16:42:38
1	As 188.979†	291.8	286.8	513.02 µg/L		513.02 ppb	16:42:59
1	B 249.677†	13712.5	13074.4	530.96 µg/L		530.96 ppb	16:42:38
1	Ba 233.527†	22228.0	21833.3	525.11 µg/L		525.11 ppb	16:42:38
1	Be 313.107†	460753.1	455074.9	269.89 µg/L		269.89 ppb	16:42:33
1	Cd 226.502†	21063.9	20815.4	519.08 µg/L		519.08 ppb	16:42:38
1	Co 228.616†	11897.3	11675.0	528.19 µg/L		528.19 ppb	16:42:38
1	Cr 267.716†	25972.0	25541.3	513.34 µg/L		513.34 ppb	16:42:38
1	Cu 324.752†	84959.1	80841.8	528.42 µg/L		528.42 ppb	16:42:38
1	Mn 257.610†	174009.6	171042.6	536.11 µg/L		536.11 ppb	16:42:33
1	Mo 202.031†	5977.0	5871.6	575.18 µg/L		575.18 ppb	16:42:59
1	Ni 231.604†	11001.5	10485.4	522.13 µg/L		522.13 ppb	16:42:38
1	P 214.914†	1396.3	1355.1	2632.9 µg/L		2632.9 ppb	16:42:59
1	Pb 220.353†	2319.9	2186.0	531.70 µg/L		531.70 ppb	16:42:59
1	S 181.975 Axial†	667.0	635.7	2636.3 µg/L		2636.3 ppb	16:42:59
1	Sb 206.836†	616.3	582.4	537.83 µg/L		537.83 ppb	16:42:59
1	Se 196.026†	1971.6	1915.8	2698.7 µg/L		2698.7 ppb	16:42:59
1	SiO2†	55895.4	53468.6	10554 µg/L		10554 ppb	16:42:38
1	Si 251.611†	66312.0	64773.2	4924.2 µg/L		4924.2 ppb	16:42:38
1	Sn 189.927†	1397.6	1371.4	578.38 µg/L		578.38 ppb	16:42:59
1	Ti 334.940†	236505.6	231950.1	512.78 µg/L		512.78 ppb	16:42:33
1	Tl 190.801†	406.2	421.1	553.15 µg/L		553.15 ppb	16:42:59
1	U 409.014†	6233.6	6195.2	513.68 µg/L		513.68 ppb	16:42:38
1	V 292.402†	55272.1	54293.1	535.87 µg/L		535.87 ppb	16:42:38
1	Zn 213.857†	23721.8	22748.1	529.99 µg/L		529.99 ppb	16:42:38
2	Sc RADIAL	57362.6	57362.6	102 %			16:41:35
2	Al 396.153Radial†	7570.2	7448.5	5170.1 µg/L		5170.1 ppb	16:41:35
2	Ca 317.933Radial†	6248.3	5942.6	5076.0 µg/L		5076.0 ppb	16:41:55
2	Fe 238.204 Radial†	687.3	660.3	5219.2 µg/L		5219.2 ppb	16:41:55
2	K 766.490 Radial†	4135.1	3907.6	2552.1 µg/L		2552.1 ppb	16:41:35
2	Mg 279.077 IEC†	628.6	606.2	5423.0 µg/L		5423.0 ppb	16:41:55
2	Na 589.592 Radial†	8905.8	8299.0	2549.0 µg/L		2549.0 ppb	16:41:35
2	Sr 421.552†	58283.1	57373.4	529.28 µg/L		529.28 ppb	16:41:35
2	Sc 361.383	1991588.3	1991588.3	101.45 %			16:43:06
2	Y 371.029	1369085.3	1369085.3	101.21 %			16:43:06
2	Ag 328.068†	36279.5	36162.5	271.74 µg/L		271.74 ppb	16:43:12
2	As 188.979†	284.2	280.6	501.89 µg/L		501.89 ppb	16:43:32
2	B 249.677†	13841.7	13259.7	538.55 µg/L		538.55 ppb	16:43:12
2	Ba 233.527†	22542.4	22237.3	534.82 µg/L		534.82 ppb	16:43:12
2	Be 313.107†	458487.5	454789.4	269.72 µg/L		269.72 ppb	16:43:06
2	Cd 226.502†	21330.8	21167.6	527.88 µg/L		527.88 ppb	16:43:12
2	Co 228.616†	12048.7	11874.5	537.21 µg/L		537.21 ppb	16:43:12
2	Cr 267.716†	26258.5	25933.5	521.22 µg/L		521.22 ppb	16:43:12
2	Cu 324.752†	85756.0	81986.4	535.89 µg/L		535.89 ppb	16:43:12
2	Mn 257.610†	173215.7	170995.8	535.95 µg/L		535.95 ppb	16:43:06
2	Mo 202.031†	5783.7	5706.4	559.00 µg/L		559.00 ppb	16:43:32
2	Ni 231.604†	11147.8	10676.1	531.63 µg/L		531.63 ppb	16:43:12
2	P 214.914†	1350.6	1315.9	2554.3 µg/L		2554.3 ppb	16:43:32
2	Pb 220.353†	2269.2	2145.8	521.87 µg/L		521.87 ppb	16:43:32

2	S 181.975 Axial†	662.1	633.7	2628.1 µg/L	2628.1 ppb	16:43:32
2	Sb 206.836†	597.3	566.3	522.67 µg/L	522.67 ppb	16:43:32
2	Se 196.026†	1939.9	1892.9	2666.3 µg/L	2666.3 ppb	16:43:32
2	SiO2†	56544.0	54344.2	10727 µg/L	10727 ppb	16:43:12
2	Si 251.611†	67028.2	65759.4	4999.2 µg/L	4999.2 ppb	16:43:12
2	Sn 189.927†	1346.2	1326.5	559.48 µg/L	559.48 ppb	16:43:32
2	Ti 334.940†	235243.5	231705.8	512.24 µg/L	512.24 ppb	16:43:06
2	Tl 190.801†	411.2	427.8	561.75 µg/L	561.75 ppb	16:43:32
2	U 409.014†	6266.1	6253.6	518.55 µg/L	518.55 ppb	16:43:12
2	V 292.402†	55774.5	55022.0	542.87 µg/L	542.87 ppb	16:43:12
2	Zn 213.857†	24005.0	23127.4	538.84 µg/L	538.84 ppb	16:43:12
3	Sc RADIAL	57314.4	57314.4	101 %		16:42:01
3	Al 396.153Radial†	7617.9	7501.8	5209.5 µg/L	5209.5 ppb	16:42:01
3	Ca 317.933Radial†	6192.6	5892.9	5033.6 µg/L	5033.6 ppb	16:42:21
3	Fe 238.204 Radial†	680.9	654.6	5172.6 µg/L	5172.6 ppb	16:42:21
3	K 766.490 Radial†	4172.6	3948.0	2578.5 µg/L	2578.5 ppb	16:42:01
3	Mg 279.077 IEC†	617.9	596.2	5331.5 µg/L	5331.5 ppb	16:42:21
3	Na 589.592 Radial†	9012.1	8411.2	2583.4 µg/L	2583.4 ppb	16:42:01
3	Sr 421.552†	58397.5	57534.4	530.76 µg/L	530.76 ppb	16:42:01
3	Sc 361.383	1985318.4	1985318.4	101.13 %		16:43:39
3	Y 371.029	1365549.9	1365549.9	100.95 %		16:43:39
3	Ag 328.068†	32686.9	32723.0	245.69 µg/L	245.69 ppb	16:43:45
3	As 188.979†	231.6	229.5	410.45 µg/L	410.45 ppb	16:44:05
3	B 249.677†	12281.0	11759.6	477.28 µg/L	477.28 ppb	16:43:45
3	Ba 233.527†	19297.0	19098.3	459.31 µg/L	459.31 ppb	16:43:45
3	Be 313.107†	404356.4	402690.8	238.83 µg/L	238.83 ppb	16:43:39
3	Cd 226.502†	18203.2	18141.4	452.33 µg/L	452.33 ppb	16:43:45
3	Co 228.616†	10166.3	10050.7	454.63 µg/L	454.63 ppb	16:43:45
3	Cr 267.716†	21411.9	21222.9	426.55 µg/L	426.55 ppb	16:43:45
3	Cu 324.752†	73007.3	69647.2	455.34 µg/L	455.34 ppb	16:43:45
3	Mn 257.610†	153334.3	151875.9	476.08 µg/L	476.08 ppb	16:43:39
3	Mo 202.031†	4566.2	4520.5	442.87 µg/L	442.87 ppb	16:44:05
3	Ni 231.604†	9424.8	9007.0	448.52 µg/L	448.52 ppb	16:43:45
3	P 214.914†	1102.1	1074.4	2083.0 µg/L	2083.0 ppb	16:44:05
3	Pb 220.353†	1863.1	1751.3	425.87 µg/L	425.87 ppb	16:44:05
3	S 181.975 Axial†	551.5	526.4	2182.8 µg/L	2182.8 ppb	16:44:05
3	Sb 206.836†	493.8	465.8	429.60 µg/L	429.60 ppb	16:44:05
3	Se 196.026†	1594.6	1557.5	2195.3 µg/L	2195.3 ppb	16:44:05
3	SiO2†	49563.2	47617.5	9399.1 µg/L	9399.1 ppb	16:43:45
3	Si 251.611†	58584.7	57619.0	4380.3 µg/L	4380.3 ppb	16:43:45
3	Sn 189.927†	1053.3	1041.2	439.13 µg/L	439.13 ppb	16:44:05
3	Ti 334.940†	205922.2	203444.7	449.72 µg/L	449.72 ppb	16:43:39
3	Tl 190.801†	337.8	356.4	468.42 µg/L	468.42 ppb	16:44:05
3	U 409.014†	5226.1	5244.7	434.73 µg/L	434.73 ppb	16:43:45
3	V 292.402†	46549.8	46074.1	454.46 µg/L	454.46 ppb	16:43:45
3	Zn 213.857†	20360.6	19598.5	456.55 µg/L	456.55 ppb	16:43:45

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1992357.6	101.49 %	0.380			0.37%
Sc RADIAL	57345.5	102 %	0.0			0.05%
Y 371.029	1369873.6	101.27 %	0.352			0.35%
Ag 328.068†	34894.6	262.14 µg/L	14.318	262.14 ppb	14.318	5.46%
QC value within limits for Ag 328.068 Recovery = 104.86%						
Al 396.153Radial†	7479.5	5192.4 µg/L	20.22	5192.4 ppb	20.22	0.39%
QC value within limits for Al 396.153Radial Recovery = 103.85%						
As 188.979†	265.6	475.12 µg/L	56.284	475.12 ppb	56.284	11.85%
QC value within limits for As 188.979 Recovery = 95.02%						
B 249.677†	12697.9	515.59 µg/L	33.400	515.59 ppb	33.400	6.48%
QC value within limits for B 249.677 Recovery = 103.12%						
Ba 233.527†	21056.3	506.41 µg/L	41.083	506.41 ppb	41.083	8.11%
QC value within limits for Ba 233.527 Recovery = 101.28%						
Be 313.107†	437518.4	259.48 µg/L	17.887	259.48 ppb	17.887	6.89%
QC value within limits for Be 313.107 Recovery = 103.79%						
Ca 317.933Radial†	5917.8	5054.8 µg/L	21.22	5054.8 ppb	21.22	0.42%
QC value within limits for Ca 317.933Radial Recovery = 101.10%						
Cd 226.502†	20041.5	499.76 µg/L	41.316	499.76 ppb	41.316	8.27%
QC value within limits for Cd 226.502 Recovery = 99.95%						
Co 228.616†	11200.1	506.67 µg/L	45.295	506.67 ppb	45.295	8.94%

QC value within limits for Co 228.616	Recovery = 101.33%			
Cr 267.716†	24232.6	487.04 µg/L	52.530	10.79%
QC value within limits for Cr 267.716	Recovery = 97.41%			
Cu 324.752†	77491.8	506.55 µg/L	44.507	8.79%
QC value within limits for Cu 324.752	Recovery = 101.31%			
Fe 238.204 Radial†	660.2	5217.6 µg/L	44.12	0.85%
QC value within limits for Fe 238.204 Radial	Recovery = 104.35%			
K 766.490 Radial†	3919.6	2560.0 µg/L	16.09	0.63%
QC value within limits for K 766.490 Radial	Recovery = 102.40%			
Mg 279.077 IEC†	600.1	5367.4 µg/L	48.83	0.91%
QC value within limits for Mg 279.077 IEC	Recovery = 107.35%			
Mn 257.610†	164638.1	516.05 µg/L	34.615	6.71%
QC value within limits for Mn 257.610	Recovery = 103.21%			
Mo 202.031†	5366.2	525.68 µg/L	72.174	13.73%
QC value within limits for Mo 202.031	Recovery = 105.14%			
Na 589.592 Radial†	8371.0	2571.1 µg/L	19.18	0.75%
QC value within limits for Na 589.592 Radial	Recovery = 102.84%			
Ni 231.604†	10056.2	500.76 µg/L	45.489	9.08%
QC value within limits for Ni 231.604	Recovery = 100.15%			
P 214.914†	1248.5	2423.4 µg/L	297.40	12.27%
QC value within limits for P 214.914	Recovery = 96.94%			
Pb 220.353†	2027.7	493.15 µg/L	58.472	11.86%
QC value within limits for Pb 220.353	Recovery = 98.63%			
S 181.975 Axial†	598.6	2482.4 µg/L	259.45	10.45%
QC value within limits for S 181.975 Axial	Recovery = 99.30%			
Sb 206.836†	538.2	496.70 µg/L	58.600	11.80%
QC value within limits for Sb 206.836	Recovery = 99.34%			
Se 196.026†	1788.7	2520.1 µg/L	281.74	11.18%
QC value within limits for Se 196.026	Recovery = 100.81%			
SiO2†	51810.1	10227 µg/L	721.9	7.06%
QC value within limits for SiO2	Recovery = 95.62%			
Si 251.611†	62717.2	4767.9 µg/L	337.74	7.08%
QC value within limits for Si 251.611	Recovery = 95.36%			
Sn 189.927†	1246.4	525.66 µg/L	75.534	14.37%
QC value within limits for Sn 189.927	Recovery = 105.13%			
Sr 421.552†	57438.8	529.88 µg/L	0.781	0.15%
QC value within limits for Sr 421.552	Recovery = 105.98%			
Ti 334.940†	222366.9	491.58 µg/L	36.251	7.37%
QC value within limits for Ti 334.940	Recovery = 98.32%			
Tl 190.801†	401.7	527.77 µg/L	51.582	9.77%
QC value within limits for Tl 190.801	Recovery = 105.55%			
U 409.014†	5897.8	488.99 µg/L	47.052	9.62%
QC value within limits for U 409.014	Recovery = 97.80%			
V 292.402†	51796.4	511.07 µg/L	49.146	9.62%
QC value within limits for V 292.402	Recovery = 102.21%			
Zn 213.857†	21824.7	508.46 µg/L	45.173	8.88%
QC value within limits for Zn 213.857	Recovery = 101.69%			

All analyte(s) passed QC.

Sequence No.: 7
 Sample ID: ICB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 10
 Date Collected: 2/19/2010 16:44:15
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56443.8	56443.8	99.9 %		16:44:48
1	Al 396.153Radial†	-10.1	-17.4	-12.137 µg/L	-12.137 ppb	16:44:48
1	Ca 317.933Radial†	199.6	-11.5	-9.8207 µg/L	-9.8207 ppb	16:45:08
1	Fe 238.204 Radial†	15.6	-0.9	-7.1871 µg/L	-7.1871 ppb	16:45:08
1	K 766.490 Radial†	171.4	6.6	4.2945 µg/L	4.2945 ppb	16:44:48
1	Mg 279.077 IEC†	7.6	-5.2	-46.321 µg/L	-46.321 ppb	16:45:08
1	Na 589.592 Radial†	489.1	17.3	5.3226 µg/L	5.3226 ppb	16:44:48
1	Sr 421.552†	79.0	50.3	0.4638 µg/L	0.4638 ppb	16:44:48
1	Sc 361.383	1989449.1	1989449.1	101.34 %		16:46:10
1	Y 371.029	1372109.7	1372109.7	101.43 %		16:46:10
1	Ag 328.068†	-456.4	-48.7	-0.3594 µg/L	-0.3594 ppb	16:46:15
1	As 188.979†	-5.3	-4.7	-8.4993 µg/L	-8.4993 ppb	16:46:36
1	B 249.677†	407.4	17.9	0.7343 µg/L	0.7343 ppb	16:46:36
1	Ba 233.527†	-5.2	11.9	0.2870 µg/L	0.2870 ppb	16:46:36
1	Be 313.107†	-2754.2	138.0	0.0819 µg/L	0.0819 ppb	16:46:15
1	Cd 226.502†	-144.4	-0.8	-0.0195 µg/L	-0.0195 ppb	16:46:36
1	Co 228.616†	1.0	-1.0	-0.0431 µg/L	-0.0431 ppb	16:46:36
1	Cr 267.716†	-33.7	17.2	0.3447 µg/L	0.3447 ppb	16:46:36
1	Cu 324.752†	2574.7	-3.1	-0.0214 µg/L	-0.0214 ppb	16:46:15
1	Mn 257.610†	-226.6	32.4	0.1025 µg/L	0.1025 ppb	16:46:36
1	Mo 202.031†	0.9	6.2	0.6075 µg/L	0.6075 ppb	16:46:36
1	Ni 231.604†	309.9	-6.6	-0.3281 µg/L	-0.3281 ppb	16:46:36
1	P 214.914†	11.4	-4.0	-7.9899 µg/L	-7.9899 ppb	16:46:36
1	Pb 220.353†	88.4	-3.8	-0.9074 µg/L	-0.9074 ppb	16:46:36
1	S 181.975 Axial†	15.3	-3.9	-15.967 µg/L	-15.967 ppb	16:46:36
1	Sb 206.836†	19.9	-2.9	-2.6187 µg/L	-2.6187 ppb	16:46:36
1	Se 196.026†	12.9	-6.6	-9.2715 µg/L	-9.2715 ppb	16:46:36
1	SiO2†	1429.0	18.5	3.6472 µg/L	3.6472 ppb	16:46:15
1	Si 251.611†	332.7	17.7	1.3429 µg/L	1.3429 ppb	16:46:36
1	Sn 189.927†	3.4	3.0	1.2548 µg/L	1.2548 ppb	16:46:36
1	Ti 334.940†	214.5	36.6	0.0844 µg/L	0.0844 ppb	16:46:15
1	Tl 190.801†	-23.3	-0.6	-0.8230 µg/L	-0.8230 ppb	16:46:36
1	U 409.014†	-112.1	-33.5	-2.7841 µg/L	-2.7841 ppb	16:46:15
1	V 292.402†	-13.0	31.9	0.3124 µg/L	0.3124 ppb	16:46:15
1	Zn 213.857†	555.4	13.6	0.3246 µg/L	0.3246 ppb	16:46:36
2	Sc RADIAL	56635.2	56635.2	100 %		16:45:14
2	Al 396.153Radial†	-10.1	-17.4	-12.141 µg/L	-12.141 ppb	16:45:14
2	Ca 317.933Radial†	187.9	-23.8	-20.367 µg/L	-20.367 ppb	16:45:34
2	Fe 238.204 Radial†	16.3	-0.3	-2.5827 µg/L	-2.5827 ppb	16:45:34
2	K 766.490 Radial†	218.4	52.9	34.520 µg/L	34.520 ppb	16:45:14
2	Mg 279.077 IEC†	12.4	-0.5	-4.1392 µg/L	-4.1392 ppb	16:45:34
2	Na 589.592 Radial†	513.9	40.5	12.430 µg/L	12.430 ppb	16:45:14
2	Sr 421.552†	58.4	29.4	0.2715 µg/L	0.2715 ppb	16:45:14
2	Sc 361.383	1983608.7	1983608.7	101.04 %		16:46:42
2	Y 371.029	1367482.8	1367482.8	101.09 %		16:46:42
2	Ag 328.068†	-443.4	-37.3	-0.2763 µg/L	-0.2763 ppb	16:46:47
2	As 188.979†	-2.8	-2.3	-4.1149 µg/L	-4.1149 ppb	16:47:08
2	B 249.677†	412.0	23.6	0.9621 µg/L	0.9621 ppb	16:47:08
2	Ba 233.527†	-18.2	-0.9	-0.0219 µg/L	-0.0219 ppb	16:47:08
2	Be 313.107†	-2703.5	180.2	0.1068 µg/L	0.1068 ppb	16:46:47
2	Cd 226.502†	-127.6	15.4	0.3840 µg/L	0.3840 ppb	16:47:08
2	Co 228.616†	7.3	5.3	0.2405 µg/L	0.2405 ppb	16:47:08
2	Cr 267.716†	-58.8	-7.8	-0.1569 µg/L	-0.1569 ppb	16:47:08
2	Cu 324.752†	2608.4	37.7	0.2459 µg/L	0.2459 ppb	16:46:47
2	Mn 257.610†	-227.1	31.2	0.0977 µg/L	0.0977 ppb	16:47:08
2	Mo 202.031†	0.0	5.4	0.5248 µg/L	0.5248 ppb	16:47:08
2	Ni 231.604†	305.0	-10.5	-0.5251 µg/L	-0.5251 ppb	16:47:08
2	P 214.914†	15.6	0.1	0.1534 µg/L	0.1534 ppb	16:47:08
2	Pb 220.353†	82.8	-8.9	-2.1787 µg/L	-2.1787 ppb	16:47:08

2	S 181.975 Axial†	18.3	-0.8	-3.3922 µg/L	-3.3922 ppb	16:47:08
2	Sb 206.836†	21.7	-1.0	-0.9259 µg/L	-0.9259 ppb	16:47:08
2	Se 196.026†	16.5	-3.0	-4.1629 µg/L	-4.1629 ppb	16:47:08
2	SiO2†	1450.1	43.5	8.5888 µg/L	8.5888 ppb	16:46:47
2	Si 251.611†	323.7	9.8	0.7431 µg/L	0.7431 ppb	16:47:08
2	Sn 189.927†	7.2	6.8	2.8541 µg/L	2.8541 ppb	16:47:08
2	Ti 334.940†	275.2	97.3	0.2152 µg/L	0.2152 ppb	16:46:47
2	Tl 190.801†	-21.7	1.0	1.2441 µg/L	1.2441 ppb	16:47:08
2	U 409.014†	-34.6	42.8	3.5596 µg/L	3.5596 ppb	16:46:47
2	V 292.402†	-47.6	-2.4	-0.0159 µg/L	-0.0159 ppb	16:46:47
2	Zn 213.857†	557.8	17.6	0.4155 µg/L	0.4155 ppb	16:47:08
3	Sc RADIAL	56103.5	56103.5	99.3 %		16:45:39
3	Al 396.153Radial†	-12.8	-20.2	-14.109 µg/L	-14.109 ppb	16:45:39
3	Ca 317.933Radial†	191.0	-18.9	-16.130 µg/L	-16.130 ppb	16:46:00
3	Fe 238.204 Radial†	17.4	1.0	7.6890 µg/L	7.6890 ppb	16:46:00
3	K 766.490 Radial†	173.9	10.1	6.6116 µg/L	6.6116 ppb	16:45:39
3	Mg 279.077 IEC†	10.0	-2.8	-24.916 µg/L	-24.916 ppb	16:46:00
3	Na 589.592 Radial†	509.0	40.4	12.402 µg/L	12.402 ppb	16:45:39
3	Sr 421.552†	51.1	22.6	0.2086 µg/L	0.2086 ppb	16:45:39
3	Sc 361.383	1979825.1	1979825.1	100.85 %		16:47:14
3	Y 371.029	1367032.8	1367032.8	101.06 %		16:47:14
3	Ag 328.068†	-365.2	39.5	0.2926 µg/L	0.2926 ppb	16:47:20
3	As 188.979†	6.4	6.8	12.172 µg/L	12.172 ppb	16:47:40
3	B 249.677†	398.6	11.1	0.4486 µg/L	0.4486 ppb	16:47:40
3	Ba 233.527†	-12.4	4.8	0.1152 µg/L	0.1152 ppb	16:47:40
3	Be 313.107†	-2652.0	226.1	0.1341 µg/L	0.1341 ppb	16:47:20
3	Cd 226.502†	-131.0	11.8	0.2924 µg/L	0.2924 ppb	16:47:40
3	Co 228.616†	3.8	1.9	0.0848 µg/L	0.0848 ppb	16:47:40
3	Cr 267.716†	-32.1	18.5	0.3716 µg/L	0.3716 ppb	16:47:40
3	Cu 324.752†	2543.2	-22.0	-0.1426 µg/L	-0.1426 ppb	16:47:20
3	Mn 257.610†	-230.0	28.0	0.0896 µg/L	0.0896 ppb	16:47:40
3	Mo 202.031†	7.5	12.8	1.2495 µg/L	1.2495 ppb	16:47:40
3	Ni 231.604†	307.7	-7.2	-0.3603 µg/L	-0.3603 ppb	16:47:40
3	P 214.914†	16.4	0.9	1.7842 µg/L	1.7842 ppb	16:47:40
3	Pb 220.353†	91.4	-0.3	-0.0769 µg/L	-0.0769 ppb	16:47:40
3	S 181.975 Axial†	16.1	-2.9	-12.216 µg/L	-12.216 ppb	16:47:40
3	Sb 206.836†	18.4	-4.3	-3.9156 µg/L	-3.9156 ppb	16:47:40
3	Se 196.026†	19.5	-0.0	0.0313 µg/L	0.0313 ppb	16:47:40
3	SiO2†	1408.7	5.2	1.0280 µg/L	1.0280 ppb	16:47:20
3	Si 251.611†	328.7	15.3	1.1614 µg/L	1.1614 ppb	16:47:40
3	Sn 189.927†	7.2	6.8	2.8616 µg/L	2.8616 ppb	16:47:40
3	Ti 334.940†	264.4	87.1	0.1944 µg/L	0.1944 ppb	16:47:20
3	Tl 190.801†	-17.8	4.8	6.2130 µg/L	6.2130 ppb	16:47:40
3	U 409.014†	44.4	121.1	10.062 µg/L	10.062 ppb	16:47:20
3	V 292.402†	-48.6	-3.5	-0.0118 µg/L	-0.0118 ppb	16:47:20
3	Zn 213.857†	546.8	7.8	0.1863 µg/L	0.1863 ppb	16:47:40

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1984294.3	101.08 %	0.247			0.24%
Sc RADIAL	56394.2	99.8 %	0.48			0.48%
Y 371.029	1368875.1	101.19 %	0.208			0.21%
Ag 328.068†	-15.5	-0.1144 µg/L	0.35487	-0.1144 ppb	0.35487	310.31%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-18.4	-12.796 µg/L	1.1373	-12.796 ppb	1.1373	8.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.1	-0.1476 µg/L	10.89157	-0.1476 ppb	10.89157	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	17.5	0.7150 µg/L	0.25726	0.7150 ppb	0.25726	35.98%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.3	0.1268 µg/L	0.15478	0.1268 ppb	0.15478	122.10%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	181.4	0.1076 µg/L	0.02612	0.1076 ppb	0.02612	24.28%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-18.1	-15.439 µg/L	5.3071	-15.439 ppb	5.3071	34.37%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.8	0.2189 µg/L	0.21153	0.2189 ppb	0.21153	96.62%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.1	0.0941 µg/L	0.14201	0.0941 ppb	0.14201	150.94%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	9.3 0.1865 µg/L	0.29770 0.1865 ppb	0.29770 159.64%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	4.2 0.0273 µg/L	0.19878 0.0273 ppb	0.19878 728.06%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.1 -0.6936 µg/L	7.61586 -0.6936 ppb	7.61586 >999.9%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	23.2 15.142 µg/L	16.8219 15.142 ppb	16.8219 111.09%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-2.8 -25.125 µg/L	21.0915 -25.125 ppb	21.0915 83.94%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	30.6 0.0966 µg/L	0.00647 0.0966 ppb	0.00647 6.70%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	8.1 0.7939 µg/L	0.39671 0.7939 ppb	0.39671 49.97%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	32.7 10.051 µg/L	4.0953 10.051 ppb	4.0953 40.74%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-8.1 -0.4045 µg/L	0.10569 -0.4045 ppb	0.10569 26.13%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-1.0 -2.0175 µg/L	5.23620 -2.0175 ppb	5.23620 259.54%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-4.3 -1.0543 µg/L	1.05859 -1.0543 ppb	1.05859 100.40%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-2.5 -10.525 µg/L	6.4558 -10.525 ppb	6.4558 61.34%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-2.7 -2.4867 µg/L	1.49921 -2.4867 ppb	1.49921 60.29%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.2 -4.4677 µg/L	4.65886 -4.4677 ppb	4.65886 104.28%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	22.4 4.4213 µg/L	3.83941 4.4213 ppb	3.83941 86.84%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	14.2 1.0825 µg/L	0.30758 1.0825 ppb	0.30758 28.41%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	5.5 2.3235 µg/L	0.92554 2.3235 ppb	0.92554 39.83%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	34.1 0.3146 µg/L	0.13296 0.3146 ppb	0.13296 42.26%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	73.7 0.1647 µg/L	0.07028 0.1647 ppb	0.07028 42.68%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	1.7 2.2114 µg/L	3.61632 2.2114 ppb	3.61632 163.53%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	43.5 3.6126 µg/L	6.42347 3.6126 ppb	6.42347 177.81%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	8.7 0.0949 µg/L	0.18839 0.0949 ppb	0.18839 198.45%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	13.0 0.3088 µg/L	0.11540 0.3088 ppb	0.11540 37.37%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 2/19/2010 16:47:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56282.3	56282.3	99.6 %		16:48:22
1	Al 396.153Radial†	298.2	292.0	202.91 µg/L	202.91 ppb	16:48:22
1	Ca 317.933Radial†	429.4	219.7	187.68 µg/L	187.68 ppb	16:48:43
1	Fe 238.204 Radial†	29.6	13.1	103.39 µg/L	103.39 ppb	16:48:43
1	K 766.490 Radial†	342.0	178.3	116.45 µg/L	116.45 ppb	16:48:22
1	Mg 279.077 IEC†	44.3	31.6	282.85 µg/L	282.85 ppb	16:48:43
1	Na 589.592 Radial†	1474.0	1007.4	309.41 µg/L	309.41 ppb	16:48:22
1	Sr 421.552†	600.8	574.3	5.2980 µg/L	5.2980 ppb	16:48:22
1	Sc 361.383	1977761.8	1977761.8	100.75 %		16:49:45
1	Y 371.029	1365399.5	1365399.5	100.93 %		16:49:45
1	Ag 328.068†	258.4	658.1	4.9148 µg/L	4.9148 ppb	16:49:50
1	As 188.979†	15.7	16.1	28.782 µg/L	28.782 ppb	16:50:11
1	B 249.677†	1617.1	1221.0	49.720 µg/L	49.720 ppb	16:49:50
1	Ba 233.527†	202.7	218.3	5.2492 µg/L	5.2492 ppb	16:50:11
1	Be 313.107†	5999.9	8811.2	5.2276 µg/L	5.2276 ppb	16:49:50
1	Cd 226.502†	69.7	210.9	5.2540 µg/L	5.2540 ppb	16:50:11
1	Co 228.616†	98.7	96.0	4.3479 µg/L	4.3479 ppb	16:50:11
1	Cr 267.716†	241.4	290.0	5.8279 µg/L	5.8279 ppb	16:49:50
1	Cu 324.752†	4202.8	1627.9	10.640 µg/L	10.640 ppb	16:49:50
1	Mn 257.610†	3188.0	3420.5	10.714 µg/L	10.714 ppb	16:49:50
1	Mo 202.031†	99.0	103.6	10.146 µg/L	10.146 ppb	16:50:11
1	Ni 231.604†	418.0	102.5	5.1075 µg/L	5.1075 ppb	16:50:11
1	P 214.914†	98.6	82.5	162.32 µg/L	162.32 ppb	16:50:11
1	Pb 220.353†	137.2	45.3	10.965 µg/L	10.965 ppb	16:50:11
1	S 181.975 Axial†	42.3	23.0	95.542 µg/L	95.542 ppb	16:50:11
1	Sb 206.836†	37.6	14.8	13.659 µg/L	13.659 ppb	16:50:11
1	Se 196.026†	37.4	17.8	24.952 µg/L	24.952 ppb	16:50:11
1	SiO2†	2505.0	1094.9	216.12 µg/L	216.12 ppb	16:49:50
1	Si 251.611†	1649.6	1326.8	100.86 µg/L	100.86 ppb	16:50:11
1	Sn 189.927†	23.4	22.9	9.6771 µg/L	9.6771 ppb	16:50:11
1	Ti 334.940†	2480.4	2287.0	5.0399 µg/L	5.0399 ppb	16:49:50
1	Tl 190.801†	-7.5	15.0	19.606 µg/L	19.606 ppb	16:50:11
1	U 409.014†	617.0	689.5	57.259 µg/L	57.259 ppb	16:49:50
1	V 292.402†	481.6	522.7	5.2575 µg/L	5.2575 ppb	16:49:50
1	Zn 213.857†	992.7	450.9	10.519 µg/L	10.519 ppb	16:50:11
2	Sc RADIAL	56210.7	56210.7	99.5 %		16:48:48
2	Al 396.153Radial†	273.4	267.4	185.81 µg/L	185.81 ppb	16:48:48
2	Ca 317.933Radial†	426.2	217.1	185.45 µg/L	185.45 ppb	16:49:08
2	Fe 238.204 Radial†	28.4	12.0	94.492 µg/L	94.492 ppb	16:49:08
2	K 766.490 Radial†	411.4	248.5	162.28 µg/L	162.28 ppb	16:48:48
2	Mg 279.077 IEC†	50.3	37.8	337.62 µg/L	337.62 ppb	16:49:08
2	Na 589.592 Radial†	1464.1	999.4	306.94 µg/L	306.94 ppb	16:48:48
2	Sr 421.552†	574.2	548.3	5.0581 µg/L	5.0581 ppb	16:48:48
2	Sc 361.383	1972692.6	1972692.6	100.49 %		16:50:17
2	Y 371.029	1361966.2	1361966.2	100.68 %		16:50:17
2	Ag 328.068†	270.6	670.9	5.0087 µg/L	5.0087 ppb	16:50:23
2	As 188.979†	17.9	18.3	32.707 µg/L	32.707 ppb	16:50:43
2	B 249.677†	1623.8	1231.8	50.165 µg/L	50.165 ppb	16:50:23
2	Ba 233.527†	197.6	213.7	5.1395 µg/L	5.1395 ppb	16:50:43
2	Be 313.107†	5881.6	8708.7	5.1667 µg/L	5.1667 ppb	16:50:23
2	Cd 226.502†	72.2	213.5	5.3190 µg/L	5.3190 ppb	16:50:43
2	Co 228.616†	112.6	110.1	4.9856 µg/L	4.9856 ppb	16:50:43
2	Cr 267.716†	212.6	261.9	5.2641 µg/L	5.2641 ppb	16:50:23
2	Cu 324.752†	4135.5	1571.7	10.273 µg/L	10.273 ppb	16:50:23
2	Mn 257.610†	3139.9	3380.7	10.586 µg/L	10.586 ppb	16:50:23
2	Mo 202.031†	100.4	105.3	10.314 µg/L	10.314 ppb	16:50:43
2	Ni 231.604†	409.7	95.3	4.7480 µg/L	4.7480 ppb	16:50:43
2	P 214.914†	98.3	82.5	162.33 µg/L	162.33 ppb	16:50:43
2	Pb 220.353†	137.5	45.9	11.123 µg/L	11.123 ppb	16:50:43

2	S 181.975 Axial†	44.4	25.2	104.52 µg/L	104.52 ppb	16:50:43
2	Sb 206.836†	32.9	10.2	9.4639 µg/L	9.4639 ppb	16:50:43
2	Se 196.026†	35.2	15.7	21.973 µg/L	21.973 ppb	16:50:43
2	SiO2†	2523.6	1119.7	221.02 µg/L	221.02 ppb	16:50:23
2	Si 251.611†	1635.2	1316.7	100.10 µg/L	100.10 ppb	16:50:43
2	Sn 189.927†	26.0	25.5	10.767 µg/L	10.767 ppb	16:50:43
2	Ti 334.940†	2526.0	2338.7	5.1499 µg/L	5.1499 ppb	16:50:23
2	Tl 190.801†	-4.6	17.8	23.319 µg/L	23.319 ppb	16:50:43
2	U 409.014†	591.4	665.6	55.280 µg/L	55.280 ppb	16:50:23
2	V 292.402†	473.1	515.6	5.1847 µg/L	5.1847 ppb	16:50:23
2	Zn 213.857†	977.2	438.1	10.216 µg/L	10.216 ppb	16:50:43
3	Sc RADIAL	56270.8	56270.8	99.6 %		16:49:14
3	Al 396.153Radial†	299.9	293.7	204.14 µg/L	204.14 ppb	16:49:14
3	Ca 317.933Radial†	434.4	224.8	192.04 µg/L	192.04 ppb	16:49:35
3	Fe 238.204 Radial†	29.7	13.3	104.87 µg/L	104.87 ppb	16:49:35
3	K 766.490 Radial†	455.9	292.7	191.16 µg/L	191.16 ppb	16:49:14
3	Mg 279.077 IEC†	45.6	33.0	295.03 µg/L	295.03 ppb	16:49:35
3	Na 589.592 Radial†	1506.5	1040.3	319.53 µg/L	319.53 ppb	16:49:14
3	Sr 421.552†	597.6	571.2	5.2696 µg/L	5.2696 ppb	16:49:14
3	Sc 361.383	1984220.0	1984220.0	101.07 %		16:50:49
3	Y 371.029	1369121.2	1369121.2	101.21 %		16:50:49
3	Ag 328.068†	201.6	601.1	4.4889 µg/L	4.4889 ppb	16:50:55
3	As 188.979†	12.2	12.5	22.435 µg/L	22.435 ppb	16:51:15
3	B 249.677†	1528.3	1127.9	45.924 µg/L	45.924 ppb	16:50:55
3	Ba 233.527†	159.9	175.2	4.2153 µg/L	4.2153 ppb	16:51:15
3	Be 313.107†	4886.5	7690.3	4.5625 µg/L	4.5625 ppb	16:50:55
3	Cd 226.502†	36.1	177.4	4.4177 µg/L	4.4177 ppb	16:51:15
3	Co 228.616†	97.9	94.9	4.2983 µg/L	4.2983 ppb	16:51:15
3	Cr 267.716†	217.3	265.4	5.3332 µg/L	5.3332 ppb	16:50:55
3	Cu 324.752†	4009.3	1423.0	9.3030 µg/L	9.3030 ppb	16:50:55
3	Mn 257.610†	2806.1	3032.2	9.4977 µg/L	9.4977 ppb	16:50:55
3	Mo 202.031†	85.5	90.0	8.8152 µg/L	8.8152 ppb	16:51:15
3	Ni 231.604†	395.2	78.7	3.9181 µg/L	3.9181 ppb	16:51:15
3	P 214.914†	81.4	65.2	128.29 µg/L	128.29 ppb	16:51:15
3	Pb 220.353†	131.5	39.1	9.4710 µg/L	9.4710 ppb	16:51:15
3	S 181.975 Axial†	39.1	19.8	81.981 µg/L	81.981 ppb	16:51:15
3	Sb 206.836†	33.0	10.1	9.3652 µg/L	9.3652 ppb	16:51:15
3	Se 196.026†	36.9	17.2	24.099 µg/L	24.099 ppb	16:51:15
3	SiO2†	2440.0	1022.5	201.82 µg/L	201.82 ppb	16:50:55
3	Si 251.611†	1427.0	1101.2	83.718 µg/L	83.718 ppb	16:51:15
3	Sn 189.927†	23.7	23.1	9.7555 µg/L	9.7555 ppb	16:51:15
3	Ti 334.940†	2205.8	2007.3	4.4203 µg/L	4.4203 ppb	16:50:55
3	Tl 190.801†	-9.0	13.5	17.705 µg/L	17.705 ppb	16:51:15
3	U 409.014†	550.5	621.7	51.630 µg/L	51.630 ppb	16:50:55
3	V 292.402†	420.4	460.6	4.6353 µg/L	4.6353 ppb	16:50:55
3	Zn 213.857†	910.8	366.7	8.5490 µg/L	8.5490 ppb	16:51:15

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1978224.8	100.77 %	0.294			0.29%
Sc RADIAL	56254.6	99.6 %	0.07			0.07%
Y 371.029	1365495.6	100.94 %	0.265			0.26%
Ag 328.068†	643.3	4.8041 µg/L	0.27699	4.8041 ppb	0.27699	5.77%
QC value within limits for Ag 328.068 Recovery = 96.08%						
Al 396.153Radial†	284.4	197.62 µg/L	10.244	197.62 ppb	10.244	5.18%
QC value within limits for Al 396.153Radial Recovery = 98.81%						
As 188.979†	15.6	27.975 µg/L	5.1834	27.975 ppb	5.1834	18.53%
QC value within limits for As 188.979 Recovery = 93.25%						
B 249.677†	1193.6	48.603 µg/L	2.3307	48.603 ppb	2.3307	4.80%
QC value within limits for B 249.677 Recovery = 97.21%						
Ba 233.527†	202.4	4.8680 µg/L	0.56789	4.8680 ppb	0.56789	11.67%
QC value within limits for Ba 233.527 Recovery = 97.36%						
Be 313.107†	8403.4	4.9856 µg/L	0.36766	4.9856 ppb	0.36766	7.37%
QC value within limits for Be 313.107 Recovery = 99.71%						
Ca 317.933Radial†	220.5	188.39 µg/L	3.356	188.39 ppb	3.356	1.78%
QC value within limits for Ca 317.933Radial Recovery = 94.19%						
Cd 226.502†	200.6	4.9969 µg/L	0.50267	4.9969 ppb	0.50267	10.06%
QC value within limits for Cd 226.502 Recovery = 99.94%						
Co 228.616†	100.4	4.5440 µg/L	0.38331	4.5440 ppb	0.38331	8.44%

QC value within limits for Co 228.616 Recovery = 90.88%						
Cr 267.716†	272.4	5.4751 µg/L	0.30749	5.4751 ppb	0.30749	5.62%
QC value within limits for Cr 267.716 Recovery = 109.50%						
Cu 324.752†	1540.9	10.072 µg/L	0.6909	10.072 ppb	0.6909	6.86%
QC value within limits for Cu 324.752 Recovery = 100.72%						
Fe 238.204 Radial†	12.8	100.92 µg/L	5.613	100.92 ppb	5.613	5.56%
QC value within limits for Fe 238.204 Radial Recovery = 100.92%						
K 766.490 Radial†	239.8	156.63 µg/L	37.674	156.63 ppb	37.674	24.05%
QC value within limits for K 766.490 Radial Recovery = 104.42%						
Mg 279.077 IEC†	34.1	305.17 µg/L	28.759	305.17 ppb	28.759	9.42%
QC value within limits for Mg 279.077 IEC Recovery = 101.72%						
Mn 257.610†	3277.8	10.266 µg/L	0.6682	10.266 ppb	0.6682	6.51%
QC value within limits for Mn 257.610 Recovery = 102.66%						
Mo 202.031†	99.6	9.7581 µg/L	0.82093	9.7581 ppb	0.82093	8.41%
QC value within limits for Mo 202.031 Recovery = 97.58%						
Na 589.592 Radial†	1015.7	311.96 µg/L	6.671	311.96 ppb	6.671	2.14%
QC value within limits for Na 589.592 Radial Recovery = 103.99%						
Ni 231.604†	92.2	4.5912 µg/L	0.61004	4.5912 ppb	0.61004	13.29%
QC value within limits for Ni 231.604 Recovery = 91.82%						
P 214.914†	76.7	150.98 µg/L	19.653	150.98 ppb	19.653	13.02%
QC value within limits for P 214.914 Recovery = 100.65%						
Pb 220.353†	43.4	10.520 µg/L	0.9115	10.520 ppb	0.9115	8.67%
QC value within limits for Pb 220.353 Recovery = 105.20%						
S 181.975 Axial†	22.7	94.016 µg/L	11.3485	94.016 ppb	11.3485	12.07%
QC value within limits for S 181.975 Axial Recovery = 94.02%						
Sb 206.836†	11.7	10.829 µg/L	2.4509	10.829 ppb	2.4509	22.63%
QC value within limits for Sb 206.836 Recovery = 108.29%						
Se 196.026†	16.9	23.675 µg/L	1.5343	23.675 ppb	1.5343	6.48%
QC value within limits for Se 196.026 Recovery = 78.92%						
SiO2†	1079.0	212.99 µg/L	9.975	212.99 ppb	9.975	4.68%
QC value within limits for SiO2 Recovery = 99.99%						
Si 251.611†	1248.2	94.893 µg/L	9.6851	94.893 ppb	9.6851	10.21%
QC value within limits for Si 251.611 Recovery = 94.89%						
Sn 189.927†	23.8	10.067 µg/L	0.6079	10.067 ppb	0.6079	6.04%
QC value within limits for Sn 189.927 Recovery = 100.67%						
Sr 421.552†	564.6	5.2086 µg/L	0.13109	5.2086 ppb	0.13109	2.52%
QC value within limits for Sr 421.552 Recovery = 104.17%						
Ti 334.940†	2211.0	4.8701 µg/L	0.39334	4.8701 ppb	0.39334	8.08%
QC value within limits for Ti 334.940 Recovery = 97.40%						
Tl 190.801†	15.4	20.210 µg/L	2.8552	20.210 ppb	2.8552	14.13%
QC value within limits for Tl 190.801 Recovery = 101.05%						
U 409.014†	659.0	54.723 µg/L	2.8553	54.723 ppb	2.8553	5.22%
QC value within limits for U 409.014 Recovery = 109.45%						
V 292.402†	499.7	5.0258 µg/L	0.34018	5.0258 ppb	0.34018	6.77%
QC value within limits for V 292.402 Recovery = 100.52%						
Zn 213.857†	418.6	9.7614 µg/L	1.06081	9.7614 ppb	1.06081	10.87%
QC value within limits for Zn 213.857 Recovery = 97.61%						

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 2/19/2010 16:51:24

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55393.6	55393.6	98.0 %		16:52:06
1	Al 396.153Radial†	724194.0	738594.2	513810 µg/L	513810 ppb	16:52:00
1	Ca 317.933Radial†	560588.9	571530.4	488190 µg/L	488190 ppb	16:52:00
1	Fe 238.204 Radial†	23830.6	24288.1	191560 µg/L	191560 ppb	16:52:06
1	K 766.490 Radial†	115.1	-47.6	-31.114 µg/L	-31.114 ppb	16:52:06
1	Mg 279.077 IEC†	54305.7	55373.3	494780 µg/L	494780 ppb	16:52:06
1	Na 589.592 Radial†	579.7	119.1	36.566 µg/L	36.566 ppb	16:52:06
1	Sr 421.552†	417.7	397.2	3.6640 µg/L	3.6640 ppb	16:52:06
1	Sc 361.383	1850788.2	1850788.2	94.278 %		16:52:38
1	Y 371.029	1267800.9	1267800.9	93.720 %		16:52:38
1	Ag 328.068†	-2693.6	-2455.5	-6.2926 µg/L	-6.2926 ppb	16:52:44
1	As 188.979†	-3.5	-3.2	-20.025 µg/L	-20.025 ppb	16:53:05
1	B 249.677†	871.2	539.9	-77.949 µg/L	-77.949 ppb	16:52:44
1	Ba 233.527†	294.9	329.9	7.8736 µg/L	7.8736 ppb	16:53:05
1	Be 313.107†	-3450.2	-803.9	-0.4876 µg/L	-0.4876 ppb	16:52:44
1	Cd 226.502†	449.3	618.2	-6.2337 µg/L	-6.2337 ppb	16:53:05
1	Co 228.616†	61.1	62.9	2.7806 µg/L	2.7806 ppb	16:53:05
1	Cr 267.716†	-66.1	-19.8	-0.4132 µg/L	-0.4132 ppb	16:53:05
1	Cu 324.752†	-1734.2	-4383.2	-1.9848 µg/L	-1.9848 ppb	16:52:44
1	Mn 257.610†	821.6	1127.5	9.2085 µg/L	9.2085 ppb	16:52:44
1	Mo 202.031†	-118.4	-120.2	-4.4913 µg/L	-4.4913 ppb	16:53:05
1	Ni 231.604†	163.0	-139.5	-4.4672 µg/L	-4.4672 ppb	16:53:05
1	P 214.914†	72.2	61.2	116.25 µg/L	116.25 ppb	16:53:05
1	Pb 220.353†	39.4	-49.1	9.0511 µg/L	9.0511 ppb	16:53:05
1	S 181.975 Axial†	32.2	15.3	63.310 µg/L	63.310 ppb	16:53:05
1	Sb 206.836†	57.5	38.5	-7.3305 µg/L	-7.3305 ppb	16:53:05
1	Se 196.026†	11.6	-7.0	-62.783 µg/L	-62.783 ppb	16:53:05
1	SiO2†	1235.7	-80.9	-15.963 µg/L	-15.963 ppb	16:53:05
1	Si 251.611†	441.8	157.9	12.007 µg/L	12.007 ppb	16:53:05
1	Sn 189.927†	-66.4	-70.8	5.6696 µg/L	5.6696 ppb	16:53:05
1	Ti 334.940†	11832.7	12375.9	-3.9147 µg/L	-3.9147 ppb	16:52:44
1	Tl 190.801†	-42.3	-22.5	-8.4040 µg/L	-8.4040 ppb	16:53:05
1	U 409.014†	-59.0	14.5	-55.197 µg/L	-55.197 ppb	16:52:44
1	V 292.402†	-2553.4	-2663.6	-3.5017 µg/L	-3.5017 ppb	16:52:44
1	Zn 213.857†	1634.5	1199.3	-8.9501 µg/L	-8.9501 ppb	16:53:05
2	Sc RADIAL	55011.0	55011.0	97.4 %		16:52:17
2	Al 396.153Radial†	723719.7	743244.2	517040 µg/L	517040 ppb	16:52:11
2	Ca 317.933Radial†	561511.7	576454.6	492400 µg/L	492400 ppb	16:52:11
2	Fe 238.204 Radial†	23613.9	24234.6	191140 µg/L	191140 ppb	16:52:17
2	K 766.490 Radial†	128.3	-33.2	-21.699 µg/L	-21.699 ppb	16:52:17
2	Mg 279.077 IEC†	53736.1	55173.5	492990 µg/L	492990 ppb	16:52:17
2	Na 589.592 Radial†	541.6	84.0	25.796 µg/L	25.796 ppb	16:52:17
2	Sr 421.552†	414.5	396.8	3.6609 µg/L	3.6609 ppb	16:52:17
2	Sc 361.383	1848725.6	1848725.6	94.173 %		16:53:11
2	Y 371.029	1266302.7	1266302.7	93.609 %		16:53:11
2	Ag 328.068†	-2764.2	-2533.7	-6.8956 µg/L	-6.8956 ppb	16:53:16
2	As 188.979†	-19.7	-20.5	-51.199 µg/L	-51.199 ppb	16:53:37
2	B 249.677†	821.6	488.3	-79.833 µg/L	-79.833 ppb	16:53:16
2	Ba 233.527†	289.2	324.1	7.7351 µg/L	7.7351 ppb	16:53:37
2	Be 313.107†	-3507.9	-869.3	-0.5266 µg/L	-0.5266 ppb	16:53:16
2	Cd 226.502†	439.6	608.5	-6.4301 µg/L	-6.4301 ppb	16:53:37
2	Co 228.616†	46.3	47.3	2.0733 µg/L	2.0733 ppb	16:53:37
2	Cr 267.716†	-55.1	-8.1	-0.1798 µg/L	-0.1798 ppb	16:53:37
2	Cu 324.752†	-1747.2	-4399.1	-2.1470 µg/L	-2.1470 ppb	16:53:16
2	Mn 257.610†	693.8	992.7	8.8018 µg/L	8.8018 ppb	16:53:16
2	Mo 202.031†	-103.9	-105.0	-3.0206 µg/L	-3.0206 ppb	16:53:37
2	Ni 231.604†	140.3	-163.4	-5.6612 µg/L	-5.6612 ppb	16:53:37
2	P 214.914†	95.8	86.4	167.33 µg/L	167.33 ppb	16:53:37
2	Pb 220.353†	25.6	-63.7	5.6987 µg/L	5.6987 ppb	16:53:37

2	S 181.975 Axial†	46.7	30.7	127.27 µg/L	127.27 ppb	16:53:37
2	Sb 206.836†	44.2	24.4	-20.582 µg/L	-20.582 ppb	16:53:37
2	Se 196.026†	15.1	-3.2	-58.240 µg/L	-58.240 ppb	16:53:37
2	SiO2†	1212.8	-103.8	-20.481 µg/L	-20.481 ppb	16:53:37
2	Si 251.611†	449.3	166.5	12.657 µg/L	12.657 ppb	16:53:37
2	Sn 189.927†	-68.4	-73.0	4.5450 µg/L	4.5450 ppb	16:53:37
2	Ti 334.940†	12102.5	12676.3	-3.0417 µg/L	-3.0417 ppb	16:53:16
2	Tl 190.801†	-37.0	-17.0	-1.3751 µg/L	-1.3751 ppb	16:53:37
2	U 409.014†	-33.8	41.2	-53.185 µg/L	-53.185 ppb	16:53:16
2	V 292.402†	-2512.7	-2623.4	-3.1453 µg/L	-3.1453 ppb	16:53:16
2	Zn 213.857†	1609.3	1174.4	-9.4073 µg/L	-9.4073 ppb	16:53:37
3	Sc RADIAL	55087.9	55087.9	97.5 %		16:52:28
3	Al 396.153Radial†	720131.5	738527.0	513760 µg/L	513760 ppb	16:52:23
3	Ca 317.933Radial†	556178.1	570179.9	487040 µg/L	487040 ppb	16:52:23
3	Fe 238.204 Radial†	23691.3	24280.2	191500 µg/L	191500 ppb	16:52:28
3	K 766.490 Radial†	149.7	-11.5	-7.5099 µg/L	-7.5099 ppb	16:52:28
3	Mg 279.077 IEC†	53963.6	55329.8	494390 µg/L	494390 ppb	16:52:28
3	Na 589.592 Radial†	551.3	93.2	28.624 µg/L	28.624 ppb	16:52:28
3	Sr 421.552†	418.9	400.8	3.6974 µg/L	3.6974 ppb	16:52:28
3	Sc 361.383	1849927.7	1849927.7	94.234 %		16:53:43
3	Y 371.029	1267002.1	1267002.1	93.661 %		16:53:43
3	Ag 328.068†	-2734.1	-2499.7	-6.6223 µg/L	-6.6223 ppb	16:53:49
3	As 188.979†	-9.3	-9.4	-31.056 µg/L	-31.056 ppb	16:54:09
3	B 249.677†	848.6	516.3	-78.878 µg/L	-78.878 ppb	16:53:49
3	Ba 233.527†	283.0	317.4	7.5725 µg/L	7.5725 ppb	16:54:09
3	Be 313.107†	-3473.1	-829.9	-0.5033 µg/L	-0.5033 ppb	16:53:49
3	Cd 226.502†	443.2	612.0	-6.3822 µg/L	-6.3822 ppb	16:54:09
3	Co 228.616†	37.7	38.1	1.6569 µg/L	1.6569 ppb	16:54:09
3	Cr 267.716†	-62.9	-16.3	-0.3442 µg/L	-0.3442 ppb	16:54:09
3	Cu 324.752†	-1721.6	-4370.7	-1.9119 µg/L	-1.9119 ppb	16:53:49
3	Mn 257.610†	731.2	1032.0	8.9167 µg/L	8.9167 ppb	16:53:49
3	Mo 202.031†	-107.8	-109.1	-3.4029 µg/L	-3.4029 ppb	16:54:09
3	Ni 231.604†	145.6	-157.8	-5.3810 µg/L	-5.3810 ppb	16:54:09
3	P 214.914†	108.6	100.0	193.00 µg/L	193.00 ppb	16:54:09
3	Pb 220.353†	37.4	-51.2	8.5535 µg/L	8.5535 ppb	16:54:09
3	S 181.975 Axial†	37.1	20.4	84.584 µg/L	84.584 ppb	16:54:09
3	Sb 206.836†	48.6	29.0	-15.889 µg/L	-15.889 ppb	16:54:09
3	Se 196.026†	35.7	18.5	-26.410 µg/L	-26.410 ppb	16:54:09
3	SiO2†	1232.2	-83.9	-16.565 µg/L	-16.565 ppb	16:54:09
3	Si 251.611†	426.5	142.0	10.792 µg/L	10.792 ppb	16:54:09
3	Sn 189.927†	-55.5	-59.3	10.507 µg/L	10.507 ppb	16:54:09
3	Ti 334.940†	12184.3	12754.8	-3.0642 µg/L	-3.0642 ppb	16:53:49
3	Tl 190.801†	-36.8	-16.7	-0.7208 µg/L	-0.7208 ppb	16:54:09
3	U 409.014†	-97.2	-26.0	-58.491 µg/L	-58.491 ppb	16:53:49
3	V 292.402†	-2526.9	-2636.8	-3.2422 µg/L	-3.2422 ppb	16:53:49
3	Zn 213.857†	1595.9	1159.1	-9.8646 µg/L	-9.8646 ppb	16:54:09

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1849813.8	94.228 %		0.0528			0.06%
Sc RADIAL	55164.1	97.6 %		0.36			0.37%
Y 371.029	1267035.2	93.663 %		0.0554			0.06%
Ag 328.068†	-2496.3	-6.6035 µg/L		0.30193	-6.6035 ppb	0.30193	4.57%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	740121.8	514870 µg/L		1881.2	514870 ppb	1881.2	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.97%							
As 188.979†	-11.0	-34.093 µg/L		15.8073	-34.093 ppb	15.8073	46.36%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	514.9	-78.887 µg/L		0.9419	-78.887 ppb	0.9419	1.19%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	323.8	7.7271 µg/L		0.15071	7.7271 ppb	0.15071	1.95%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-834.4	-0.5058 µg/L		0.01964	-0.5058 ppb	0.01964	3.88%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	572721.6	489210 µg/L		2821.0	489210 ppb	2821.0	0.58%
QC value within limits for Ca 317.933Radial Recovery = 97.84%							
Cd 226.502†	612.9	-6.3487 µg/L		0.10242	-6.3487 ppb	0.10242	1.61%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	49.4	2.1702 µg/L		0.56812	2.1702 ppb	0.56812	26.18%

QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-14.7	-0.3124 µg/L	0.11992	-0.3124 ppb	0.11992	38.39%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-4384.3	-2.0146 µg/L	0.12034	-2.0146 ppb	0.12034	5.97%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	24267.6	191400 µg/L	227.6	191400 ppb	227.6	0.12%
QC value within limits for Fe 238.204 Radial Recovery = 95.70%						
K 766.490 Radial†	-30.8	-20.107 µg/L	11.8821	-20.107 ppb	11.8821	59.09%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	55292.2	494060 µg/L	938.7	494060 ppb	938.7	0.19%
QC value within limits for Mg 279.077 IEC Recovery = 98.81%						
Mn 257.610†	1050.7	8.9756 µg/L	0.20969	8.9756 ppb	0.20969	2.34%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-111.4	-3.6383 µg/L	0.76308	-3.6383 ppb	0.76308	20.97%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	98.7	30.329 µg/L	5.5836	30.329 ppb	5.5836	18.41%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-153.6	-5.1698 µg/L	0.62439	-5.1698 ppb	0.62439	12.08%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	82.5	158.86 µg/L	39.068	158.86 ppb	39.068	24.59%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-54.7	7.7677 µg/L	1.80905	7.7677 ppb	1.80905	23.29%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	22.1	91.723 µg/L	32.5738	91.723 ppb	32.5738	35.51%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	30.6	-14.600 µg/L	6.7191	-14.600 ppb	6.7191	46.02%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.8	-49.144 µg/L	19.8190	-49.144 ppb	19.8190	40.33%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	-89.5	-17.670 µg/L	2.4533	-17.670 ppb	2.4533	13.88%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	155.5	11.818 µg/L	0.9466	11.818 ppb	0.9466	8.01%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-67.7	6.9072 µg/L	3.16787	6.9072 ppb	3.16787	45.86%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	398.3	3.6741 µg/L	0.02024	3.6741 ppb	0.02024	0.55%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	12602.3	-3.3402 µg/L	0.49765	-3.3402 ppb	0.49765	14.90%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-18.7	-3.4999 µg/L	4.25960	-3.4999 ppb	4.25960	121.70%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	9.9	-55.624 µg/L	2.6789	-55.624 ppb	2.6789	4.82%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-2641.3	-3.2964 µg/L	0.18427	-3.2964 ppb	0.18427	5.59%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	1177.6	-9.4073 µg/L	0.45728	-9.4073 ppb	0.45728	4.86%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 104

Date Collected: 2/19/2010 16:54:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55797.0	55797.0	98.8 %		16:54:58
1	Al 396.153Radial†	721688.4	730717.2	508320 µg/L	508320 ppb	16:54:53
1	Ca 317.933Radial†	559165.5	565955.4	483430 µg/L	483430 ppb	16:54:53
1	Fe 238.204 Radial†	23697.0	23977.1	189110 µg/L	189110 ppb	16:54:58
1	K 766.490 Radial†	7825.4	7758.4	5067.1 µg/L	5067.1 ppb	16:54:58
1	Mg 279.077 IEC†	54011.0	54674.5	488540 µg/L	488540 ppb	16:54:58
1	Na 589.592 Radial†	17079.2	16820.9	5166.4 µg/L	5166.4 ppb	16:54:58
1	Sr 421.552†	53653.0	54296.0	500.89 µg/L	500.89 ppb	16:54:58
1	Sc 361.383	1843700.1	1843700.1	93.917 %		16:55:33
1	Y 371.029	1261744.6	1261744.6	93.272 %		16:55:33
1	Ag 328.068†	30366.5	32735.0	257.65 µg/L	257.65 ppb	16:55:33
1	As 188.979†	267.3	285.0	495.71 µg/L	495.71 ppb	16:55:53
1	B 249.677†	12776.1	13219.5	440.90 µg/L	440.90 ppb	16:55:33
1	Ba 233.527†	19707.5	21001.1	505.07 µg/L	505.07 ppb	16:55:33
1	Be 313.107†	381967.5	409563.9	242.87 µg/L	242.87 ppb	16:55:33
1	Cd 226.502†	18000.5	19308.2	460.62 µg/L	460.62 ppb	16:55:33
1	Co 228.616†	9028.5	9611.4	434.60 µg/L	434.60 ppb	16:55:53
1	Cr 267.716†	22814.5	24342.6	489.24 µg/L	489.24 ppb	16:55:33
1	Cu 324.752†	76830.3	79263.0	543.67 µg/L	543.67 ppb	16:55:33
1	Mn 257.610†	145121.7	154777.5	490.29 µg/L	490.29 ppb	16:55:33
1	Mo 202.031†	4771.3	5085.6	505.20 µg/L	505.20 ppb	16:55:53
1	Ni 231.604†	8362.6	8591.9	430.24 µg/L	430.24 ppb	16:55:53
1	P 214.914†	1320.9	1391.1	2699.5 µg/L	2699.5 ppb	16:55:53
1	Pb 220.353†	1871.2	1901.4	483.01 µg/L	483.01 ppb	16:55:53
1	S 181.975 Axial†	648.6	671.7	2785.4 µg/L	2785.4 ppb	16:55:53
1	Sb 206.836†	575.1	589.8	502.04 µg/L	502.04 ppb	16:55:53
1	Se 196.026†	1623.8	1709.6	2348.3 µg/L	2348.3 ppb	16:55:53
1	SiO2†	53672.2	55757.1	11006 µg/L	11006 ppb	16:55:33
1	Si 251.611†	64106.8	67948.4	5165.6 µg/L	5165.6 ppb	16:55:33
1	Sn 189.927†	1083.9	1153.7	521.63 µg/L	521.63 ppb	16:55:53
1	Ti 334.940†	229038.7	243698.9	508.24 µg/L	508.24 ppb	16:55:33
1	Tl 190.801†	288.9	330.0	454.77 µg/L	454.77 ppb	16:55:53
1	U 409.014†	5773.2	6224.2	461.36 µg/L	461.36 ppb	16:55:33
1	V 292.402†	47456.1	50574.7	520.63 µg/L	520.63 ppb	16:55:33
1	Zn 213.857†	20837.2	21652.5	468.58 µg/L	468.58 ppb	16:55:33
2	Sc RADIAL	55348.5	55348.5	98.0 %		16:55:10
2	Al 396.153Radial†	722041.1	736998.6	512690 µg/L	512690 ppb	16:55:04
2	Ca 317.933Radial†	559699.2	571088.2	487810 µg/L	487810 ppb	16:55:04
2	Fe 238.204 Radial†	23398.1	23866.4	188240 µg/L	188240 ppb	16:55:10
2	K 766.490 Radial†	7752.4	7748.1	5060.4 µg/L	5060.4 ppb	16:55:10
2	Mg 279.077 IEC†	53665.0	54764.4	489350 µg/L	489350 ppb	16:55:10
2	Na 589.592 Radial†	16898.5	16776.6	5152.8 µg/L	5152.8 ppb	16:55:10
2	Sr 421.552†	53220.9	54295.2	500.88 µg/L	500.88 ppb	16:55:10
2	Sc 361.383	1828346.4	1828346.4	93.135 %		16:56:01
2	Y 371.029	1251250.1	1251250.1	92.496 %		16:56:01
2	Ag 328.068†	30001.6	32614.7	256.69 µg/L	256.69 ppb	16:56:01
2	As 188.979†	258.0	277.4	481.82 µg/L	481.82 ppb	16:56:21
2	B 249.677†	12695.1	13246.8	442.46 µg/L	442.46 ppb	16:56:01
2	Ba 233.527†	19356.4	20800.3	500.24 µg/L	500.24 ppb	16:56:01
2	Be 313.107†	377037.1	407685.5	241.76 µg/L	241.76 ppb	16:56:01
2	Cd 226.502†	17698.0	19144.3	456.64 µg/L	456.64 ppb	16:56:01
2	Co 228.616†	8995.7	9656.8	436.67 µg/L	436.67 ppb	16:56:21
2	Cr 267.716†	22554.0	24266.9	487.72 µg/L	487.72 ppb	16:56:01
2	Cu 324.752†	76157.1	79227.2	543.32 µg/L	543.32 ppb	16:56:01
2	Mn 257.610†	143300.8	154120.0	488.08 µg/L	488.08 ppb	16:56:01
2	Mo 202.031†	4737.2	5091.8	505.77 µg/L	505.77 ppb	16:56:21
2	Ni 231.604†	8356.6	8660.3	433.64 µg/L	433.64 ppb	16:56:21
2	P 214.914†	1314.8	1396.4	2712.1 µg/L	2712.1 ppb	16:56:21
2	Pb 220.353†	1869.4	1916.2	486.89 µg/L	486.89 ppb	16:56:21

2	S 181.975 Axial†	642.4	670.8	2782.0 µg/L	2782.0 ppb	16:56:21
2	Sb 206.836†	578.7	598.8	509.94 µg/L	509.94 ppb	16:56:21
2	Se 196.026†	1633.2	1734.3	2378.6 µg/L	2378.6 ppb	16:56:21
2	SiO2†	52972.0	55485.1	10952 µg/L	10952 ppb	16:56:01
2	Si 251.611†	63354.2	67713.7	5147.7 µg/L	5147.7 ppb	16:56:01
2	Sn 189.927†	1076.4	1155.4	522.48 µg/L	522.48 ppb	16:56:21
2	Ti 334.940†	226229.7	242730.8	506.11 µg/L	506.11 ppb	16:56:01
2	Tl 190.801†	294.9	339.0	466.26 µg/L	466.26 ppb	16:56:21
2	U 409.014†	5629.0	6121.0	452.64 µg/L	452.64 ppb	16:56:01
2	V 292.402†	46870.5	50370.2	518.52 µg/L	518.52 ppb	16:56:01
2	Zn 213.857†	20535.2	21514.5	465.32 µg/L	465.32 ppb	16:56:01
3	Sc RADIAL	55847.7	55847.7	98.9 %		16:55:21
3	Al 396.153Radial†	722897.9	731277.0	508700 µg/L	508700 ppb	16:55:15
3	Ca 317.933Radial†	559752.9	566035.4	483500 µg/L	483500 ppb	16:55:15
3	Fe 238.204 Radial†	23698.6	23957.0	188960 µg/L	188960 ppb	16:55:21
3	K 766.490 Radial†	7809.0	7734.7	5051.6 µg/L	5051.6 ppb	16:55:21
3	Mg 279.077 IEC†	54100.9	54715.7	488910 µg/L	488910 ppb	16:55:21
3	Na 589.592 Radial†	17037.2	16762.7	5148.5 µg/L	5148.5 ppb	16:55:21
3	Sr 421.552†	53557.3	54149.8	499.54 µg/L	499.54 ppb	16:55:21
3	Sc 361.383	1849513.8	1849513.8	94.213 %		16:56:29
3	Y 371.029	1265200.0	1265200.0	93.528 %		16:56:29
3	Ag 328.068†	30278.1	32539.5	256.19 µg/L	256.19 ppb	16:56:29
3	As 188.979†	249.4	265.2	460.15 µg/L	460.15 ppb	16:56:49
3	B 249.677†	12838.9	13243.4	441.96 µg/L	441.96 ppb	16:56:29
3	Ba 233.527†	19684.2	20910.3	502.89 µg/L	502.89 ppb	16:56:29
3	Be 313.107†	381877.8	408190.3	242.06 µg/L	242.06 ppb	16:56:29
3	Cd 226.502†	18049.5	19299.9	460.44 µg/L	460.44 ppb	16:56:29
3	Co 228.616†	9068.2	9623.2	435.15 µg/L	435.15 ppb	16:56:49
3	Cr 267.716†	22913.2	24371.1	489.81 µg/L	489.81 ppb	16:56:29
3	Cu 324.752†	76676.5	78842.6	540.91 µg/L	540.91 ppb	16:56:29
3	Mn 257.610†	145122.9	154293.0	488.74 µg/L	488.74 ppb	16:56:29
3	Mo 202.031†	4785.3	5084.6	505.09 µg/L	505.09 ppb	16:56:49
3	Ni 231.604†	8413.0	8617.4	431.51 µg/L	431.51 ppb	16:56:49
3	P 214.914†	1336.0	1402.7	2723.0 µg/L	2723.0 ppb	16:56:49
3	Pb 220.353†	1874.0	1898.2	482.26 µg/L	482.26 ppb	16:56:49
3	S 181.975 Axial†	650.5	671.5	2784.8 µg/L	2784.8 ppb	16:56:49
3	Sb 206.836†	579.0	592.1	504.11 µg/L	504.11 ppb	16:56:49
3	Se 196.026†	1645.5	1727.2	2372.2 µg/L	2372.2 ppb	16:56:49
3	SiO2†	53612.6	55514.2	10958 µg/L	10958 ppb	16:56:29
3	Si 251.611†	64125.9	67754.2	5150.8 µg/L	5150.8 ppb	16:56:29
3	Sn 189.927†	1079.8	1145.8	518.33 µg/L	518.33 ppb	16:56:49
3	Ti 334.940†	228839.3	242720.7	506.05 µg/L	506.05 ppb	16:56:29
3	Tl 190.801†	301.0	341.8	470.11 µg/L	470.11 ppb	16:56:49
3	U 409.014†	5634.4	6057.5	447.53 µg/L	447.53 ppb	16:56:29
3	V 292.402†	47572.3	50539.2	520.25 µg/L	520.25 ppb	16:56:29
3	Zn 213.857†	20782.8	21525.0	465.57 µg/L	465.57 ppb	16:56:29

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1840520.1	93.755 %	0.5571			0.59%
Sc RADIAL	55664.4	98.5 %	0.49			0.49%
Y 371.029	1259398.2	93.099 %	0.5370			0.58%
Ag 328.068†	32629.7	256.85 µg/L	0.742	256.85 ppb	0.742	0.29%
QC value within limits for Ag 328.068 Recovery = 102.74%						
Al 396.153Radial†	732997.6	509900 µg/L	2418.3	509900 ppb	2418.3	0.47%
QC value within limits for Al 396.153Radial Recovery = 101.98%						
As 188.979†	275.9	479.23 µg/L	17.921	479.23 ppb	17.921	3.74%
QC value within limits for As 188.979 Recovery = 95.85%						
B 249.677†	13236.6	441.77 µg/L	0.799	441.77 ppb	0.799	0.18%
QC value within limits for B 249.677 Recovery = 88.35%						
Ba 233.527†	20903.9	502.73 µg/L	2.416	502.73 ppb	2.416	0.48%
QC value within limits for Ba 233.527 Recovery = 100.55%						
Be 313.107†	408479.9	242.23 µg/L	0.577	242.23 ppb	0.577	0.24%
QC value within limits for Be 313.107 Recovery = 96.89%						
Ca 317.933Radial†	567693.0	484910 µg/L	2511.8	484910 ppb	2511.8	0.52%
QC value within limits for Ca 317.933Radial Recovery = 96.98%						
Cd 226.502†	19250.8	459.23 µg/L	2.249	459.23 ppb	2.249	0.49%
QC value within limits for Cd 226.502 Recovery = 91.85%						
Co 228.616†	9630.5	435.47 µg/L	1.070	435.47 ppb	1.070	0.25%

QC value within limits for Co 228.616 Recovery = 87.09%							
Cr 267.716†	24326.8	488.92 µg/L	1.082	488.92 ppb	1.082	0.22%	
QC value within limits for Cr 267.716 Recovery = 97.78%							
Cu 324.752†	79110.9	542.63 µg/L	1.505	542.63 ppb	1.505	0.28%	
QC value within limits for Cu 324.752 Recovery = 108.53%							
Fe 238.204 Radial†	23933.5	188770 µg/L	465.0	188770 ppb	465.0	0.25%	
QC value within limits for Fe 238.204 Radial Recovery = 94.39%							
K 766.490 Radial†	7747.0	5059.7 µg/L	7.77	5059.7 ppb	7.77	0.15%	
QC value within limits for K 766.490 Radial Recovery = 101.19%							
Mg 279.077 IEC†	54718.2	488940 µg/L	403.0	488940 ppb	403.0	0.08%	
QC value within limits for Mg 279.077 IEC Recovery = 97.79%							
Mn 257.610†	154396.8	489.04 µg/L	1.134	489.04 ppb	1.134	0.23%	
QC value within limits for Mn 257.610 Recovery = 97.81%							
Mo 202.031†	5087.3	505.36 µg/L	0.362	505.36 ppb	0.362	0.07%	
QC value within limits for Mo 202.031 Recovery = 101.07%							
Na 589.592 Radial†	16786.7	5155.9 µg/L	9.34	5155.9 ppb	9.34	0.18%	
QC value within limits for Na 589.592 Radial Recovery = 103.12%							
Ni 231.604†	8623.2	431.80 µg/L	1.714	431.80 ppb	1.714	0.40%	
QC value within limits for Ni 231.604 Recovery = 86.36%							
P 214.914†	1396.7	2711.6 µg/L	11.77	2711.6 ppb	11.77	0.43%	
QC value within limits for P 214.914 Recovery = 108.46%							
Pb 220.353†	1905.3	484.05 µg/L	2.482	484.05 ppb	2.482	0.51%	
QC value within limits for Pb 220.353 Recovery = 96.81%							
S 181.975 Axial†	671.3	2784.0 µg/L	1.83	2784.0 ppb	1.83	0.07%	
QC value within limits for S 181.975 Axial Recovery = 111.36%							
Sb 206.836†	593.6	505.36 µg/L	4.096	505.36 ppb	4.096	0.81%	
QC value within limits for Sb 206.836 Recovery = 101.07%							
Se 196.026†	1723.7	2366.3 µg/L	15.98	2366.3 ppb	15.98	0.68%	
QC value within limits for Se 196.026 Recovery = 94.65%							
SiO2†	55585.5	10972 µg/L	29.5	10972 ppb	29.5	0.27%	
QC value within limits for SiO2 Recovery = 102.59%							
Si 251.611†	67805.4	5154.7 µg/L	9.54	5154.7 ppb	9.54	0.19%	
QC value within limits for Si 251.611 Recovery = 103.09%							
Sn 189.927†	1151.6	520.81 µg/L	2.193	520.81 ppb	2.193	0.42%	
QC value within limits for Sn 189.927 Recovery = 104.16%							
Sr 421.552†	54247.0	500.44 µg/L	0.776	500.44 ppb	0.776	0.16%	
QC value within limits for Sr 421.552 Recovery = 100.09%							
Ti 334.940†	243050.1	506.80 µg/L	1.249	506.80 ppb	1.249	0.25%	
QC value within limits for Ti 334.940 Recovery = 101.36%							
Tl 190.801†	337.0	463.71 µg/L	7.981	463.71 ppb	7.981	1.72%	
QC value within limits for Tl 190.801 Recovery = 92.74%							
U 409.014†	6134.3	453.84 µg/L	6.995	453.84 ppb	6.995	1.54%	
QC value within limits for U 409.014 Recovery = 90.77%							
V 292.402†	50494.7	519.80 µg/L	1.121	519.80 ppb	1.121	0.22%	
QC value within limits for V 292.402 Recovery = 103.96%							
Zn 213.857†	21564.0	466.49 µg/L	1.813	466.49 ppb	1.813	0.39%	
QC value within limits for Zn 213.857 Recovery = 93.30%							

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 105

Date Collected: 2/19/2010 16:56:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54748.6	54748.6	96.9 %		16:57:39
1	Al 396.153Radial†	706292.1	728823.1	507010 µg/L	507010 ppb	16:57:34
1	Ca 317.933Radial†	550897.7	568266.0	485400 µg/L	485400 ppb	16:57:34
1	Fe 238.204 Radial†	56162.0	57937.6	456950 µg/L	456950 ppb	16:57:39
1	K 766.490 Radial†	115.4	-45.9	-29.969 µg/L	-29.969 ppb	16:57:39
1	Mg 279.077 IEC†	52280.8	53936.3	481650 µg/L	481650 ppb	16:57:39
1	Na 589.592 Radial†	1551701.3	1600745.1	491660 µg/L	491660 ppb	16:57:34
1	Sr 421.552†	596.5	586.7	5.4124 µg/L	5.4124 ppb	16:57:39
1	Sc 361.383	1808982.1	1808982.1	92.148 %		16:58:15
1	Y 371.029	1229275.2	1229275.2	90.872 %		16:58:15
1	Ag 328.068†	-4982.3	-5005.2	-8.7931 µg/L	-8.7931 ppb	16:58:15
1	As 188.979†	-19.3	-20.5	-35.405 µg/L	-35.405 ppb	16:58:35
1	B 249.677†	1469.8	1210.9	-189.08 µg/L	-189.08 ppb	16:58:15
1	Ba 233.527†	599.8	668.0	15.898 µg/L	15.898 ppb	16:58:35
1	Be 313.107†	-11244.2	-9346.6	-5.5617 µg/L	-5.5617 ppb	16:58:15
1	Cd 226.502†	1210.5	1455.3	-15.352 µg/L	-15.352 ppb	16:58:15
1	Co 228.616†	210.6	226.6	10.160 µg/L	10.160 ppb	16:58:35
1	Cr 267.716†	45.2	99.4	1.9489 µg/L	1.9489 ppb	16:58:35
1	Cu 324.752†	-9617.8	-12981.1	-21.218 µg/L	-21.218 ppb	16:58:15
1	Mn 257.610†	-6155.9	-6424.4	21.370 µg/L	21.370 ppb	16:58:15
1	Mo 202.031†	-225.9	-239.8	-6.1197 µg/L	-6.1197 ppb	16:58:35
1	Ni 231.604†	48.3	-259.9	-7.0295 µg/L	-7.0295 ppb	16:58:35
1	P 214.914†	306.6	317.4	411.96 µg/L	411.96 ppb	16:58:35
1	Pb 220.353†	156.6	79.1	15.477 µg/L	15.477 ppb	16:58:35
1	S 181.975 Axial†	35.4	19.5	80.955 µg/L	80.955 ppb	16:58:35
1	Sb 206.836†	57.1	39.4	-6.4292 µg/L	-6.4292 ppb	16:58:35
1	Se 196.026†	-157.5	-190.2	417.62 µg/L	417.62 ppb	16:58:35
1	SiO2†	1118.3	-178.0	-35.141 µg/L	-35.141 ppb	16:58:35
1	Si 251.611†	-300.1	-636.3	-48.374 µg/L	-48.374 ppb	16:58:35
1	Sn 189.927†	-47.4	-51.8	-16.141 µg/L	-16.141 ppb	16:58:35
1	Ti 334.940†	15981.4	17168.1	7.6569 µg/L	7.6569 ppb	16:58:15
1	Tl 190.801†	-58.7	-41.3	21.254 µg/L	21.254 ppb	16:58:35
1	U 409.014†	152808.3	165905.7	13691 µg/L	13691 ppb	16:58:15
1	V 292.402†	-7264.4	-7838.6	-8.4612 µg/L	-8.4612 ppb	16:58:15
1	Zn 213.857†	2986.9	2707.0	14.661 µg/L	14.661 ppb	16:58:35
2	Sc RADIAL	54627.5	54627.5	96.7 %		16:57:51
2	Al 396.153Radial†	705003.9	729106.1	507210 µg/L	507210 ppb	16:57:46
2	Ca 317.933Radial†	548288.5	566827.4	484170 µg/L	484170 ppb	16:57:46
2	Fe 238.204 Radial†	56104.2	58006.2	457490 µg/L	457490 ppb	16:57:51
2	K 766.490 Radial†	75.8	-86.6	-56.548 µg/L	-56.548 ppb	16:57:51
2	Mg 279.077 IEC†	52084.5	53852.8	480900 µg/L	480900 ppb	16:57:51
2	Na 589.592 Radial†	1549659.8	1602182.6	492100 µg/L	492100 ppb	16:57:46
2	Sr 421.552†	580.4	571.4	5.2714 µg/L	5.2714 ppb	16:57:51
2	Sc 361.383	1809663.3	1809663.3	92.183 %		16:58:42
2	Y 371.029	1230302.7	1230302.7	90.948 %		16:58:42
2	Ag 328.068†	-5024.4	-5048.9	-9.0852 µg/L	-9.0852 ppb	16:58:42
2	As 188.979†	-32.4	-34.7	-60.833 µg/L	-60.833 ppb	16:59:03
2	B 249.677†	1435.1	1172.6	-190.92 µg/L	-190.92 ppb	16:58:42
2	Ba 233.527†	598.4	666.2	15.855 µg/L	15.855 ppb	16:59:03
2	Be 313.107†	-11290.0	-9391.7	-5.5890 µg/L	-5.5890 ppb	16:58:42
2	Cd 226.502†	1204.3	1448.1	-15.591 µg/L	-15.591 ppb	16:58:42
2	Co 228.616†	198.7	213.6	9.5711 µg/L	9.5711 ppb	16:59:03
2	Cr 267.716†	78.1	135.1	2.6649 µg/L	2.6649 ppb	16:59:03
2	Cu 324.752†	-9599.6	-12957.4	-20.988 µg/L	-20.988 ppb	16:58:42
2	Mn 257.610†	-6316.5	-6596.2	20.934 µg/L	20.934 ppb	16:58:42
2	Mo 202.031†	-200.5	-212.1	-3.3875 µg/L	-3.3875 ppb	16:59:03
2	Ni 231.604†	53.6	-254.2	-6.7348 µg/L	-6.7348 ppb	16:59:03
2	P 214.914†	301.0	311.1	399.21 µg/L	399.21 ppb	16:59:03
2	Pb 220.353†	148.3	69.9	13.245 µg/L	13.245 ppb	16:59:03

2	S 181.975 Axial†	35.1	19.1	79.229 µg/L	79.229 ppb	16:59:03
2	Sb 206.836†	43.8	25.1	-19.483 µg/L	-19.483 ppb	16:59:03
2	Se 196.026†	-176.5	-210.8	391.20 µg/L	391.20 ppb	16:59:03
2	SiO2†	1119.0	-177.7	-35.076 µg/L	-35.076 ppb	16:59:03
2	Si 251.611†	-359.8	-700.9	-53.283 µg/L	-53.283 ppb	16:59:03
2	Sn 189.927†	-47.7	-52.1	-16.412 µg/L	-16.412 ppb	16:59:03
2	Ti 334.940†	16565.0	17794.7	9.0824 µg/L	9.0824 ppb	16:58:42
2	Tl 190.801†	-50.4	-32.3	33.191 µg/L	33.191 ppb	16:59:03
2	U 409.014†	152895.7	165938.1	13694 µg/L	13694 ppb	16:58:42
2	V 292.402†	-7309.1	-7884.1	-8.8154 µg/L	-8.8154 ppb	16:58:42
2	Zn 213.857†	2986.8	2705.7	14.646 µg/L	14.646 ppb	16:59:03
3	Sc RADIAL	54733.6	54733.6	96.9 %		16:58:03
3	Al 396.153Radial†	704918.4	727604.3	506160 µg/L	506160 ppb	16:57:58
3	Ca 317.933Radial†	547195.5	564600.0	482270 µg/L	482270 ppb	16:57:58
3	Fe 238.204 Radial†	56342.5	58139.8	458540 µg/L	458540 ppb	16:58:03
3	K 766.490 Radial†	150.9	-9.2	-6.0382 µg/L	-6.0382 ppb	16:58:03
3	Mg 279.077 IEC†	52432.2	54107.4	483180 µg/L	483180 ppb	16:58:03
3	Na 589.592 Radial†	1551864.9	1601351.6	491840 µg/L	491840 ppb	16:57:58
3	Sr 421.552†	544.2	532.9	4.9161 µg/L	4.9161 ppb	16:58:03
3	Sc 361.383	1803530.5	1803530.5	91.871 %		16:59:10
3	Y 371.029	1226225.3	1226225.3	90.646 %		16:59:10
3	Ag 328.068†	-4992.7	-5032.9	-8.8937 µg/L	-8.8937 ppb	16:59:10
3	As 188.979†	-17.9	-19.1	-32.607 µg/L	-32.607 ppb	16:59:30
3	B 249.677†	1429.0	1171.3	-191.53 µg/L	-191.53 ppb	16:59:10
3	Ba 233.527†	596.4	666.2	15.857 µg/L	15.857 ppb	16:59:30
3	Be 313.107†	-11247.7	-9387.3	-5.5855 µg/L	-5.5855 ppb	16:59:10
3	Cd 226.502†	1240.2	1491.6	-14.625 µg/L	-14.625 ppb	16:59:10
3	Co 228.616†	217.8	235.1	10.551 µg/L	10.551 ppb	16:59:30
3	Cr 267.716†	61.4	117.2	2.3057 µg/L	2.3057 ppb	16:59:30
3	Cu 324.752†	-9496.4	-12880.5	-20.340 µg/L	-20.340 ppb	16:59:10
3	Mn 257.610†	-6307.3	-6609.4	20.942 µg/L	20.942 ppb	16:59:10
3	Mo 202.031†	-204.7	-217.5	-3.8705 µg/L	-3.8705 ppb	16:59:30
3	Ni 231.604†	57.2	-250.1	-6.5186 µg/L	-6.5186 ppb	16:59:30
3	P 214.914†	280.7	290.2	356.64 µg/L	356.64 ppb	16:59:30
3	Pb 220.353†	147.7	69.8	13.118 µg/L	13.118 ppb	16:59:30
3	S 181.975 Axial†	25.1	8.4	34.818 µg/L	34.818 ppb	16:59:30
3	Sb 206.836†	38.6	19.5	-24.434 µg/L	-24.434 ppb	16:59:30
3	Se 196.026†	-161.9	-195.6	413.95 µg/L	413.95 ppb	16:59:30
3	SiO2†	1115.5	-177.4	-35.018 µg/L	-35.018 ppb	16:59:30
3	Si 251.611†	-321.2	-660.2	-50.191 µg/L	-50.191 ppb	16:59:30
3	Sn 189.927†	-41.2	-45.3	-13.350 µg/L	-13.350 ppb	16:59:30
3	Ti 334.940†	15494.0	16690.0	6.4283 µg/L	6.4283 ppb	16:59:10
3	Tl 190.801†	-51.2	-33.3	32.056 µg/L	32.056 ppb	16:59:30
3	U 409.014†	152493.7	166064.5	13704 µg/L	13704 ppb	16:59:10
3	V 292.402†	-7191.9	-7783.6	-7.7057 µg/L	-7.7057 ppb	16:59:10
3	Zn 213.857†	2972.0	2700.6	14.345 µg/L	14.345 ppb	16:59:30

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1807392.0	92.067 %	0.1712			0.19%
Sc RADIAL	54703.2	96.8 %	0.12			0.12%
Y 371.029	1228601.0	90.822 %	0.1568			0.17%
Ag 328.068†	-5029.0	-8.9240 µg/L	0.14840	-8.9240 ppb	0.14840	1.66%
Al 396.153Radial†	728511.2	506790 µg/L	555.2	506790 ppb	555.2	0.11%
QC value within limits for Al 396.153Radial Recovery = 101.36%						
As 188.979†	-24.8	-42.948 µg/L	15.5521	-42.948 ppb	15.5521	36.21%
B 249.677†	1184.9	-190.51 µg/L	1.274	-190.51 ppb	1.274	0.67%
Ba 233.527†	666.8	15.870 µg/L	0.0245	15.870 ppb	0.0245	0.15%
Be 313.107†	-9375.2	-5.5787 µg/L	0.01486	-5.5787 ppb	0.01486	0.27%
Ca 317.933Radial†	566564.5	483950 µg/L	1577.8	483950 ppb	1577.8	0.33%
QC value within limits for Ca 317.933Radial Recovery = 96.79%						
Cd 226.502†	1465.0	-15.189 µg/L	0.5033	-15.189 ppb	0.5033	3.31%
Co 228.616†	225.1	10.094 µg/L	0.4933	10.094 ppb	0.4933	4.89%
Cr 267.716†	117.2	2.3065 µg/L	0.35801	2.3065 ppb	0.35801	15.52%
Cu 324.752†	-12939.7	-20.849 µg/L	0.4554	-20.849 ppb	0.4554	2.18%
Fe 238.204 Radial†	58027.9	457660 µg/L	810.7	457660 ppb	810.7	0.18%
QC value within limits for Fe 238.204 Radial Recovery = 91.53%						
K 766.490 Radial†	-47.2	-30.852 µg/L	25.2666	-30.852 ppb	25.2666	81.90%
Mg 279.077 IEC†	53965.5	481910 µg/L	1159.2	481910 ppb	1159.2	0.24%

QC value within limits for Mg 279.077 IEC Recovery = 96.38%							
Mn 257.610†	-6543.3	21.082 µg/L	0.2497	21.082 ppb	0.2497	1.18%	
Mo 202.031†	-223.1	-4.4592 µg/L	1.45813	-4.4592 ppb	1.45813	32.70%	
Na 589.592 Radial†	1601426.4	491870 µg/L	221.6	491870 ppb	221.6	0.05%	
QC value within limits for Na 589.592 Radial Recovery = 98.37%							
Ni 231.604†	-254.7	-6.7610 µg/L	0.25647	-6.7610 ppb	0.25647	3.79%	
P 214.914†	306.2	389.27 µg/L	28.970	389.27 ppb	28.970	7.44%	
Pb 220.353†	72.9	13.947 µg/L	1.3271	13.947 ppb	1.3271	9.52%	
S 181.975 Axial†	15.7	65.000 µg/L	26.1534	65.000 ppb	26.1534	40.24%	
Sb 206.836†	28.0	-16.782 µg/L	9.3013	-16.782 ppb	9.3013	55.42%	
Se 196.026†	-198.8	407.59 µg/L	14.310	407.59 ppb	14.310	3.51%	
SiO2†	-177.7	-35.078 µg/L	0.0614	-35.078 ppb	0.0614	0.18%	
Si 251.611†	-665.8	-50.616 µg/L	2.4820	-50.616 ppb	2.4820	4.90%	
Sn 189.927†	-49.7	-15.301 µg/L	1.6952	-15.301 ppb	1.6952	11.08%	
Sr 421.552†	563.7	5.2000 µg/L	0.25572	5.2000 ppb	0.25572	4.92%	
Ti 334.940†	17217.6	7.7225 µg/L	1.32825	7.7225 ppb	1.32825	17.20%	
Tl 190.801†	-35.6	28.834 µg/L	6.5890	28.834 ppb	6.5890	22.85%	
U 409.014†	165969.4	13696 µg/L	7.0	13696 ppb	7.0	0.05%	
QC value within limits for U 409.014 Recovery = 91.31%							
V 292.402†	-7835.4	-8.3274 µg/L	0.56678	-8.3274 ppb	0.56678	6.81%	
Zn 213.857†	2704.4	14.551 µg/L	0.1785	14.551 ppb	0.1785	1.23%	
All analyte(s) passed QC.							

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/19/2010 16:59:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56692.7	56692.7	100 %		17:00:22
1	Al 396.153Radial†	410.3	401.6	67.150 µg/L	67.150 ppb	17:00:22
1	Ca 317.933Radial†	313.1	100.7	86.030 µg/L	86.030 ppb	17:00:42
1	Fe 238.204 Radial†	6.3	-10.3	125.34 µg/L	125.34 ppb	17:00:42
1	K 766.490 Radial†	452848.2	451108.7	294630 µg/L	294630 ppb	17:00:16
1	Mg 279.077 IEC†	-3.5	-16.3	27.924 µg/L	27.924 ppb	17:00:42
1	Na 589.592 Radial†	1202.8	726.5	223.13 µg/L	223.13 ppb	17:00:22
1	Sr 421.552†	1055792.8	1052093.2	9705.7 µg/L	9705.7 ppb	17:00:16
1	Sc 361.383	1927950.9	1927950.9	98.209 %		17:02:14
1	Y 371.029	1317313.5	1317313.5	97.380 %		17:02:14
1	Ag 328.068†	-7740.8	-7480.4	13.019 µg/L	13.019 ppb	17:02:19
1	As 188.979†	5373.1	5471.6	9786.3 µg/L	9786.3 ppb	17:02:19
1	B 249.677†	122177.3	124021.9	5094.8 µg/L	5094.8 ppb	17:02:14
1	Ba 233.527†	611336.6	622505.5	14963 µg/L	14963 ppb	17:02:14
1	Be 313.107†	4884950.3	4976915.5	2949.9 µg/L	2949.9 ppb	17:02:03
1	Cd 226.502†	386911.9	394111.5	9839.4 µg/L	9839.4 ppb	17:02:14
1	Co 228.616†	210861.9	214706.5	9711.7 µg/L	9711.7 ppb	17:02:14
1	Cr 267.716†	1221432.5	1243763.8	24988 µg/L	24988 ppb	17:02:14
1	Cu 324.752†	3142243.6	3197019.5	20869 µg/L	20869 ppb	17:02:14
1	Mn 257.610†	3084343.0	3140862.5	9835.7 µg/L	9835.7 ppb	17:02:14
1	Mo 202.031†	103586.6	105481.5	10329 µg/L	10329 ppb	17:02:14
1	Ni 231.604†	195607.8	198863.7	9901.7 µg/L	9901.7 ppb	17:02:14
1	P 214.914†	7737.6	7863.4	13522 µg/L	13522 ppb	17:02:19
1	Pb 220.353†	104065.3	105872.7	25731 µg/L	25731 ppb	17:02:14
1	S 181.975 Axial†	12812.3	13027.1	54023 µg/L	54023 ppb	17:02:19
1	Sb 206.836†	11529.6	11717.4	10643 µg/L	10643 ppb	17:02:19
1	Se 196.026†	6981.3	7089.4	9956.3 µg/L	9956.3 ppb	17:02:19
1	SiO2†	509789.5	517697.3	102190 µg/L	102190 ppb	17:02:14
1	Si 251.611†	616246.3	627177.0	47679 µg/L	47679 ppb	17:02:14
1	Sn 189.927†	24747.6	25198.7	10627 µg/L	10627 ppb	17:02:19
1	Ti 334.940†	4520614.2	4602902.5	10183 µg/L	10183 ppb	17:02:03
1	Tl 190.801†	7250.0	7404.6	9714.3 µg/L	9714.3 ppb	17:02:19
1	U 409.014†	894.0	987.4	82.040 µg/L	82.040 ppb	17:02:14
1	V 292.402†	1045223.3	1064334.6	10510 µg/L	10510 ppb	17:02:14
1	Zn 213.857†	624777.0	635639.6	14836 µg/L	14836 ppb	17:02:14
2	Sc RADIAL	56901.4	56901.4	101 %		17:00:54
2	Al 396.153Radial†	358.9	349.0	41.120 µg/L	41.120 ppb	17:00:54
2	Ca 317.933Radial†	305.5	92.1	78.637 µg/L	78.637 ppb	17:01:14
2	Fe 238.204 Radial†	4.4	-12.2	99.290 µg/L	99.290 ppb	17:01:14
2	K 766.490 Radial†	456232.0	452813.9	295740 µg/L	295740 ppb	17:00:48
2	Mg 279.077 IEC†	1.4	-11.4	63.333 µg/L	63.333 ppb	17:01:14
2	Na 589.592 Radial†	1121.5	641.3	196.97 µg/L	196.97 ppb	17:00:54
2	Sr 421.552†	1064137.7	1056521.3	9746.6 µg/L	9746.6 ppb	17:00:48
2	Sc 361.383	1930719.4	1930719.4	98.350 %		17:02:38
2	Y 371.029	1320362.0	1320362.0	97.605 %		17:02:38
2	Ag 328.068†	-7077.0	-6794.2	14.570 µg/L	14.570 ppb	17:02:44
2	As 188.979†	5081.0	5166.8	9240.9 µg/L	9240.9 ppb	17:02:44
2	B 249.677†	118618.7	120225.2	4937.5 µg/L	4937.5 ppb	17:02:38
2	Ba 233.527†	584914.6	594747.4	14296 µg/L	14296 ppb	17:02:38
2	Be 313.107†	4840646.5	4924735.5	2919.0 µg/L	2919.0 ppb	17:02:28
2	Cd 226.502†	369934.9	376284.7	9394.3 µg/L	9394.3 ppb	17:02:38
2	Co 228.616†	200219.4	203577.5	9207.4 µg/L	9207.4 ppb	17:02:38
2	Cr 267.716†	1146054.0	1165336.9	23412 µg/L	23412 ppb	17:02:38
2	Cu 324.752†	2987260.6	3034847.6	19810 µg/L	19810 ppb	17:02:38
2	Mn 257.610†	2933156.9	2982635.7	9340.2 µg/L	9340.2 ppb	17:02:38
2	Mo 202.031†	98580.4	100240.0	9816.1 µg/L	9816.1 ppb	17:02:38
2	Ni 231.604†	185684.1	188487.9	9385.1 µg/L	9385.1 ppb	17:02:38
2	P 214.914†	7168.5	7273.5	12452 µg/L	12452 ppb	17:02:44
2	Pb 220.353†	100296.4	101888.6	24763 µg/L	24763 ppb	17:02:38

2	S 181.975 Axial†	12172.5	12357.8	51247 µg/L	51247 ppb	17:02:44
2	Sb 206.836†	10777.5	10935.8	9934.7 µg/L	9934.7 ppb	17:02:44
2	Se 196.026†	6594.7	6686.0	9389.7 µg/L	9389.7 ppb	17:02:44
2	SiO2†	493318.0	500205.0	98734 µg/L	98734 ppb	17:02:38
2	Si 251.611†	596653.2	606355.3	46096 µg/L	46096 ppb	17:02:38
2	Sn 189.927†	22590.4	22969.2	9686.4 µg/L	9686.4 ppb	17:02:44
2	Ti 334.940†	4476920.0	4551874.4	10070 µg/L	10070 ppb	17:02:28
2	Tl 190.801†	7064.0	7204.9	9453.5 µg/L	9453.5 ppb	17:02:44
2	U 409.014†	804.4	895.0	74.370 µg/L	74.370 ppb	17:02:38
2	V 292.402†	992711.5	1009415.4	9966.7 µg/L	9966.7 ppb	17:02:38
2	Zn 213.857†	595571.0	605031.1	14122 µg/L	14122 ppb	17:02:38
3	Sc RADIAL	56734.5	56734.5	100 %		17:01:26
3	Al 396.153Radial†	382.8	373.8	92.098 µg/L	92.098 ppb	17:01:26
3	Ca 317.933Radial†	337.7	125.0	106.77 µg/L	106.77 ppb	17:01:46
3	Fe 238.204 Radial†	8.1	-8.5	96.137 µg/L	96.137 ppb	17:01:46
3	K 766.490 Radial†	455344.2	453262.2	296030 µg/L	296030 ppb	17:01:20
3	Mg 279.077 IEC†	6.4	-6.4	80.021 µg/L	80.021 ppb	17:01:46
3	Na 589.592 Radial†	1058.9	582.2	178.83 µg/L	178.83 ppb	17:01:26
3	Sr 421.552†	1062613.5	1058110.9	9761.2 µg/L	9761.2 ppb	17:01:20
3	Sc 361.383	1951531.6	1951531.6	99.410 %		17:03:03
3	Y 371.029	1334759.8	1334759.8	98.670 %		17:03:03
3	Ag 328.068†	-5952.6	-5586.4	12.490 µg/L	12.490 ppb	17:03:09
3	As 188.979†	4352.3	4378.6	7831.5 µg/L	7831.5 ppb	17:03:09
3	B 249.677†	103961.3	104194.4	4277.3 µg/L	4277.3 ppb	17:03:03
3	Ba 233.527†	498513.8	501491.0	12054 µg/L	12054 ppb	17:03:03
3	Be 313.107†	4199873.9	4227668.5	2505.9 µg/L	2505.9 ppb	17:02:53
3	Cd 226.502†	314684.6	316694.9	7906.5 µg/L	7906.5 ppb	17:03:03
3	Co 228.616†	168522.5	169521.2	7666.6 µg/L	7666.6 ppb	17:03:03
3	Cr 267.716†	945201.2	950864.3	19103 µg/L	19103 ppb	17:03:03
3	Cu 324.752†	2517755.9	2530162.7	16516 µg/L	16516 ppb	17:03:03
3	Mn 257.610†	2467371.4	2482278.7	7773.3 µg/L	7773.3 ppb	17:03:03
3	Mo 202.031†	82974.3	83472.3	8174.1 µg/L	8174.1 ppb	17:03:03
3	Ni 231.604†	156258.3	156873.9	7811.0 µg/L	7811.0 ppb	17:03:03
3	P 214.914†	6005.8	6026.1	10305 µg/L	10305 ppb	17:03:09
3	Pb 220.353†	86464.2	86886.7	21117 µg/L	21117 ppb	17:03:03
3	S 181.975 Axial†	10331.9	10374.4	43022 µg/L	43022 ppb	17:03:09
3	Sb 206.836†	9128.5	9160.2	8326.6 µg/L	8326.6 ppb	17:03:09
3	Se 196.026†	5645.3	5659.5	7948.1 µg/L	7948.1 ppb	17:03:09
3	SiO2†	429530.2	430689.2	85012 µg/L	85012 ppb	17:03:03
3	Si 251.611†	519223.8	521996.3	39683 µg/L	39683 ppb	17:03:03
3	Sn 189.927†	18770.5	18881.6	7962.6 µg/L	7962.6 ppb	17:03:09
3	Ti 334.940†	3882788.8	3905669.8	8640.2 µg/L	8640.2 ppb	17:02:53
3	Tl 190.801†	6222.6	6282.0	8241.0 µg/L	8241.0 ppb	17:03:09
3	U 409.014†	704.1	785.3	65.252 µg/L	65.252 ppb	17:03:03
3	V 292.402†	832909.4	837900.0	8272.7 µg/L	8272.7 ppb	17:03:03
3	Zn 213.857†	505033.0	507497.5	11846 µg/L	11846 ppb	17:03:03

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1936734.0	98.656 %	0.6566			0.67%
Sc RADIAL	56776.2	100 %	0.2			0.19%
Y 371.029	1324145.1	97.885 %	0.6888			0.70%
Ag 328.068†	-6620.3	13.360 µg/L	1.0808	13.360 ppb	1.0808	8.09%
Al 396.153Radial†	374.8	66.790 µg/L	25.4910	66.790 ppb	25.4910	38.17%
As 188.979†	5005.6	8952.9 µg/L	1008.74	8952.9 ppb	1008.74	11.27%
QC value less than the lower limit for As 188.979 Recovery = 89.53%						
B 249.677†	116147.2	4769.9 µg/L	433.79	4769.9 ppb	433.79	9.09%
QC value within limits for B 249.677 Recovery = 95.40%						
Ba 233.527†	572914.6	13771 µg/L	1524.0	13771 ppb	1524.0	11.07%
QC value within limits for Ba 233.527 Recovery = 91.81%						
Be 313.107†	4709773.2	2791.6 µg/L	247.95	2791.6 ppb	247.95	8.88%
QC value within limits for Be 313.107 Recovery = 93.05%						
Ca 317.933Radial†	105.9	90.480 µg/L	14.5864	90.480 ppb	14.5864	16.12%
Cd 226.502†	362363.7	9046.7 µg/L	1012.25	9046.7 ppb	1012.25	11.19%
QC value within limits for Cd 226.502 Recovery = 90.47%						
Co 228.616†	195935.1	8861.9 µg/L	1065.42	8861.9 ppb	1065.42	12.02%
QC value less than the lower limit for Co 228.616 Recovery = 88.62%						
Cr 267.716†	1119988.3	22501 µg/L	3046.1	22501 ppb	3046.1	13.54%
QC value within limits for Cr 267.716 Recovery = 90.00%						

Cu 324.752†	2920676.6	19065 µg/L	2270.1	19065 ppb	2270.1	11.91%
QC value within limits for Cu 324.752 Recovery = 95.32%						
Fe 238.204 Radial†	-10.3	106.92 µg/L	16.029	106.92 ppb	16.029	14.99%
K 766.490 Radial†	452395.0	295470 µg/L	742.1	295470 ppb	742.1	0.25%
QC value within limits for K 766.490 Radial Recovery = 98.49%						
Mg 279.077 IEC†	-11.4	57.093 µg/L	26.6031	57.093 ppb	26.6031	46.60%
Mn 257.610†	2868592.3	8983.1 µg/L	1076.57	8983.1 ppb	1076.57	11.98%
QC value less than the lower limit for Mn 257.610 Recovery = 89.83%						
Mo 202.031†	96398.0	9439.9 µg/L	1125.82	9439.9 ppb	1125.82	11.93%
QC value within limits for Mo 202.031 Recovery = 94.40%						
Na 589.592 Radial†	650.0	199.64 µg/L	22.270	199.64 ppb	22.270	11.15%
Ni 231.604†	181408.5	9032.6 µg/L	1089.03	9032.6 ppb	1089.03	12.06%
QC value within limits for Ni 231.604 Recovery = 90.33%						
P 214.914†	7054.3	12093 µg/L	1638.4	12093 ppb	1638.4	13.55%
QC value less than the lower limit for P 214.914 Recovery = 80.62%						
Pb 220.353†	98216.0	23870 µg/L	2433.1	23870 ppb	2433.1	10.19%
QC value within limits for Pb 220.353 Recovery = 95.48%						
S 181.975 Axial†	11919.8	49431 µg/L	5721.0	49431 ppb	5721.0	11.57%
QC value within limits for S 181.975 Axial Recovery = 98.86%						
Sb 206.836†	10604.5	9634.7 µg/L	1186.86	9634.7 ppb	1186.86	12.32%
QC value within limits for Sb 206.836 Recovery = 96.35%						
Se 196.026†	6478.3	9098.0 µg/L	1035.37	9098.0 ppb	1035.37	11.38%
QC value within limits for Se 196.026 Recovery = 90.98%						
SiO2†	482863.9	95311 µg/L	9084.4	95311 ppb	9084.4	9.53%
QC value less than the lower limit for SiO2 Recovery = 89.08%						
Si 251.611†	585176.2	44486 µg/L	4234.2	44486 ppb	4234.2	9.52%
QC value less than the lower limit for Si 251.611 Recovery = 88.97%						
Sn 189.927†	22349.8	9425.3 µg/L	1351.08	9425.3 ppb	1351.08	14.33%
QC value within limits for Sn 189.927 Recovery = 94.25%						
Sr 421.552†	1055575.2	9737.8 µg/L	28.77	9737.8 ppb	28.77	0.30%
QC value within limits for Sr 421.552 Recovery = 97.38%						
Ti 334.940†	4353482.3	9630.9 µg/L	859.79	9630.9 ppb	859.79	8.93%
QC value within limits for Ti 334.940 Recovery = 96.31%						
Tl 190.801†	6963.8	9136.3 µg/L	786.19	9136.3 ppb	786.19	8.61%
QC value within limits for Tl 190.801 Recovery = 91.36%						
U 409.014†	889.2	73.887 µg/L	8.4048	73.887 ppb	8.4048	11.38%
V 292.402†	970550.0	9583.0 µg/L	1166.76	9583.0 ppb	1166.76	12.18%
QC value within limits for V 292.402 Recovery = 95.83%						
Zn 213.857†	582722.8	13601 µg/L	1561.6	13601 ppb	1561.6	11.48%
QC value within limits for Zn 213.857 Recovery = 90.67%						

QC Failed. Continue with analysis.

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 17:03:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55888.6	55888.6	98.9 %		17:03:56
1	Al 396.153Radial†	7603.9	7679.1	5330.8 µg/L	5330.8 ppb	17:03:56
1	Ca 317.933Radial†	6396.5	6254.7	5342.6 µg/L	5342.6 ppb	17:04:16
1	Fe 238.204 Radial†	693.3	684.2	5407.8 µg/L	5407.8 ppb	17:04:16
1	K 766.490 Radial†	8387.1	8313.2	5429.5 µg/L	5429.5 ppb	17:03:56
1	Mg 279.077 IEC†	619.4	613.3	5485.4 µg/L	5485.4 ppb	17:04:16
1	Na 589.592 Radial†	35135.8	35045.3	10764 µg/L	10764 ppb	17:03:56
1	Sr 421.552†	55695.8	56272.0	519.12 µg/L	519.12 ppb	17:03:56
1	Sc 361.383	1985726.3	1985726.3	101.15 %		17:05:20
1	Y 371.029	1365771.7	1365771.7	100.96 %		17:05:20
1	Ag 328.068†	70288.8	69890.2	521.53 µg/L	521.53 ppb	17:05:25
1	As 188.979†	301.3	298.4	533.72 µg/L	533.72 ppb	17:05:46
1	B 249.677†	13549.7	13011.4	528.34 µg/L	528.34 ppb	17:05:25
1	Ba 233.527†	22064.2	21830.1	525.03 µg/L	525.03 ppb	17:05:25
1	Be 313.107†	895757.0	888415.0	527.08 µg/L	527.08 ppb	17:05:20
1	Cd 226.502†	21255.4	21155.1	527.55 µg/L	527.55 ppb	17:05:25
1	Co 228.616†	11817.8	11681.3	528.41 µg/L	528.41 ppb	17:05:25
1	Cr 267.716†	26786.8	26532.2	533.24 µg/L	533.24 ppb	17:05:25
1	Cu 324.752†	84423.2	80918.4	528.94 µg/L	528.94 ppb	17:05:25
1	Mn 257.610†	172694.5	170984.5	535.94 µg/L	535.94 ppb	17:05:20
1	Mo 202.031†	5634.1	5575.3	546.17 µg/L	546.17 ppb	17:05:46
1	Ni 231.604†	11061.6	10623.3	529.01 µg/L	529.01 ppb	17:05:25
1	P 214.914†	1393.6	1362.4	2646.9 µg/L	2646.9 ppb	17:05:46
1	Pb 220.353†	2366.1	2248.2	546.74 µg/L	546.74 ppb	17:05:46
1	S 181.975 Axial†	286.4	264.2	1095.6 µg/L	1095.6 ppb	17:05:46
1	Sb 206.836†	624.5	594.8	548.51 µg/L	548.51 ppb	17:05:46
1	Se 196.026†	403.3	379.4	541.16 µg/L	541.16 ppb	17:05:46
1	SiO2†	30463.6	28725.2	5670.0 µg/L	5670.0 ppb	17:05:25
1	Si 251.611†	35537.3	34822.1	2647.2 µg/L	2647.2 ppb	17:05:25
1	Sn 189.927†	1316.6	1301.2	548.79 µg/L	548.79 ppb	17:05:46
1	Ti 334.940†	242343.4	239409.4	529.28 µg/L	529.28 ppb	17:05:20
1	Tl 190.801†	396.9	414.8	545.11 µg/L	545.11 ppb	17:05:46
1	U 409.014†	6392.8	6397.1	530.42 µg/L	530.42 ppb	17:05:25
1	V 292.402†	54586.5	54009.9	532.97 µg/L	532.97 ppb	17:05:25
1	Zn 213.857†	23680.6	22876.6	532.96 µg/L	532.96 ppb	17:05:25
2	Sc RADIAL	56411.2	56411.2	99.9 %		17:04:22
2	Al 396.153Radial†	7635.5	7639.5	5303.6 µg/L	5303.6 ppb	17:04:22
2	Ca 317.933Radial†	6387.4	6185.7	5283.7 µg/L	5283.7 ppb	17:04:42
2	Fe 238.204 Radial†	694.2	678.6	5363.5 µg/L	5363.5 ppb	17:04:42
2	K 766.490 Radial†	8367.7	8215.3	5365.5 µg/L	5365.5 ppb	17:04:22
2	Mg 279.077 IEC†	620.5	608.6	5443.2 µg/L	5443.2 ppb	17:04:42
2	Na 589.592 Radial†	35309.3	34889.9	10716 µg/L	10716 ppb	17:04:22
2	Sr 421.552†	56012.6	56067.6	517.23 µg/L	517.23 ppb	17:04:22
2	Sc 361.383	1973301.2	1973301.2	100.52 %		17:05:53
2	Y 371.029	1356327.8	1356327.8	100.26 %		17:05:53
2	Ag 328.068†	69539.4	69582.3	519.23 µg/L	519.23 ppb	17:05:58
2	As 188.979†	297.6	296.5	530.36 µg/L	530.36 ppb	17:06:19
2	B 249.677†	13399.5	12946.2	525.71 µg/L	525.71 ppb	17:05:58
2	Ba 233.527†	21880.7	21784.8	523.94 µg/L	523.94 ppb	17:05:58
2	Be 313.107†	883505.0	881802.2	523.15 µg/L	523.15 ppb	17:05:53
2	Cd 226.502†	20975.5	21009.0	523.90 µg/L	523.90 ppb	17:05:58
2	Co 228.616†	11661.3	11599.2	524.68 µg/L	524.68 ppb	17:05:58
2	Cr 267.716†	26502.8	26416.4	530.91 µg/L	530.91 ppb	17:05:58
2	Cu 324.752†	83587.4	80612.4	526.94 µg/L	526.94 ppb	17:05:58
2	Mn 257.610†	170657.8	170033.3	532.96 µg/L	532.96 ppb	17:05:53
2	Mo 202.031†	5420.5	5397.9	528.80 µg/L	528.80 ppb	17:06:19
2	Ni 231.604†	10882.8	10514.3	523.58 µg/L	523.58 ppb	17:05:58
2	P 214.914†	1342.7	1320.4	2563.7 µg/L	2563.7 ppb	17:06:19
2	Pb 220.353†	2290.9	2188.1	532.08 µg/L	532.08 ppb	17:06:19

2	S 181.975 Axial†	275.7	255.3	1058.7 µg/L	1058.7 ppb	17:06:19
2	Sb 206.836†	598.1	572.5	527.76 µg/L	527.76 ppb	17:06:19
2	Se 196.026†	397.1	375.7	535.95 µg/L	535.95 ppb	17:06:19
2	SiO2†	30055.7	28509.0	5627.3 µg/L	5627.3 ppb	17:05:58
2	Si 251.611†	35203.5	34711.2	2638.8 µg/L	2638.8 ppb	17:05:58
2	Sn 189.927†	1262.7	1255.8	529.63 µg/L	529.63 ppb	17:06:19
2	Ti 334.940†	239137.9	237729.0	525.56 µg/L	525.56 ppb	17:05:53
2	Tl 190.801†	378.8	399.3	524.92 µg/L	524.92 ppb	17:06:19
2	U 409.014†	6362.6	6406.8	531.24 µg/L	531.24 ppb	17:05:58
2	V 292.402†	53891.1	53657.8	529.39 µg/L	529.39 ppb	17:05:58
2	Zn 213.857†	23377.3	22722.3	529.37 µg/L	529.37 ppb	17:05:58
3	Sc RADIAL	56975.5	56975.5	101 %		17:04:48
3	Al 396.153Radial†	7635.5	7563.8	5253.0 µg/L	5253.0 ppb	17:04:48
3	Ca 317.933Radial†	6375.4	6110.4	5219.4 µg/L	5219.4 ppb	17:05:08
3	Fe 238.204 Radial†	692.0	669.6	5290.9 µg/L	5290.9 ppb	17:05:08
3	K 766.490 Radial†	8336.4	8101.2	5291.0 µg/L	5291.0 ppb	17:04:48
3	Mg 279.077 IEC†	615.1	597.1	5339.2 µg/L	5339.2 ppb	17:05:08
3	Na 589.592 Radial†	35286.2	34516.8	10602 µg/L	10602 ppb	17:04:48
3	Sr 421.552†	56155.5	55653.7	513.41 µg/L	513.41 ppb	17:04:48
3	Sc 361.383	1965301.5	1965301.5	100.11 %		17:06:26
3	Y 371.029	1350670.0	1350670.0	99.846 %		17:06:26
3	Ag 328.068†	64381.3	64711.5	482.70 µg/L	482.70 ppb	17:06:32
3	As 188.979†	245.8	246.0	440.05 µg/L	440.05 ppb	17:06:52
3	B 249.677†	12272.2	11874.4	481.93 µg/L	481.93 ppb	17:06:32
3	Ba 233.527†	19548.8	19544.2	470.02 µg/L	470.02 ppb	17:06:32
3	Be 313.107†	784667.9	786652.6	466.70 µg/L	466.70 ppb	17:06:26
3	Cd 226.502†	18615.7	18736.7	467.18 µg/L	467.18 ppb	17:06:32
3	Co 228.616†	10218.5	10205.2	461.59 µg/L	461.59 ppb	17:06:32
3	Cr 267.716†	22418.3	22443.7	451.08 µg/L	451.08 ppb	17:06:32
3	Cu 324.752†	73939.9	71314.0	466.24 µg/L	466.24 ppb	17:06:32
3	Mn 257.610†	152452.7	152539.5	478.17 µg/L	478.17 ppb	17:06:26
3	Mo 202.031†	4381.2	4381.7	429.29 µg/L	429.29 ppb	17:06:52
3	Ni 231.604†	9646.8	9323.7	464.30 µg/L	464.30 ppb	17:06:32
3	P 214.914†	1099.4	1082.8	2098.1 µg/L	2098.1 ppb	17:06:52
3	Pb 220.353†	1951.4	1858.2	451.78 µg/L	451.78 ppb	17:06:52
3	S 181.975 Axial†	236.4	217.2	900.67 µg/L	900.67 ppb	17:06:52
3	Sb 206.836†	506.2	483.2	445.02 µg/L	445.02 ppb	17:06:52
3	Se 196.026†	341.1	321.4	459.63 µg/L	459.63 ppb	17:06:52
3	SiO2†	27392.4	25970.5	5126.2 µg/L	5126.2 ppb	17:06:32
3	Si 251.611†	31876.5	31530.5	2397.0 µg/L	2397.0 ppb	17:06:32
3	Sn 189.927†	1001.9	1000.4	421.93 µg/L	421.93 ppb	17:06:52
3	Ti 334.940†	211018.2	210609.0	465.58 µg/L	465.58 ppb	17:06:26
3	Tl 190.801†	333.8	355.8	467.83 µg/L	467.83 ppb	17:06:52
3	U 409.014†	5451.1	5522.1	457.75 µg/L	457.75 ppb	17:06:32
3	V 292.402†	46793.0	46785.8	461.39 µg/L	461.39 ppb	17:06:32
3	Zn 213.857†	20591.5	20034.3	466.68 µg/L	466.68 ppb	17:06:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1974776.3	100.59 %	0.524			0.52%
Sc RADIAL	56425.1	99.9 %	0.96			0.96%
Y 371.029	1357589.8	100.36 %	0.564			0.56%
Ag 328.068†	68061.3	507.82 µg/L	21.786	507.82 ppb	21.786	4.29%
QC value within limits for Ag 328.068 Recovery = 101.56%						
Al 396.153Radial†	7627.5	5295.8 µg/L	39.51	5295.8 ppb	39.51	0.75%
QC value within limits for Al 396.153Radial Recovery = 105.92%						
As 188.979†	280.3	501.38 µg/L	53.136	501.38 ppb	53.136	10.60%
QC value within limits for As 188.979 Recovery = 100.28%						
B 249.677†	12610.7	512.00 µg/L	26.067	512.00 ppb	26.067	5.09%
QC value within limits for B 249.677 Recovery = 102.40%						
Ba 233.527†	21053.0	506.33 µg/L	31.447	506.33 ppb	31.447	6.21%
QC value within limits for Ba 233.527 Recovery = 101.27%						
Be 313.107†	852289.9	505.65 µg/L	33.780	505.65 ppb	33.780	6.68%
QC value within limits for Be 313.107 Recovery = 101.13%						
Ca 317.933Radial†	6183.6	5281.9 µg/L	61.64	5281.9 ppb	61.64	1.17%
QC value within limits for Ca 317.933Radial Recovery = 105.64%						
Cd 226.502†	20300.3	506.21 µg/L	33.851	506.21 ppb	33.851	6.69%
QC value within limits for Cd 226.502 Recovery = 101.24%						
Co 228.616†	11161.9	504.89 µg/L	37.550	504.89 ppb	37.550	7.44%

Cr	267.716†	25130.8	505.07 µg/L	46.779	505.07 ppb	46.779	9.26%
	QC value within limits for Cr 267.716 Recovery = 101.01%						
Cu	324.752†	77614.9	507.37 µg/L	35.640	507.37 ppb	35.640	7.02%
	QC value within limits for Cu 324.752 Recovery = 101.47%						
Fe	238.204 Radial†	677.5	5354.0 µg/L	59.03	5354.0 ppb	59.03	1.10%
	QC value within limits for Fe 238.204 Radial Recovery = 107.08%						
K	766.490 Radial†	8209.9	5362.0 µg/L	69.32	5362.0 ppb	69.32	1.29%
	QC value within limits for K 766.490 Radial Recovery = 107.24%						
Mg	279.077 IEC†	606.3	5422.6 µg/L	75.22	5422.6 ppb	75.22	1.39%
	QC value within limits for Mg 279.077 IEC Recovery = 108.45%						
Mn	257.610†	164519.1	515.69 µg/L	32.527	515.69 ppb	32.527	6.31%
	QC value within limits for Mn 257.610 Recovery = 103.14%						
Mo	202.031†	5118.3	501.42 µg/L	63.069	501.42 ppb	63.069	12.58%
	QC value within limits for Mo 202.031 Recovery = 100.28%						
Na	589.592 Radial†	34817.3	10694 µg/L	83.4	10694 ppb	83.4	0.78%
	QC value within limits for Na 589.592 Radial Recovery = 106.94%						
Ni	231.604†	10153.8	505.63 µg/L	35.893	505.63 ppb	35.893	7.10%
	QC value within limits for Ni 231.604 Recovery = 101.13%						
P	214.914†	1255.2	2436.2 µg/L	295.76	2436.2 ppb	295.76	12.14%
	QC value within limits for P 214.914 Recovery = 97.45%						
Pb	220.353†	2098.2	510.20 µg/L	51.120	510.20 ppb	51.120	10.02%
	QC value within limits for Pb 220.353 Recovery = 102.04%						
S	181.975 Axial†	245.6	1018.3 µg/L	103.55	1018.3 ppb	103.55	10.17%
	QC value within limits for S 181.975 Axial Recovery = 101.83%						
Sb	206.836†	550.2	507.10 µg/L	54.752	507.10 ppb	54.752	10.80%
	QC value within limits for Sb 206.836 Recovery = 101.42%						
Se	196.026†	358.8	512.25 µg/L	45.639	512.25 ppb	45.639	8.91%
	QC value within limits for Se 196.026 Recovery = 102.45%						
SiO2†		27734.9	5474.5 µg/L	302.37	5474.5 ppb	302.37	5.52%
	QC value within limits for SiO2 Recovery = 102.38%						
Si	251.611†	33688.0	2561.0 µg/L	142.10	2561.0 ppb	142.10	5.55%
	QC value within limits for Si 251.611 Recovery = 102.44%						
Sn	189.927†	1185.8	500.11 µg/L	68.387	500.11 ppb	68.387	13.67%
	QC value within limits for Sn 189.927 Recovery = 100.02%						
Sr	421.552†	55997.8	516.59 µg/L	2.906	516.59 ppb	2.906	0.56%
	QC value within limits for Sr 421.552 Recovery = 103.32%						
Ti	334.940†	229249.1	506.81 µg/L	35.755	506.81 ppb	35.755	7.05%
	QC value within limits for Ti 334.940 Recovery = 101.36%						
Tl	190.801†	390.0	512.62 µg/L	40.080	512.62 ppb	40.080	7.82%
	QC value within limits for Tl 190.801 Recovery = 102.52%						
U	409.014†	6108.7	506.47 µg/L	42.195	506.47 ppb	42.195	8.33%
	QC value within limits for U 409.014 Recovery = 101.29%						
V	292.402†	51484.5	507.91 µg/L	40.335	507.91 ppb	40.335	7.94%
	QC value within limits for V 292.402 Recovery = 101.58%						
Zn	213.857†	21877.7	509.67 µg/L	37.277	509.67 ppb	37.277	7.31%
	QC value within limits for Zn 213.857 Recovery = 101.93%						

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 17:07:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55412.9	55412.9	98.1 %		17:07:34
1	Al 396.153Radial†	37.8	31.1	21.627 µg/L	21.627 ppb	17:07:34
1	Ca 317.933Radial†	224.1	17.2	14.719 µg/L	14.719 ppb	17:07:55
1	Fe 238.204 Radial†	17.2	1.0	7.9128 µg/L	7.9128 ppb	17:07:55
1	K 766.490 Radial†	263.9	104.0	67.945 µg/L	67.945 ppb	17:07:34
1	Mg 279.077 IEC†	16.1	3.6	31.922 µg/L	31.922 ppb	17:07:55
1	Na 589.592 Radial†	689.0	230.2	70.711 µg/L	70.711 ppb	17:07:34
1	Sr 421.552†	101.9	75.1	0.6926 µg/L	0.6926 ppb	17:07:34
1	Sc 361.383	1951828.9	1951828.9	99.425 %		17:08:57
1	Y 371.029	1347100.7	1347100.7	99.582 %		17:08:57
1	Ag 328.068†	-411.9	-12.6	-0.0884 µg/L	-0.0884 ppb	17:09:02
1	As 188.979†	1.0	1.5	2.6447 µg/L	2.6447 ppb	17:09:23
1	B 249.677†	547.2	166.2	6.7725 µg/L	6.7725 ppb	17:09:02
1	Ba 233.527†	13.0	30.1	0.7248 µg/L	0.7248 ppb	17:09:23
1	Be 313.107†	-2489.6	351.6	0.2085 µg/L	0.2085 ppb	17:09:02
1	Cd 226.502†	-106.1	35.0	0.8724 µg/L	0.8724 ppb	17:09:23
1	Co 228.616†	8.3	6.4	0.2907 µg/L	0.2907 ppb	17:09:23
1	Cr 267.716†	3.3	53.7	1.0792 µg/L	1.0792 ppb	17:09:02
1	Cu 324.752†	2832.8	305.4	1.9949 µg/L	1.9949 ppb	17:09:02
1	Mn 257.610†	-94.7	160.8	0.5033 µg/L	0.5033 ppb	17:09:23
1	Mo 202.031†	11.2	16.6	1.6267 µg/L	1.6267 ppb	17:09:23
1	Ni 231.604†	329.4	19.0	0.9450 µg/L	0.9450 ppb	17:09:23
1	P 214.914†	17.5	2.3	4.3252 µg/L	4.3252 ppb	17:09:23
1	Pb 220.353†	117.3	27.1	6.5756 µg/L	6.5756 ppb	17:09:23
1	S 181.975 Axial†	13.9	-5.0	-20.708 µg/L	-20.708 ppb	17:09:23
1	Sb 206.836†	24.4	2.0	1.8677 µg/L	1.8677 ppb	17:09:23
1	Se 196.026†	8.1	-11.2	-15.713 µg/L	-15.713 ppb	17:09:23
1	SiO2†	1498.4	115.5	22.804 µg/L	22.804 ppb	17:09:02
1	Si 251.611†	397.1	88.7	6.7465 µg/L	6.7465 ppb	17:09:23
1	Sn 189.927†	7.9	7.6	3.2082 µg/L	3.2082 ppb	17:09:23
1	Ti 334.940†	420.5	247.9	0.5462 µg/L	0.5462 ppb	17:09:02
1	Tl 190.801†	-26.0	-3.7	-4.8506 µg/L	-4.8506 ppb	17:09:23
1	U 409.014†	-2.4	74.7	6.2026 µg/L	6.2026 ppb	17:09:02
1	V 292.402†	29.6	74.5	0.7487 µg/L	0.7487 ppb	17:09:02
1	Zn 213.857†	624.2	93.4	2.1827 µg/L	2.1827 ppb	17:09:23
2	Sc RADIAL	55845.1	55845.1	98.8 %		17:08:00
2	Al 396.153Radial†	15.5	8.3	5.7389 µg/L	5.7389 ppb	17:08:00
2	Ca 317.933Radial†	229.7	21.1	18.050 µg/L	18.050 ppb	17:08:21
2	Fe 238.204 Radial†	18.3	1.9	15.065 µg/L	15.065 ppb	17:08:21
2	K 766.490 Radial†	268.0	106.2	69.336 µg/L	69.336 ppb	17:08:00
2	Mg 279.077 IEC†	18.8	6.2	55.616 µg/L	55.616 ppb	17:08:21
2	Na 589.592 Radial†	718.0	254.2	78.078 µg/L	78.078 ppb	17:08:00
2	Sr 421.552†	118.8	91.4	0.8433 µg/L	0.8433 ppb	17:08:00
2	Sc 361.383	1967750.3	1967750.3	100.24 %		17:09:29
2	Y 371.029	1358640.9	1358640.9	100.44 %		17:09:29
2	Ag 328.068†	-328.6	73.7	0.5515 µg/L	0.5515 ppb	17:09:34
2	As 188.979†	0.4	0.9	1.5587 µg/L	1.5587 ppb	17:09:55
2	B 249.677†	564.6	179.1	7.2933 µg/L	7.2933 ppb	17:09:34
2	Ba 233.527†	22.7	39.7	0.9547 µg/L	0.9547 ppb	17:09:55
2	Be 313.107†	-2501.6	360.0	0.2134 µg/L	0.2134 ppb	17:09:34
2	Cd 226.502†	-111.0	30.9	0.7694 µg/L	0.7694 ppb	17:09:55
2	Co 228.616†	5.7	3.7	0.1688 µg/L	0.1688 ppb	17:09:55
2	Cr 267.716†	-17.2	33.2	0.6680 µg/L	0.6680 ppb	17:09:34
2	Cu 324.752†	2799.6	249.3	1.6293 µg/L	1.6293 ppb	17:09:34
2	Mn 257.610†	-100.4	155.9	0.4879 µg/L	0.4879 ppb	17:09:55
2	Mo 202.031†	11.5	16.9	1.6521 µg/L	1.6521 ppb	17:09:55
2	Ni 231.604†	309.9	-3.2	-0.1576 µg/L	-0.1576 ppb	17:09:55
2	P 214.914†	22.6	7.2	14.217 µg/L	14.217 ppb	17:09:55
2	Pb 220.353†	112.5	21.3	5.1809 µg/L	5.1809 ppb	17:09:55

2	S 181.975 Axial†	17.8	-1.2	-5.0873 µg/L	-5.0873 ppb	17:09:55
2	Sb 206.836†	28.6	6.1	5.5939 µg/L	5.5939 ppb	17:09:55
2	Se 196.026†	12.5	-6.8	-9.5638 µg/L	-9.5638 ppb	17:09:55
2	SiO2†	1499.4	104.3	20.597 µg/L	20.597 ppb	17:09:34
2	Si 251.611†	402.2	90.6	6.8889 µg/L	6.8889 ppb	17:09:55
2	Sn 189.927†	9.5	9.2	3.8641 µg/L	3.8641 ppb	17:09:55
2	Ti 334.940†	469.3	293.2	0.6444 µg/L	0.6444 ppb	17:09:34
2	Tl 190.801†	-20.6	1.9	2.4344 µg/L	2.4344 ppb	17:09:55
2	U 409.014†	-26.6	50.5	4.1927 µg/L	4.1927 ppb	17:09:34
2	V 292.402†	21.3	66.0	0.6641 µg/L	0.6641 ppb	17:09:34
2	Zn 213.857†	610.2	74.4	1.7390 µg/L	1.7390 ppb	17:09:55
3	Sc RADIAL	55020.8	55020.8	97.4 %		17:08:26
3	Al 396.153Radial†	25.2	18.5	12.855 µg/L	12.855 ppb	17:08:26
3	Ca 317.933Radial†	219.3	13.9	11.843 µg/L	11.843 ppb	17:08:46
3	Fe 238.204 Radial†	16.8	0.7	5.5902 µg/L	5.5902 ppb	17:08:46
3	K 766.490 Radial†	318.2	161.7	105.61 µg/L	105.61 ppb	17:08:26
3	Mg 279.077 IEC†	14.2	1.7	15.617 µg/L	15.617 ppb	17:08:46
3	Na 589.592 Radial†	674.2	220.1	67.603 µg/L	67.603 ppb	17:08:26
3	Sr 421.552†	108.4	82.5	0.7609 µg/L	0.7609 ppb	17:08:26
3	Sc 361.383	1948909.4	1948909.4	99.276 %		17:10:01
3	Y 371.029	1346308.2	1346308.2	99.523 %		17:10:01
3	Ag 328.068†	-352.8	46.2	0.3442 µg/L	0.3442 ppb	17:10:07
3	As 188.979†	-1.2	-0.7	-1.3112 µg/L	-1.3112 ppb	17:10:27
3	B 249.677†	510.9	130.5	5.3165 µg/L	5.3165 ppb	17:10:07
3	Ba 233.527†	13.0	30.2	0.7245 µg/L	0.7245 ppb	17:10:27
3	Be 313.107†	-2546.8	290.3	0.1721 µg/L	0.1721 ppb	17:10:07
3	Cd 226.502†	-112.3	28.5	0.7115 µg/L	0.7115 ppb	17:10:27
3	Co 228.616†	15.8	14.0	0.6325 µg/L	0.6325 ppb	17:10:27
3	Cr 267.716†	5.2	55.6	1.1178 µg/L	1.1178 ppb	17:10:07
3	Cu 324.752†	2793.0	269.6	1.7608 µg/L	1.7608 ppb	17:10:07
3	Mn 257.610†	-128.7	126.3	0.3957 µg/L	0.3957 ppb	17:10:27
3	Mo 202.031†	14.1	19.5	1.9140 µg/L	1.9140 ppb	17:10:27
3	Ni 231.604†	312.1	2.0	0.1004 µg/L	0.1004 ppb	17:10:27
3	P 214.914†	16.0	0.8	1.3809 µg/L	1.3809 ppb	17:10:27
3	Pb 220.353†	106.0	15.9	3.8630 µg/L	3.8630 ppb	17:10:27
3	S 181.975 Axial†	14.2	-4.6	-19.132 µg/L	-19.132 ppb	17:10:27
3	Sb 206.836†	16.0	-6.4	-5.8776 µg/L	-5.8776 ppb	17:10:27
3	Se 196.026†	18.1	-1.1	-1.5391 µg/L	-1.5391 ppb	17:10:27
3	SiO2†	1473.7	92.8	18.326 µg/L	18.326 ppb	17:10:07
3	Si 251.611†	414.5	106.9	8.1279 µg/L	8.1279 ppb	17:10:27
3	Sn 189.927†	10.6	10.3	4.3488 µg/L	4.3488 ppb	17:10:27
3	Ti 334.940†	439.9	268.1	0.5920 µg/L	0.5920 ppb	17:10:07
3	Tl 190.801†	-23.3	-1.1	-1.4129 µg/L	-1.4129 ppb	17:10:27
3	U 409.014†	-71.7	4.9	0.4060 µg/L	0.4060 ppb	17:10:07
3	V 292.402†	-20.7	23.9	0.2511 µg/L	0.2511 ppb	17:10:07
3	Zn 213.857†	601.7	71.7	1.6777 µg/L	1.6777 ppb	17:10:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1956162.9	99.646 %	0.5166			0.52%
Sc RADIAL	55426.3	98.1 %	0.73			0.74%
Y 371.029	1350683.2	99.847 %	0.5103			0.51%
Ag 328.068†	35.8	0.2691 µg/L	0.32647	0.2691 ppb	0.32647	121.32%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	19.3	13.407 µg/L	7.9584	13.407 ppb	7.9584	59.36%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.5	0.9641 µg/L	2.04391	0.9641 ppb	2.04391	212.00%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	158.6	6.4608 µg/L	1.02461	6.4608 ppb	1.02461	15.86%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	33.3	0.8013 µg/L	0.13279	0.8013 ppb	0.13279	16.57%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	334.0	0.1980 µg/L	0.02257	0.1980 ppb	0.02257	11.40%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	17.4	14.871 µg/L	3.1063	14.871 ppb	3.1063	20.89%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	31.5	0.7844 µg/L	0.08148	0.7844 ppb	0.08148	10.39%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	8.0	0.3640 µg/L	0.24037	0.3640 ppb	0.24037	66.04%

Cr	267.716†	47.5	0.9550 µg/L	0.24930	0.9550 ppb	0.24930	26.10%
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu	324.752†	274.8	1.7950 µg/L	0.18518	1.7950 ppb	0.18518	10.32%
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe	238.204 Radial†	1.2	9.5227 µg/L	4.93823	9.5227 ppb	4.93823	51.86%
	QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K	766.490 Radial†	124.0	80.963 µg/L	21.3541	80.963 ppb	21.3541	26.38%
	QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg	279.077 IEC†	3.8	34.385 µg/L	20.1131	34.385 ppb	20.1131	58.49%
	QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn	257.610†	147.7	0.4623 µg/L	0.05817	0.4623 ppb	0.05817	12.58%
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo	202.031†	17.7	1.7309 µg/L	0.15903	1.7309 ppb	0.15903	9.19%
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Na	589.592 Radial†	234.8	72.131 µg/L	5.3801	72.131 ppb	5.3801	7.46%
	QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni	231.604†	5.9	0.2959 µg/L	0.57673	0.2959 ppb	0.57673	194.90%
	QC value within limits for Ni 231.604 Recovery = Not calculated						
P	214.914†	3.4	6.6410 µg/L	6.72404	6.6410 ppb	6.72404	101.25%
	QC value within limits for P 214.914 Recovery = Not calculated						
Pb	220.353†	21.4	5.2065 µg/L	1.35647	5.2065 ppb	1.35647	26.05%
	QC value within limits for Pb 220.353 Recovery = Not calculated						
S	181.975 Axial†	-3.6	-14.976 µg/L	8.5998	-14.976 ppb	8.5998	57.42%
	QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb	206.836†	0.6	0.5280 µg/L	5.85192	0.5280 ppb	5.85192	>999.9%
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se	196.026†	-6.4	-8.9385 µg/L	7.10744	-8.9385 ppb	7.10744	79.51%
	QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	104.2	20.576	µg/L	2.2394	20.576 ppb	2.2394	10.88%
	QC value within limits for SiO2 Recovery = Not calculated						
Si	251.611†	95.4	7.2544 µg/L	0.75977	7.2544 ppb	0.75977	10.47%
	QC value within limits for Si 251.611 Recovery = Not calculated						
Sn	189.927†	9.0	3.8070 µg/L	0.57241	3.8070 ppb	0.57241	15.04%
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr	421.552†	83.0	0.7656 µg/L	0.07544	0.7656 ppb	0.07544	9.85%
	QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti	334.940†	269.7	0.5942 µg/L	0.04915	0.5942 ppb	0.04915	8.27%
	QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl	190.801†	-1.0	-1.2763 µg/L	3.64442	-1.2763 ppb	3.64442	285.54%
	QC value within limits for Tl 190.801 Recovery = Not calculated						
U	409.014†	43.4	3.6004 µg/L	2.94331	3.6004 ppb	2.94331	81.75%
	QC value within limits for U 409.014 Recovery = Not calculated						
V	292.402†	54.8	0.5546 µg/L	0.26626	0.5546 ppb	0.26626	48.01%
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn	213.857†	79.8	1.8665 µg/L	0.27558	1.8665 ppb	0.27558	14.76%
	QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/19/2010 17:18:12

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\021910E.sif

Batch ID:

Results Data Set: 021910A

Results Library: c:\pe\optimal\Results\Results.mdb

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Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 2/19/2010 16:28:12

IEC File: 011510.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 113

Sample ID: LR2

Date Collected: 2/19/2010 17:18:14

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57089.6	57089.6	101 %		17:18:49
1	Al 396.153Radial†	-10.5	-17.7	-12.364 µg/L	-12.364 ppb	17:18:49
1	Ca 317.933Radial†	228.9	15.3	13.039 µg/L	13.039 ppb	17:19:09
1	Fe 238.204 Radial†	8.4	-8.2	43.697 µg/L	43.697 ppb	17:19:09

1	K 766.490 Radial†	220.7	53.4	34.889 µg/L	34.889 ppb	17:18:49
1	Mg 279.077 IEC†	10.1	-2.8	-24.911 µg/L	-24.911 ppb	17:19:09
1	Na 589.592 Radial†	602.0	123.6	37.957 µg/L	37.957 ppb	17:18:49
1	Sr 421.552†	60.8	31.4	0.2896 µg/L	0.2896 ppb	17:18:49
1	Sc 361.383	1992980.4	1992980.4	101.52 %		17:20:12
1	Y 371.029	1370801.5	1370801.5	101.33 %		17:20:12
1	Ag 328.068†	-413.2	-5.4	-0.0402 µg/L	-0.0402 ppb	17:20:18
1	As 188.979†	2879.0	2836.3	5083.5 µg/L	5083.5 ppb	17:20:38
1	B 249.677†	863.8	466.7	19.057 µg/L	19.057 ppb	17:20:18
1	Ba 233.527†	-3.1	14.0	0.3366 µg/L	0.3366 ppb	17:20:38
1	Be 313.107†	-2634.3	260.8	0.1545 µg/L	0.1545 ppb	17:20:18
1	Cd 226.502†	-101.6	41.6	1.0480 µg/L	1.0480 ppb	17:20:38
1	Co 228.616†	114754.7	113033.4	5119.0 µg/L	5119.0 ppb	17:20:18
1	Cr 267.716†	-18.5	32.2	0.6465 µg/L	0.6465 ppb	17:20:18
1	Cu 324.752†	1806.3	-764.5	-4.9994 µg/L	-4.9994 ppb	17:20:18
1	Mn 257.610†	-157.7	100.7	0.3076 µg/L	0.3076 ppb	17:20:38
1	Mo 202.031†	8.0	13.2	1.2927 µg/L	1.2927 ppb	17:20:38
1	Ni 231.604†	383.1	65.0	-2.8550 µg/L	-2.8550 ppb	17:20:38
1	P 214.914†	5661.5	5561.4	11011 µg/L	11011 ppb	17:20:18
1	Pb 220.353†	103.9	11.4	2.7844 µg/L	2.7844 ppb	17:20:38
1	S 181.975 Axial†	11.6	-7.5	-31.222 µg/L	-31.222 ppb	17:20:38
1	Sb 206.836†	26.1	3.2	2.9217 µg/L	2.9217 ppb	17:20:38
1	Se 196.026†	15.5	-4.1	-5.9032 µg/L	-5.9032 ppb	17:20:38
1	SiO2†	426908.6	419120.7	82729 µg/L	82729 ppb	17:20:12
1	Si 251.611†	511420.1	503446.9	38273 µg/L	38273 ppb	17:20:12
1	Sn 189.927†	7.7	7.2	3.0305 µg/L	3.0305 ppb	17:20:38
1	Ti 334.940†	600.4	416.4	0.9232 µg/L	0.9232 ppb	17:20:18
1	Tl 190.801†	0.4	22.7	12.314 µg/L	12.314 ppb	17:20:38
1	U 409.014†	-95.3	-16.8	-1.3899 µg/L	-1.3899 ppb	17:20:18
1	V 292.402†	13.1	57.7	0.5647 µg/L	0.5647 ppb	17:20:18
1	Zn 213.857†	632.3	88.4	2.0732 µg/L	2.0732 ppb	17:20:38
2	Sc RADIAL	56165.6	56165.6	99.4 %		17:19:15
2	Al 396.153Radial†	-6.9	-14.3	-9.9617 µg/L	-9.9617 ppb	17:19:15
2	Ca 317.933Radial†	216.0	6.0	5.1201 µg/L	5.1201 ppb	17:19:35
2	Fe 238.204 Radial†	7.6	-8.9	36.342 µg/L	36.342 ppb	17:19:35
2	K 766.490 Radial†	221.8	58.1	37.930 µg/L	37.930 ppb	17:19:15
2	Mg 279.077 IEC†	7.5	-5.3	-47.450 µg/L	-47.450 ppb	17:19:35
2	Na 589.592 Radial†	593.1	124.4	38.204 µg/L	38.204 ppb	17:19:15
2	Sr 421.552†	33.6	5.0	0.0462 µg/L	0.0462 ppb	17:19:15
2	Sc 361.383	2021073.3	2021073.3	102.95 %		17:20:45
2	Y 371.029	1388832.8	1388832.8	102.67 %		17:20:45
2	Ag 328.068†	-393.4	19.5	0.1414 µg/L	0.1414 ppb	17:20:50
2	As 188.979†	2798.9	2719.1	4873.4 µg/L	4873.4 ppb	17:21:11
2	B 249.677†	844.8	436.4	17.824 µg/L	17.824 ppb	17:20:50
2	Ba 233.527†	-4.8	12.4	0.2992 µg/L	0.2992 ppb	17:21:11
2	Be 313.107†	-2671.8	260.5	0.1543 µg/L	0.1543 ppb	17:20:50
2	Cd 226.502†	-106.1	38.6	0.9740 µg/L	0.9740 ppb	17:21:11
2	Co 228.616†	114007.7	110736.6	5015.0 µg/L	5015.0 ppb	17:20:50
2	Cr 267.716†	-23.2	27.9	0.5600 µg/L	0.5600 ppb	17:20:50
2	Cu 324.752†	1789.0	-806.1	-5.2714 µg/L	-5.2714 ppb	17:20:50
2	Mn 257.610†	-160.2	100.4	0.3070 µg/L	0.3070 ppb	17:21:11
2	Mo 202.031†	1.7	7.0	0.6793 µg/L	0.6793 ppb	17:21:11
2	Ni 231.604†	365.6	42.8	-3.8392 µg/L	-3.8392 ppb	17:21:11
2	P 214.914†	5616.7	5440.3	10772 µg/L	10772 ppb	17:20:50
2	Pb 220.353†	110.3	16.2	3.9509 µg/L	3.9509 ppb	17:21:11
2	S 181.975 Axial†	18.6	-0.9	-3.7186 µg/L	-3.7186 ppb	17:21:11
2	Sb 206.836†	25.8	2.5	2.3409 µg/L	2.3409 ppb	17:21:11
2	Se 196.026†	13.5	-6.2	-8.8057 µg/L	-8.8057 ppb	17:21:11
2	SiO2†	425202.9	411618.8	81248 µg/L	81248 ppb	17:20:45
2	Si 251.611†	509536.8	494615.4	37602 µg/L	37602 ppb	17:20:45
2	Sn 189.927†	2.6	2.2	0.9156 µg/L	0.9156 ppb	17:21:11
2	Ti 334.940†	589.0	397.1	0.8822 µg/L	0.8822 ppb	17:20:50
2	Tl 190.801†	0.9	23.3	13.383 µg/L	13.383 ppb	17:21:11
2	U 409.014†	-89.3	-9.7	-0.7935 µg/L	-0.7935 ppb	17:20:50
2	V 292.402†	-20.8	24.5	0.2365 µg/L	0.2365 ppb	17:20:50
2	Zn 213.857†	620.1	67.9	1.5977 µg/L	1.5977 ppb	17:21:11
3	Sc RADIAL	56192.1	56192.1	99.5 %		17:19:41
3	Al 396.153Radial†	-3.6	-11.0	-7.6627 µg/L	-7.6627 ppb	17:19:41
3	Ca 317.933Radial†	218.7	8.6	7.3845 µg/L	7.3845 ppb	17:20:01
3	Fe 238.204 Radial†	9.7	-6.8	38.692 µg/L	38.692 ppb	17:20:01
3	K 766.490 Radial†	214.2	50.4	32.899 µg/L	32.899 ppb	17:19:41

3	Mg 279.077 IEC†	13.9	1.2	10.769 µg/L	10.769 ppb	17:20:01
3	Na 589.592 Radial†	600.0	131.0	40.239 µg/L	40.239 ppb	17:19:41
3	Sr 421.552†	67.6	39.2	0.3616 µg/L	0.3616 ppb	17:19:41
3	Sc 361.383	1998637.7	1998637.7	101.81 %		17:21:17
3	Y 371.029	1373104.8	1373104.8	101.50 %		17:21:17
3	Ag 328.068†	-417.7	-8.6	-0.0666 µg/L	-0.0666 ppb	17:21:23
3	As 188.979†	2369.6	2327.9	4172.3 µg/L	4172.3 ppb	17:21:43
3	B 249.677†	832.0	433.0	17.679 µg/L	17.679 ppb	17:21:23
3	Ba 233.527†	-4.2	12.9	0.3111 µg/L	0.3111 ppb	17:21:43
3	Be 313.107†	-2497.8	402.3	0.2384 µg/L	0.2384 ppb	17:21:23
3	Cd 226.502†	-118.0	25.8	0.6517 µg/L	0.6517 ppb	17:21:43
3	Co 228.616†	98118.9	96373.3	4364.5 µg/L	4364.5 ppb	17:21:23
3	Cr 267.716†	-6.1	44.4	0.8924 µg/L	0.8924 ppb	17:21:23
3	Cu 324.752†	1945.6	-632.7	-4.1375 µg/L	-4.1375 ppb	17:21:23
3	Mn 257.610†	-181.8	77.4	0.2349 µg/L	0.2349 ppb	17:21:43
3	Mo 202.031†	-0.1	5.3	0.5134 µg/L	0.5134 ppb	17:21:43
3	Ni 231.604†	349.6	31.0	-3.6536 µg/L	-3.6536 ppb	17:21:43
3	P 214.914†	4913.6	4810.9	9525.5 µg/L	9525.5 ppb	17:21:23
3	Pb 220.353†	106.2	13.4	3.2602 µg/L	3.2602 ppb	17:21:43
3	S 181.975 Axial†	19.1	-0.2	-0.8917 µg/L	-0.8917 ppb	17:21:43
3	Sb 206.836†	17.0	-5.8	-5.3639 µg/L	-5.3639 ppb	17:21:43
3	Se 196.026†	14.4	-5.1	-7.3641 µg/L	-7.3641 ppb	17:21:43
3	SiO2†	388378.1	380084.6	75024 µg/L	75024 ppb	17:21:17
3	Si 251.611†	465723.5	457136.5	34752 µg/L	34752 ppb	17:21:17
3	Sn 189.927†	7.2	6.7	2.8419 µg/L	2.8419 ppb	17:21:43
3	Ti 334.940†	599.4	413.7	0.9146 µg/L	0.9146 ppb	17:21:23
3	Tl 190.801†	-3.1	19.4	10.494 µg/L	10.494 ppb	17:21:43
3	U 409.014†	-33.0	44.6	3.7148 µg/L	3.7148 ppb	17:21:23
3	V 292.402†	-34.4	11.0	0.1103 µg/L	0.1103 ppb	17:21:23
3	Zn 213.857†	609.9	64.6	1.5181 µg/L	1.5181 ppb	17:21:43

Mean Data: LR2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2004230.5	102.09 %		0.757			0.74%
Sc RADIAL	56482.4	100.0 %		0.93			0.93%
Y 371.029	1377579.7	101.84 %		0.725			0.71%
Ag 328.068†	1.8	0.0115 µg/L		0.11324	0.0115 ppb	0.11324	983.61%
Al 396.153Radial†	-14.3	-9.9961 µg/L		2.35074	-9.9961 ppb	2.35074	23.52%
As 188.979†	2627.8	4709.7 µg/L		477.13	4709.7 ppb	477.13	10.13%
B 249.677†	445.4	18.187 µg/L		0.7573	18.187 ppb	0.7573	4.16%
Ba 233.527†	13.1	0.3156 µg/L		0.01910	0.3156 ppb	0.01910	6.05%
Be 313.107†	307.9	0.1824 µg/L		0.04852	0.1824 ppb	0.04852	26.60%
Ca 317.933Radial†	10.0	8.5144 µg/L		4.07847	8.5144 ppb	4.07847	47.90%
Cd 226.502†	35.4	0.8912 µg/L		0.21072	0.8912 ppb	0.21072	23.64%
Co 228.616†	106714.5	4832.9 µg/L		408.90	4832.9 ppb	408.90	8.46%
Cr 267.716†	34.8	0.6996 µg/L		0.17243	0.6996 ppb	0.17243	24.65%
Cu 324.752†	-734.4	-4.8027 µg/L		0.59198	-4.8027 ppb	0.59198	12.33%
Fe 238.204 Radial†	-8.0	39.577 µg/L		3.7566	39.577 ppb	3.7566	9.49%
K 766.490 Radial†	54.0	35.239 µg/L		2.5339	35.239 ppb	2.5339	7.19%
Mg 279.077 IEC†	-2.3	-20.531 µg/L		29.3558	-20.531 ppb	29.3558	142.98%
Mn 257.610†	92.8	0.2832 µg/L		0.04179	0.2832 ppb	0.04179	14.76%
Mo 202.031†	8.5	0.8285 µg/L		0.41049	0.8285 ppb	0.41049	49.55%
Na 589.592 Radial†	126.3	38.800 µg/L		1.2520	38.800 ppb	1.2520	3.23%
Ni 231.604†	46.3	-3.4493 µg/L		0.52296	-3.4493 ppb	0.52296	15.16%
P 214.914†	5270.9	10436 µg/L		797.7	10436 ppb	797.7	7.64%
Pb 220.353†	13.7	3.3319 µg/L		0.58655	3.3319 ppb	0.58655	17.60%
S 181.975 Axial†	-2.9	-11.944 µg/L		16.7551	-11.944 ppb	16.7551	140.28%
Sb 206.836†	-0.0	-0.0338 µg/L		4.62516	-0.0338 ppb	4.62516	>999.9%
Se 196.026†	-5.1	-7.3577 µg/L		1.45126	-7.3577 ppb	1.45126	19.72%
SiO2†	403608.1	79667 µg/L		4088.7	79667 ppb	4088.7	5.13%
Si 251.611†	485066.3	36876 µg/L		1869.2	36876 ppb	1869.2	5.07%
Sn 189.927†	5.4	2.2626 µg/L		1.17039	2.2626 ppb	1.17039	51.73%
Sr 421.552†	25.2	0.2325 µg/L		0.16530	0.2325 ppb	0.16530	71.11%
Ti 334.940†	409.0	0.9067 µg/L		0.02163	0.9067 ppb	0.02163	2.39%
Tl 190.801†	21.8	12.064 µg/L		1.4608	12.064 ppb	1.4608	12.11%
U 409.014†	6.0	0.5104 µg/L		2.79101	0.5104 ppb	2.79101	546.79%
V 292.402†	31.1	0.3038 µg/L		0.23456	0.3038 ppb	0.23456	77.20%
Zn 213.857†	73.7	1.7297 µg/L		0.30016	1.7297 ppb	0.30016	17.35%

Sequence No.: 2
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/19/2010 17:21:52
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55997.1	55997.1	99.1 %		17:22:28
1	Al 396.153Radial†	7484.4	7543.7	5236.5 µg/L	5236.5 ppb	17:22:28
1	Ca 317.933Radial†	6284.2	6128.9	5235.2 µg/L	5235.2 ppb	17:22:48
1	Fe 238.204 Radial†	689.0	678.6	5363.5 µg/L	5363.5 ppb	17:22:48
1	K 766.490 Radial†	8069.9	7976.8	5209.8 µg/L	5209.8 ppb	17:22:28
1	Mg 279.077 IEC†	607.2	599.8	5365.3 µg/L	5365.3 ppb	17:22:48
1	Na 589.592 Radial†	34612.1	34448.1	10580 µg/L	10580 ppb	17:22:28
1	Sr 421.552†	55249.7	55712.7	513.96 µg/L	513.96 ppb	17:22:28
1	Sc 361.383	1941292.6	1941292.6	98.888 %		17:23:51
1	Y 371.029	1335522.5	1335522.5	98.726 %		17:23:51
1	Ag 328.068†	70158.7	71349.1	532.40 µg/L	532.40 ppb	17:23:57
1	As 188.979†	304.1	308.0	550.96 µg/L	550.96 ppb	17:24:18
1	B 249.677†	13216.5	12981.0	527.15 µg/L	527.15 ppb	17:23:57
1	Ba 233.527†	22082.2	22347.5	537.47 µg/L	537.47 ppb	17:23:57
1	Be 313.107†	881057.8	893819.8	530.28 µg/L	530.28 ppb	17:23:51
1	Cd 226.502†	21234.9	21615.4	539.04 µg/L	539.04 ppb	17:23:57
1	Co 228.616†	11841.2	11972.4	541.59 µg/L	541.59 ppb	17:23:57
1	Cr 267.716†	26708.5	27059.1	543.83 µg/L	543.83 ppb	17:23:57
1	Cu 324.752†	83577.2	81973.2	535.82 µg/L	535.82 ppb	17:23:57
1	Mn 257.610†	169839.0	172004.6	539.13 µg/L	539.13 ppb	17:23:51
1	Mo 202.031†	5552.9	5620.6	550.61 µg/L	550.61 ppb	17:24:18
1	Ni 231.604†	11057.1	10869.0	541.24 µg/L	541.24 ppb	17:23:57
1	P 214.914†	1373.5	1373.6	2668.4 µg/L	2668.4 ppb	17:24:18
1	Pb 220.353†	2326.6	2261.9	550.03 µg/L	550.03 ppb	17:24:18
1	S 181.975 Axial†	279.6	263.8	1093.9 µg/L	1093.9 ppb	17:24:18
1	Sb 206.836†	611.1	595.5	549.07 µg/L	549.07 ppb	17:24:18
1	Se 196.026†	411.0	396.3	565.02 µg/L	565.02 ppb	17:24:18
1	SiO2†	30336.5	29286.0	5780.7 µg/L	5780.7 ppb	17:23:57
1	Si 251.611†	35486.6	35575.0	2704.5 µg/L	2704.5 ppb	17:23:57
1	Sn 189.927†	1307.2	1321.6	557.36 µg/L	557.36 ppb	17:24:18
1	Ti 334.940†	237204.0	239696.0	529.92 µg/L	529.92 ppb	17:23:51
1	Tl 190.801†	383.1	409.8	538.64 µg/L	538.64 ppb	17:24:18
1	U 409.014†	6443.7	6593.3	546.74 µg/L	546.74 ppb	17:23:57
1	V 292.402†	54369.9	55025.9	542.94 µg/L	542.94 ppb	17:23:57
1	Zn 213.857†	23470.8	23200.3	540.50 µg/L	540.50 ppb	17:23:57
2	Sc RADIAL	55374.2	55374.2	98.0 %		17:22:54
2	Al 396.153Radial†	7516.3	7661.2	5318.8 µg/L	5318.8 ppb	17:22:54
2	Ca 317.933Radial†	6316.8	6233.4	5324.5 µg/L	5324.5 ppb	17:23:14
2	Fe 238.204 Radial†	689.1	686.5	5425.5 µg/L	5425.5 ppb	17:23:14
2	K 766.490 Radial†	8078.4	8077.0	5275.2 µg/L	5275.2 ppb	17:22:54
2	Mg 279.077 IEC†	616.4	616.1	5510.0 µg/L	5510.0 ppb	17:23:14
2	Na 589.592 Radial†	34699.9	34930.4	10729 µg/L	10729 ppb	17:22:54
2	Sr 421.552†	55215.6	56305.0	519.42 µg/L	519.42 ppb	17:22:54
2	Sc 361.383	1972008.9	1972008.9	100.45 %		17:24:25
2	Y 371.029	1357440.8	1357440.8	100.35 %		17:24:25
2	Ag 328.068†	69394.0	69482.8	518.48 µg/L	518.48 ppb	17:24:30
2	As 188.979†	292.5	291.6	521.69 µg/L	521.69 ppb	17:24:51
2	B 249.677†	13098.0	12654.8	513.80 µg/L	513.80 ppb	17:24:30
2	Ba 233.527†	21766.9	21685.9	521.56 µg/L	521.56 ppb	17:24:30
2	Be 313.107†	875557.6	874466.7	518.80 µg/L	518.80 ppb	17:24:25
2	Cd 226.502†	20934.5	20981.8	523.22 µg/L	523.22 ppb	17:24:30
2	Co 228.616†	11674.3	11619.7	525.62 µg/L	525.62 ppb	17:24:30
2	Cr 267.716†	26349.4	26281.0	528.19 µg/L	528.19 ppb	17:24:30
2	Cu 324.752†	82762.2	79845.4	521.94 µg/L	521.94 ppb	17:24:30
2	Mn 257.610†	168819.9	168315.0	527.58 µg/L	527.58 ppb	17:24:25
2	Mo 202.031†	5374.4	5355.5	524.65 µg/L	524.65 ppb	17:24:51
2	Ni 231.604†	10896.7	10535.3	524.62 µg/L	524.62 ppb	17:24:30
2	P 214.914†	1349.1	1327.7	2578.5 µg/L	2578.5 ppb	17:24:51
2	Pb 220.353†	2255.8	2154.7	523.94 µg/L	523.94 ppb	17:24:51

2	S 181.975 Axial†	273.6	253.5	1051.2 µg/L	1051.2 ppb	17:24:51
2	Sb 206.836†	597.1	571.9	527.15 µg/L	527.15 ppb	17:24:51
2	Se 196.026†	399.0	377.9	539.15 µg/L	539.15 ppb	17:24:51
2	SiO2†	30015.2	28488.3	5623.2 µg/L	5623.2 ppb	17:24:30
2	Si 251.611†	35058.2	34589.5	2629.6 µg/L	2629.6 ppb	17:24:30
2	Sn 189.927†	1256.6	1250.5	527.41 µg/L	527.41 ppb	17:24:51
2	Ti 334.940†	235686.9	234449.5	518.30 µg/L	518.30 ppb	17:24:25
2	Tl 190.801†	379.7	400.4	526.29 µg/L	526.29 ppb	17:24:51
2	U 409.014†	6398.7	6446.9	534.56 µg/L	534.56 ppb	17:24:30
2	V 292.402†	53704.7	53507.4	527.90 µg/L	527.90 ppb	17:24:30
2	Zn 213.857†	23141.6	22502.9	524.22 µg/L	524.22 ppb	17:24:30
3	Sc RADIAL	55679.0	55679.0	98.6 %		17:23:19
3	Al 396.153Radial†	7596.6	7700.7	5348.4 µg/L	5348.4 ppb	17:23:19
3	Ca 317.933Radial†	6283.1	6164.0	5265.1 µg/L	5265.1 ppb	17:23:40
3	Fe 238.204 Radial†	686.1	679.6	5369.7 µg/L	5369.7 ppb	17:23:40
3	K 766.490 Radial†	8154.7	8109.3	5296.3 µg/L	5296.3 ppb	17:23:19
3	Mg 279.077 IEC†	612.2	608.4	5439.6 µg/L	5439.6 ppb	17:23:40
3	Na 589.592 Radial†	34975.0	35015.8	10755 µg/L	10755 ppb	17:23:19
3	Sr 421.552†	55908.1	56699.3	523.06 µg/L	523.06 ppb	17:23:19
3	Sc 361.383	1952535.0	1952535.0	99.461 %		17:24:58
3	Y 371.029	1343624.0	1343624.0	99.325 %		17:24:58
3	Ag 328.068†	63360.5	64105.6	478.17 µg/L	478.17 ppb	17:25:04
3	As 188.979†	241.7	243.4	435.49 µg/L	435.49 ppb	17:25:24
3	B 249.677†	11843.3	11523.4	467.57 µg/L	467.57 ppb	17:25:04
3	Ba 233.527†	19104.2	19224.8	462.34 µg/L	462.34 ppb	17:25:04
3	Be 313.107†	780835.5	787924.2	467.46 µg/L	467.46 ppb	17:24:58
3	Cd 226.502†	18231.2	18471.7	460.55 µg/L	460.55 ppb	17:25:04
3	Co 228.616†	10034.6	10087.0	456.23 µg/L	456.23 ppb	17:25:04
3	Cr 267.716†	21902.6	22071.8	443.60 µg/L	443.60 ppb	17:25:04
3	Cu 324.752†	72242.1	70090.0	458.26 µg/L	458.26 ppb	17:25:04
3	Mn 257.610†	151408.5	152485.3	478.01 µg/L	478.01 ppb	17:24:58
3	Mo 202.031†	4271.9	4300.4	421.32 µg/L	421.32 ppb	17:25:24
3	Ni 231.604†	9447.8	9186.7	457.48 µg/L	457.48 ppb	17:25:04
3	P 214.914†	1083.3	1073.8	2080.9 µg/L	2080.9 ppb	17:25:24
3	Pb 220.353†	1873.7	1793.0	435.92 µg/L	435.92 ppb	17:25:24
3	S 181.975 Axial†	233.8	216.1	896.36 µg/L	896.36 ppb	17:25:24
3	Sb 206.836†	489.4	469.6	432.51 µg/L	432.51 ppb	17:25:24
3	Se 196.026†	332.8	315.3	451.15 µg/L	451.15 ppb	17:25:24
3	SiO2†	26947.7	25702.2	5073.3 µg/L	5073.3 ppb	17:25:04
3	Si 251.611†	31277.9	31136.9	2367.1 µg/L	2367.1 ppb	17:25:04
3	Sn 189.927†	976.9	981.8	414.09 µg/L	414.09 ppb	17:25:24
3	Ti 334.940†	208555.8	209511.3	463.14 µg/L	463.14 ppb	17:24:58
3	Tl 190.801†	319.8	343.9	452.38 µg/L	452.38 ppb	17:25:24
3	U 409.014†	5254.4	5360.0	444.27 µg/L	444.27 ppb	17:25:04
3	V 292.402†	45815.6	46108.8	454.70 µg/L	454.70 ppb	17:25:04
3	Zn 213.857†	20168.8	19743.8	459.90 µg/L	459.90 ppb	17:25:04

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1955278.8	99.601 %	0.7916			0.79%
Sc RADIAL	55683.5	98.6 %	0.55			0.56%
Y 371.029	1345529.1	99.466 %	0.8193			0.82%
Ag 328.068†	68312.5	509.69 µg/L	28.165	509.69 ppb	28.165	5.53%
QC value within limits for Ag 328.068 Recovery = 101.94%						
Al 396.153Radial†	7635.2	5301.2 µg/L	57.98	5301.2 ppb	57.98	1.09%
QC value within limits for Al 396.153Radial Recovery = 106.02%						
As 188.979†	281.0	502.71 µg/L	60.027	502.71 ppb	60.027	11.94%
QC value within limits for As 188.979 Recovery = 100.54%						
B 249.677†	12386.4	502.84 µg/L	31.261	502.84 ppb	31.261	6.22%
QC value within limits for B 249.677 Recovery = 100.57%						
Ba 233.527†	21086.1	507.12 µg/L	39.588	507.12 ppb	39.588	7.81%
QC value within limits for Ba 233.527 Recovery = 101.42%						
Be 313.107†	852070.2	505.52 µg/L	33.453	505.52 ppb	33.453	6.62%
QC value within limits for Be 313.107 Recovery = 101.10%						
Ca 317.933Radial†	6175.4	5274.9 µg/L	45.45	5274.9 ppb	45.45	0.86%
QC value within limits for Ca 317.933Radial Recovery = 105.50%						
Cd 226.502†	20356.3	507.61 µg/L	41.509	507.61 ppb	41.509	8.18%
QC value within limits for Cd 226.502 Recovery = 101.52%						
Co 228.616†	11226.4	507.82 µg/L	45.380	507.82 ppb	45.380	8.94%

QC value within limits for Co 228.616 Recovery = 101.56%							
Cr 267.716†	25137.3	505.21 µg/L	53.922	505.21 ppb	53.922	10.67%	
QC value within limits for Cr 267.716 Recovery = 101.04%							
Cu 324.752†	77302.9	505.34 µg/L	41.362	505.34 ppb	41.362	8.19%	
QC value within limits for Cu 324.752 Recovery = 101.07%							
Fe 238.204 Radial†	681.6	5386.2 µg/L	34.14	5386.2 ppb	34.14	0.63%	
QC value within limits for Fe 238.204 Radial Recovery = 107.72%							
K 766.490 Radial†	8054.3	5260.4 µg/L	45.13	5260.4 ppb	45.13	0.86%	
QC value within limits for K 766.490 Radial Recovery = 105.21%							
Mg 279.077 IEC†	608.1	5438.3 µg/L	72.33	5438.3 ppb	72.33	1.33%	
QC value within limits for Mg 279.077 IEC Recovery = 108.77%							
Mn 257.610†	164268.3	514.91 µg/L	32.475	514.91 ppb	32.475	6.31%	
QC value within limits for Mn 257.610 Recovery = 102.98%							
Mo 202.031†	5092.2	498.86 µg/L	68.394	498.86 ppb	68.394	13.71%	
QC value within limits for Mo 202.031 Recovery = 99.77%							
Na 589.592 Radial†	34798.1	10688 µg/L	94.0	10688 ppb	94.0	0.88%	
QC value within limits for Na 589.592 Radial Recovery = 106.88%							
Ni 231.604†	10197.0	507.78 µg/L	44.349	507.78 ppb	44.349	8.73%	
QC value within limits for Ni 231.604 Recovery = 101.56%							
P 214.914†	1258.3	2442.6 µg/L	316.42	2442.6 ppb	316.42	12.95%	
QC value within limits for P 214.914 Recovery = 97.70%							
Pb 220.353†	2069.8	503.29 µg/L	59.790	503.29 ppb	59.790	11.88%	
QC value within limits for Pb 220.353 Recovery = 100.66%							
S 181.975 Axial†	244.5	1013.8 µg/L	103.94	1013.8 ppb	103.94	10.25%	
QC value within limits for S 181.975 Axial Recovery = 101.38%							
Sb 206.836†	545.7	502.91 µg/L	61.945	502.91 ppb	61.945	12.32%	
QC value within limits for Sb 206.836 Recovery = 100.58%							
Se 196.026†	363.2	518.44 µg/L	59.692	518.44 ppb	59.692	11.51%	
QC value within limits for Se 196.026 Recovery = 103.69%							
SiO2†	27825.5	5492.4 µg/L	371.40	5492.4 ppb	371.40	6.76%	
QC value within limits for SiO2 Recovery = 102.71%							
Si 251.611†	33767.1	2567.0 µg/L	177.17	2567.0 ppb	177.17	6.90%	
QC value within limits for Si 251.611 Recovery = 102.68%							
Sn 189.927†	1184.6	499.62 µg/L	75.568	499.62 ppb	75.568	15.13%	
QC value within limits for Sn 189.927 Recovery = 99.92%							
Sr 421.552†	56239.0	518.81 µg/L	4.581	518.81 ppb	4.581	0.88%	
QC value within limits for Sr 421.552 Recovery = 103.76%							
Ti 334.940†	227885.6	503.79 µg/L	35.678	503.79 ppb	35.678	7.08%	
QC value within limits for Ti 334.940 Recovery = 100.76%							
Tl 190.801†	384.7	505.77 µg/L	46.646	505.77 ppb	46.646	9.22%	
QC value within limits for Tl 190.801 Recovery = 101.15%							
U 409.014†	6133.4	508.52 µg/L	55.977	508.52 ppb	55.977	11.01%	
QC value within limits for U 409.014 Recovery = 101.70%							
V 292.402†	51547.4	508.51 µg/L	47.203	508.51 ppb	47.203	9.28%	
QC value within limits for V 292.402 Recovery = 101.70%							
Zn 213.857†	21815.7	508.21 µg/L	42.623	508.21 ppb	42.623	8.39%	
QC value within limits for Zn 213.857 Recovery = 101.64%							

All analyte(s) passed QC.

Sequence No.: 3

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 17:25:33

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55715.1	55715.1	98.6 %		17:26:06
1	Al 396.153Radial†	9.9	2.7	1.8794 µg/L	1.8794 ppb	17:26:06
1	Ca 317.933Radial†	200.0	-8.4	-7.2065 µg/L	-7.2065 ppb	17:26:26
1	Fe 238.204 Radial†	18.1	1.8	14.281 µg/L	14.281 ppb	17:26:26
1	K 766.490 Radial†	190.3	28.0	18.262 µg/L	18.262 ppb	17:26:06
1	Mg 279.077 IEC†	10.8	-1.8	-16.403 µg/L	-16.403 ppb	17:26:26
1	Na 589.592 Radial†	566.5	102.3	31.414 µg/L	31.414 ppb	17:26:06
1	Sr 421.552†	8.2	-20.5	-0.1895 µg/L	-0.1895 ppb	17:26:06
1	Sc 361.383	1953458.7	1953458.7	99.508 %		17:27:28
1	Y 371.029	1347989.6	1347989.6	99.648 %		17:27:28
1	Ag 328.068†	-445.9	-46.5	-0.3428 µg/L	-0.3428 ppb	17:27:34
1	As 188.979†	1.8	2.2	4.0261 µg/L	4.0261 ppb	17:27:54
1	B 249.677†	402.6	20.4	0.8246 µg/L	0.8246 ppb	17:27:54
1	Ba 233.527†	-7.2	9.9	0.2372 µg/L	0.2372 ppb	17:27:54
1	Be 313.107†	-2535.3	307.9	0.1827 µg/L	0.1827 ppb	17:27:34
1	Cd 226.502†	-139.8	1.2	0.0290 µg/L	0.0290 ppb	17:27:54
1	Co 228.616†	8.7	6.8	0.3065 µg/L	0.3065 ppb	17:27:54
1	Cr 267.716†	-42.4	7.8	0.1560 µg/L	0.1560 ppb	17:27:34
1	Cu 324.752†	2642.5	111.8	0.7321 µg/L	0.7321 ppb	17:27:34
1	Mn 257.610†	-204.1	50.9	0.1618 µg/L	0.1618 ppb	17:27:54
1	Mo 202.031†	-2.0	3.3	0.3242 µg/L	0.3242 ppb	17:27:54
1	Ni 231.604†	314.6	3.8	0.1900 µg/L	0.1900 ppb	17:27:54
1	P 214.914†	18.8	3.5	6.8616 µg/L	6.8616 ppb	17:27:54
1	Pb 220.353†	98.3	7.8	1.8853 µg/L	1.8853 ppb	17:27:54
1	S 181.975 Axial†	15.5	-3.4	-14.112 µg/L	-14.112 ppb	17:27:54
1	Sb 206.836†	26.9	4.5	4.1739 µg/L	4.1739 ppb	17:27:54
1	Se 196.026†	12.3	-7.0	-9.7684 µg/L	-9.7684 ppb	17:27:54
1	SiO2†	1515.6	131.5	25.955 µg/L	25.955 ppb	17:27:34
1	Si 251.611†	416.0	107.4	8.1665 µg/L	8.1665 ppb	17:27:54
1	Sn 189.927†	2.2	1.9	0.7860 µg/L	0.7860 ppb	17:27:54
1	Ti 334.940†	256.5	82.7	0.1842 µg/L	0.1842 ppb	17:27:34
1	Tl 190.801†	-25.3	-3.1	-3.9679 µg/L	-3.9679 ppb	17:27:54
1	U 409.014†	32.9	110.1	9.1492 µg/L	9.1492 ppb	17:27:34
1	V 292.402†	-29.6	15.0	0.1604 µg/L	0.1604 ppb	17:27:34
1	Zn 213.857†	546.5	14.8	0.3443 µg/L	0.3443 ppb	17:27:54
2	Sc RADIAL	55504.2	55504.2	98.2 %		17:26:32
2	Al 396.153Radial†	11.6	4.4	3.0699 µg/L	3.0699 ppb	17:26:32
2	Ca 317.933Radial†	200.3	-7.4	-6.2839 µg/L	-6.2839 ppb	17:26:52
2	Fe 238.204 Radial†	17.9	1.6	12.645 µg/L	12.645 ppb	17:26:52
2	K 766.490 Radial†	201.9	40.6	26.491 µg/L	26.491 ppb	17:26:32
2	Mg 279.077 IEC†	10.5	-2.1	-19.078 µg/L	-19.078 ppb	17:26:52
2	Na 589.592 Radial†	562.4	100.3	30.804 µg/L	30.804 ppb	17:26:32
2	Sr 421.552†	36.5	8.4	0.0774 µg/L	0.0774 ppb	17:26:32
2	Sc 361.383	1950778.5	1950778.5	99.371 %		17:28:00
2	Y 371.029	1346193.0	1346193.0	99.515 %		17:28:00
2	Ag 328.068†	-396.0	3.1	0.0257 µg/L	0.0257 ppb	17:28:06
2	As 188.979†	1.1	1.6	2.8532 µg/L	2.8532 ppb	17:28:26
2	B 249.677†	390.0	8.3	0.3322 µg/L	0.3322 ppb	17:28:26
2	Ba 233.527†	-6.8	10.2	0.2452 µg/L	0.2452 ppb	17:28:26
2	Be 313.107†	-2616.4	222.8	0.1321 µg/L	0.1321 ppb	17:28:06
2	Cd 226.502†	-139.8	1.0	0.0242 µg/L	0.0242 ppb	17:28:26
2	Co 228.616†	3.7	1.8	0.0803 µg/L	0.0803 ppb	17:28:26
2	Cr 267.716†	-54.5	-4.5	-0.0900 µg/L	-0.0900 ppb	17:28:06
2	Cu 324.752†	2637.6	110.5	0.7233 µg/L	0.7233 ppb	17:28:06
2	Mn 257.610†	-213.1	41.5	0.1325 µg/L	0.1325 ppb	17:28:26
2	Mo 202.031†	-0.0	5.3	0.5204 µg/L	0.5204 ppb	17:28:26
2	Ni 231.604†	311.7	1.3	0.0651 µg/L	0.0651 ppb	17:28:26
2	P 214.914†	7.2	-8.1	-16.019 µg/L	-16.019 ppb	17:28:26
2	Pb 220.353†	96.7	6.4	1.5474 µg/L	1.5474 ppb	17:28:26

2	S 181.975 Axial†	17.4	-1.4	-5.8210 µg/L	-5.8210 ppb	17:28:26
2	Sb 206.836†	19.7	-2.6	-2.3998 µg/L	-2.3998 ppb	17:28:26
2	Se 196.026†	15.0	-4.2	-5.8108 µg/L	-5.8108 ppb	17:28:26
2	SiO2†	1459.9	77.6	15.313 µg/L	15.313 ppb	17:28:06
2	Si 251.611†	412.0	104.0	7.9062 µg/L	7.9062 ppb	17:28:26
2	Sn 189.927†	7.8	7.4	3.1294 µg/L	3.1294 ppb	17:28:26
2	Ti 334.940†	270.4	97.1	0.2161 µg/L	0.2161 ppb	17:28:06
2	Tl 190.801†	-21.2	1.0	1.3155 µg/L	1.3155 ppb	17:28:26
2	U 409.014†	-29.9	47.0	3.9019 µg/L	3.9019 ppb	17:28:06
2	V 292.402†	-11.1	33.5	0.3361 µg/L	0.3361 ppb	17:28:06
2	Zn 213.857†	544.6	13.6	0.3180 µg/L	0.3180 ppb	17:28:26
3	Sc RADIAL	55576.2	55576.2	98.4 %		17:26:57
3	Al 396.153Radial†	-4.2	-11.6	-8.0814 µg/L	-8.0814 ppb	17:26:57
3	Ca 317.933Radial†	198.4	-9.6	-8.1878 µg/L	-8.1878 ppb	17:27:18
3	Fe 238.204 Radial†	17.1	0.8	6.2197 µg/L	6.2197 ppb	17:27:18
3	K 766.490 Radial†	182.5	20.5	13.397 µg/L	13.397 ppb	17:26:57
3	Mg 279.077 IEC†	14.4	1.8	16.514 µg/L	16.514 ppb	17:27:18
3	Na 589.592 Radial†	564.0	101.1	31.056 µg/L	31.056 ppb	17:26:57
3	Sr 421.552†	84.4	57.0	0.5260 µg/L	0.5260 ppb	17:26:57
3	Sc 361.383	1984583.7	1984583.7	101.09 %		17:28:32
3	Y 371.029	1368650.9	1368650.9	101.18 %		17:28:32
3	Ag 328.068†	-463.7	-57.1	-0.4221 µg/L	-0.4221 ppb	17:28:38
3	As 188.979†	1.5	1.9	3.4901 µg/L	3.4901 ppb	17:28:58
3	B 249.677†	385.7	-2.6	-0.1102 µg/L	-0.1102 ppb	17:28:58
3	Ba 233.527†	-8.4	8.8	0.2107 µg/L	0.2107 ppb	17:28:58
3	Be 313.107†	-2606.1	277.8	0.1648 µg/L	0.1648 ppb	17:28:38
3	Cd 226.502†	-137.9	5.3	0.1312 µg/L	0.1312 ppb	17:28:58
3	Co 228.616†	11.7	9.7	0.4385 µg/L	0.4385 ppb	17:28:58
3	Cr 267.716†	-56.0	-5.0	-0.1002 µg/L	-0.1002 ppb	17:28:38
3	Cu 324.752†	2581.0	9.4	0.0621 µg/L	0.0621 ppb	17:28:38
3	Mn 257.610†	-221.0	37.4	0.1174 µg/L	0.1174 ppb	17:28:58
3	Mo 202.031†	2.7	8.0	0.7835 µg/L	0.7835 ppb	17:28:58
3	Ni 231.604†	311.4	-4.3	-0.2151 µg/L	-0.2151 ppb	17:28:58
3	P 214.914†	14.9	-0.6	-1.1261 µg/L	-1.1261 ppb	17:28:58
3	Pb 220.353†	89.4	-2.5	-0.6244 µg/L	-0.6244 ppb	17:28:58
3	S 181.975 Axial†	14.9	-4.2	-17.388 µg/L	-17.388 ppb	17:28:58
3	Sb 206.836†	22.0	-0.7	-0.6331 µg/L	-0.6331 ppb	17:28:58
3	Se 196.026†	16.1	-3.3	-4.6875 µg/L	-4.6875 ppb	17:28:58
3	SiO2†	1488.2	80.6	15.904 µg/L	15.904 ppb	17:28:38
3	Si 251.611†	405.3	90.2	6.8609 µg/L	6.8609 ppb	17:28:58
3	Sn 189.927†	5.4	5.0	2.0931 µg/L	2.0931 ppb	17:28:58
3	Ti 334.940†	242.9	65.3	0.1429 µg/L	0.1429 ppb	17:28:38
3	Tl 190.801†	-20.1	2.5	3.3063 µg/L	3.3063 ppb	17:28:58
3	U 409.014†	41.4	118.0	9.8042 µg/L	9.8042 ppb	17:28:38
3	V 292.402†	-37.8	7.4	0.0885 µg/L	0.0885 ppb	17:28:38
3	Zn 213.857†	537.5	-2.8	-0.0653 µg/L	-0.0653 ppb	17:28:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1962940.3	99.991 %		0.9572				0.96%
Sc RADIAL	55598.5	98.4 %		0.19				0.19%
Y 371.029	1354277.8	100.11 %		0.923				0.92%
Ag 328.068†	-33.5	-0.2464 µg/L		0.23900	-0.2464 ppb		0.23900	96.99%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.5	-1.0440 µg/L		6.12354	-1.0440 ppb		6.12354	586.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	3.4565 µg/L		0.58720	3.4565 ppb		0.58720	16.99%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	8.7	0.3489 µg/L		0.46764	0.3489 ppb		0.46764	134.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.6	0.2310 µg/L		0.01805	0.2310 ppb		0.01805	7.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	269.5	0.1599 µg/L		0.02562	0.1599 ppb		0.02562	16.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-8.5	-7.2261 µg/L		0.95208	-7.2261 ppb		0.95208	13.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.5	0.0615 µg/L		0.06046	0.0615 ppb		0.06046	98.36%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	6.1	0.2751 µg/L		0.18114	0.2751 ppb		0.18114	65.85%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-0.6	-0.0114 µg/L	0.14502	-0.0114 ppb	0.14502 >999.9%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	77.3	0.5058 µg/L	0.38426	0.5058 ppb	0.38426 75.97%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	1.4	11.049 µg/L	4.2612	11.049 ppb	4.2612 38.57%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	29.7	19.384 µg/L	6.6186	19.384 ppb	6.6186 34.15%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-0.7	-6.3222 µg/L	19.82205	-6.3222 ppb	19.82205 313.53%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	43.3	0.1372 µg/L	0.02261	0.1372 ppb	0.02261 16.47%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	5.5	0.5427 µg/L	0.23045	0.5427 ppb	0.23045 42.46%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	101.2	31.091 µg/L	0.3066	31.091 ppb	0.3066 0.99%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	0.3	0.0133 µg/L	0.20747	0.0133 ppb	0.20747 >999.9%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-1.7	-3.4277 µg/L	11.61243	-3.4277 ppb	11.61243 338.78%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	3.9	0.9361 µg/L	1.36196	0.9361 ppb	1.36196 145.50%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-3.0	-12.440 µg/L	5.9620	-12.440 ppb	5.9620 47.92%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	0.4	0.3803 µg/L	3.40201	0.3803 ppb	3.40201 894.45%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-4.8	-6.7556 µg/L	2.66893	-6.7556 ppb	2.66893 39.51%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	96.5	19.057 µg/L	5.9811	19.057 ppb	5.9811 31.38%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	100.6	7.6446 µg/L	0.69104	7.6446 ppb	0.69104 9.04%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	4.8	2.0028 µg/L	1.17429	2.0028 ppb	1.17429 58.63%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	15.0	0.1380 µg/L	0.36157	0.1380 ppb	0.36157 262.05%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	81.7	0.1811 µg/L	0.03671	0.1811 ppb	0.03671 20.27%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	0.2	0.2179 µg/L	3.75923	0.2179 ppb	3.75923 >999.9%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	91.7	7.6184 µg/L	3.23526	7.6184 ppb	3.23526 42.47%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	18.6	0.1950 µg/L	0.12739	0.1950 ppb	0.12739 65.33%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	8.5	0.1990 µg/L	0.22924	0.1990 ppb	0.22924 115.20%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 17:52:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56387.7	56387.7	99.8 %		17:52:51
1	Al 396.153Radial†	7516.2	7523.2	5222.3 µg/L	5222.3 ppb	17:52:51
1	Ca 317.933Radial†	6203.6	6004.2	5128.7 µg/L	5128.7 ppb	17:53:12
1	Fe 238.204 Radial†	678.6	663.3	5242.5 µg/L	5242.5 ppb	17:53:12
1	K 766.490 Radial†	8065.5	7916.0	5170.1 µg/L	5170.1 ppb	17:52:51
1	Mg 279.077 IEC†	612.7	601.1	5376.4 µg/L	5376.4 ppb	17:53:12
1	Na 589.592 Radial†	34827.6	34422.1	10573 µg/L	10573 ppb	17:52:51
1	Sr 421.552†	55284.5	55361.6	510.72 µg/L	510.72 ppb	17:52:51
1	Sc 361.383	1961302.2	1961302.2	99.907 %		17:54:15
1	Y 371.029	1346537.9	1346537.9	99.540 %		17:54:15
1	Ag 328.068†	69774.1	70240.4	524.12 µg/L	524.12 ppb	17:54:21
1	As 188.979†	301.3	302.0	540.22 µg/L	540.22 ppb	17:54:41
1	B 249.677†	13080.8	12708.8	516.10 µg/L	516.10 ppb	17:54:21
1	Ba 233.527†	21956.6	21994.0	528.97 µg/L	528.97 ppb	17:54:21
1	Be 313.107†	883536.0	887210.5	526.36 µg/L	526.36 ppb	17:54:15
1	Cd 226.502†	21042.7	21203.9	528.78 µg/L	528.78 ppb	17:54:21
1	Co 228.616†	11741.3	11750.3	531.54 µg/L	531.54 ppb	17:54:21
1	Cr 267.716†	26482.6	26557.5	533.75 µg/L	533.75 ppb	17:54:21
1	Cu 324.752†	83088.9	80622.2	526.99 µg/L	526.99 ppb	17:54:21
1	Mn 257.610†	170434.3	170848.3	535.50 µg/L	535.50 ppb	17:54:15
1	Mo 202.031†	5552.2	5562.7	544.93 µg/L	544.93 ppb	17:54:41
1	Ni 231.604†	10987.8	10685.6	532.11 µg/L	532.11 ppb	17:54:21
1	P 214.914†	1368.8	1354.8	2632.0 µg/L	2632.0 ppb	17:54:41
1	Pb 220.353†	2310.1	2221.3	540.17 µg/L	540.17 ppb	17:54:41
1	S 181.975 Axial†	278.0	259.3	1075.2 µg/L	1075.2 ppb	17:54:41
1	Sb 206.836†	616.4	594.4	548.12 µg/L	548.12 ppb	17:54:41
1	Se 196.026†	407.1	388.1	553.19 µg/L	553.19 ppb	17:54:41
1	SiO2†	29956.0	28592.2	5643.7 µg/L	5643.7 ppb	17:54:21
1	Si 251.611†	34932.9	34654.6	2634.5 µg/L	2634.5 ppb	17:54:21
1	Sn 189.927†	1295.2	1296.1	546.62 µg/L	546.62 ppb	17:54:41
1	Ti 334.940†	237959.8	238005.3	526.18 µg/L	526.18 ppb	17:54:15
1	Tl 190.801†	387.6	410.3	539.25 µg/L	539.25 ppb	17:54:41
1	U 409.014†	6411.5	6494.5	538.55 µg/L	538.55 ppb	17:54:21
1	V 292.402†	54050.9	54145.8	534.27 µg/L	534.27 ppb	17:54:21
1	Zn 213.857†	23288.3	22775.5	530.59 µg/L	530.59 ppb	17:54:21
2	Sc RADIAL	56513.7	56513.7	100 %		17:53:17
2	Al 396.153Radial†	7511.3	7501.5	5207.6 µg/L	5207.6 ppb	17:53:17
2	Ca 317.933Radial†	6229.5	6016.2	5139.0 µg/L	5139.0 ppb	17:53:38
2	Fe 238.204 Radial†	684.9	668.1	5280.5 µg/L	5280.5 ppb	17:53:38
2	K 766.490 Radial†	8100.3	7932.7	5181.0 µg/L	5181.0 ppb	17:53:17
2	Mg 279.077 IEC†	601.5	588.5	5263.5 µg/L	5263.5 ppb	17:53:38
2	Na 589.592 Radial†	34828.0	34344.7	10549 µg/L	10549 ppb	17:53:17
2	Sr 421.552†	55539.3	55492.7	511.93 µg/L	511.93 ppb	17:53:17
2	Sc 361.383	1968482.8	1968482.8	100.27 %		17:54:48
2	Y 371.029	1351706.6	1351706.6	99.922 %		17:54:48
2	Ag 328.068†	69757.2	69968.7	522.10 µg/L	522.10 ppb	17:54:54
2	As 188.979†	290.5	290.2	519.13 µg/L	519.13 ppb	17:55:15
2	B 249.677†	13075.3	12655.5	513.91 µg/L	513.91 ppb	17:54:54
2	Ba 233.527†	21957.1	21914.4	527.05 µg/L	527.05 ppb	17:54:54
2	Be 313.107†	886040.3	886482.1	525.93 µg/L	525.93 ppb	17:54:48
2	Cd 226.502†	21056.7	21141.0	527.21 µg/L	527.21 ppb	17:54:54
2	Co 228.616†	11735.1	11701.2	529.30 µg/L	529.30 ppb	17:54:54
2	Cr 267.716†	26499.8	26477.9	532.15 µg/L	532.15 ppb	17:54:54
2	Cu 324.752†	83008.4	80238.5	524.49 µg/L	524.49 ppb	17:54:54
2	Mn 257.610†	171057.7	170847.6	535.50 µg/L	535.50 ppb	17:54:48
2	Mo 202.031†	5398.9	5389.5	527.98 µg/L	527.98 ppb	17:55:15
2	Ni 231.604†	11020.6	10678.2	531.74 µg/L	531.74 ppb	17:54:54
2	P 214.914†	1347.0	1328.0	2579.1 µg/L	2579.1 ppb	17:55:15
2	Pb 220.353†	2257.9	2160.8	525.43 µg/L	525.43 ppb	17:55:15

2	S 181.975 Axial†	275.1	255.4	1059.1 µg/L	1059.1 ppb	17:55:15
2	Sb 206.836†	599.1	574.9	529.97 µg/L	529.97 ppb	17:55:15
2	Se 196.026†	397.7	377.3	538.13 µg/L	538.13 ppb	17:55:15
2	SiO2†	29922.8	28449.7	5615.6 µg/L	5615.6 ppb	17:54:54
2	Si 251.611†	35029.2	34623.1	2632.1 µg/L	2632.1 ppb	17:54:54
2	Sn 189.927†	1263.5	1259.7	531.25 µg/L	531.25 ppb	17:55:15
2	Ti 334.940†	238598.7	237773.6	525.67 µg/L	525.67 ppb	17:54:48
2	Tl 190.801†	380.1	401.4	527.72 µg/L	527.72 ppb	17:55:15
2	U 409.014†	6311.3	6371.2	528.30 µg/L	528.30 ppb	17:54:54
2	V 292.402†	54031.0	53928.5	532.01 µg/L	532.01 ppb	17:54:54
2	Zn 213.857†	23199.9	22602.3	526.54 µg/L	526.54 ppb	17:54:54
3	Sc RADIAL	56302.2	56302.2	99.7 %		17:53:43
3	Al 396.153Radial†	7458.4	7476.7	5192.5 µg/L	5192.5 ppb	17:53:43
3	Ca 317.933Radial†	6210.0	6020.1	5142.2 µg/L	5142.2 ppb	17:54:03
3	Fe 238.204 Radial†	676.1	661.8	5229.6 µg/L	5229.6 ppb	17:54:03
3	K 766.490 Radial†	8076.1	7938.9	5185.0 µg/L	5185.0 ppb	17:53:43
3	Mg 279.077 IEC†	611.6	600.9	5372.7 µg/L	5372.7 ppb	17:54:03
3	Na 589.592 Radial†	34581.8	34228.4	10513 µg/L	10513 ppb	17:53:43
3	Sr 421.552†	55197.9	55358.8	510.69 µg/L	510.69 ppb	17:53:43
3	Sc 361.383	1973873.7	1973873.7	100.55 %		17:55:22
3	Y 371.029	1355653.4	1355653.4	100.21 %		17:55:22
3	Ag 328.068†	63217.1	63274.3	471.97 µg/L	471.97 ppb	17:55:27
3	As 188.979†	239.4	238.6	426.79 µg/L	426.79 ppb	17:55:48
3	B 249.677†	11772.4	11324.2	459.52 µg/L	459.52 ppb	17:55:27
3	Ba 233.527†	19082.8	18995.9	456.84 µg/L	456.84 ppb	17:55:27
3	Be 313.107†	789189.1	787745.2	467.35 µg/L	467.35 ppb	17:55:22
3	Cd 226.502†	18227.9	18270.3	455.54 µg/L	455.54 ppb	17:55:27
3	Co 228.616†	10065.9	10009.1	452.70 µg/L	452.70 ppb	17:55:27
3	Cr 267.716†	21831.4	21762.8	437.39 µg/L	437.39 ppb	17:55:27
3	Cu 324.752†	71769.6	68834.9	450.04 µg/L	450.04 ppb	17:55:27
3	Mn 257.610†	152925.4	152348.2	477.56 µg/L	477.56 ppb	17:55:22
3	Mo 202.031†	4301.6	4283.5	419.66 µg/L	419.66 ppb	17:55:48
3	Ni 231.604†	9432.0	9068.3	451.58 µg/L	451.58 ppb	17:55:27
3	P 214.914†	1090.2	1068.9	2072.2 µg/L	2072.2 ppb	17:55:48
3	Pb 220.353†	1884.4	1783.2	433.56 µg/L	433.56 ppb	17:55:48
3	S 181.975 Axial†	236.4	216.2	896.48 µg/L	896.48 ppb	17:55:48
3	Sb 206.836†	488.0	462.9	426.39 µg/L	426.39 ppb	17:55:48
3	Se 196.026†	334.6	313.5	448.33 µg/L	448.33 ppb	17:55:48
3	SiO2†	26642.0	25105.3	4955.5 µg/L	4955.5 ppb	17:55:27
3	Si 251.611†	30980.1	30500.6	2318.7 µg/L	2318.7 ppb	17:55:27
3	Sn 189.927†	986.2	980.5	413.54 µg/L	413.54 ppb	17:55:48
3	Ti 334.940†	210724.4	209401.3	462.90 µg/L	462.90 ppb	17:55:22
3	Tl 190.801†	331.8	352.3	463.31 µg/L	463.31 ppb	17:55:48
3	U 409.014†	5301.6	5349.8	443.44 µg/L	443.44 ppb	17:55:27
3	V 292.402†	45830.4	45625.5	449.95 µg/L	449.95 ppb	17:55:27
3	Zn 213.857†	20052.4	19408.7	452.08 µg/L	452.08 ppb	17:55:27

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1967886.2	100.24 %	0.321			0.32%
Sc RADIAL	56401.2	99.8 %	0.19			0.19%
Y 371.029	1351299.3	99.892 %	0.3379			0.34%
Ag 328.068†	67827.8	506.07 µg/L	29.542	506.07 ppb	29.542	5.84%
QC value within limits for Ag 328.068 Recovery = 101.21%						
Al 396.153Radial†	7500.4	5207.5 µg/L	14.90	5207.5 ppb	14.90	0.29%
QC value within limits for Al 396.153Radial Recovery = 104.15%						
As 188.979†	276.9	495.38 µg/L	60.328	495.38 ppb	60.328	12.18%
QC value within limits for As 188.979 Recovery = 99.08%						
B 249.677†	12229.5	496.51 µg/L	32.053	496.51 ppb	32.053	6.46%
QC value within limits for B 249.677 Recovery = 99.30%						
Ba 233.527†	20968.1	504.29 µg/L	41.100	504.29 ppb	41.100	8.15%
QC value within limits for Ba 233.527 Recovery = 100.86%						
Be 313.107†	853812.6	506.55 µg/L	33.945	506.55 ppb	33.945	6.70%
QC value within limits for Be 313.107 Recovery = 101.31%						
Ca 317.933Radial†	6013.5	5136.6 µg/L	7.07	5136.6 ppb	7.07	0.14%
QC value within limits for Ca 317.933Radial Recovery = 102.73%						
Cd 226.502†	20205.1	503.85 µg/L	41.841	503.85 ppb	41.841	8.30%
QC value within limits for Cd 226.502 Recovery = 100.77%						
Co 228.616†	11153.5	504.51 µg/L	44.882	504.51 ppb	44.882	8.90%

Cr	267.716†	24932.7	501.10 µg/L	55.174	501.10 ppb	55.174	11.01%
Cu	324.752†	76565.2	500.51 µg/L	43.720	500.51 ppb	43.720	8.74%
Fe	238.204 Radial†	664.4	5250.8 µg/L	26.46	5250.8 ppb	26.46	0.50%
K	766.490 Radial†	7929.2	5178.7 µg/L	7.74	5178.7 ppb	7.74	0.15%
Mg	279.077 IEC†	596.8	5337.6 µg/L	64.15	5337.6 ppb	64.15	1.20%
Mn	257.610†	164681.4	516.19 µg/L	33.451	516.19 ppb	33.451	6.48%
Mo	202.031†	5078.6	497.52 µg/L	67.959	497.52 ppb	67.959	13.66%
Na	589.592 Radial†	34331.7	10545 µg/L	29.9	10545 ppb	29.9	0.28%
Ni	231.604†	10144.1	505.14 µg/L	46.388	505.14 ppb	46.388	9.18%
P	214.914†	1250.6	2427.8 µg/L	309.09	2427.8 ppb	309.09	12.73%
Pb	220.353†	2055.1	499.72 µg/L	57.768	499.72 ppb	57.768	11.56%
S	181.975 Axial†	243.6	1010.2 µg/L	98.85	1010.2 ppb	98.85	9.79%
Sb	206.836†	544.1	501.49 µg/L	65.671	501.49 ppb	65.671	13.10%
Se	196.026†	359.6	513.22 µg/L	56.697	513.22 ppb	56.697	11.05%
SiO2†		27382.4	5404.9 µg/L	389.50	5404.9 ppb	389.50	7.21%
Si	251.611†	33259.5	2528.4 µg/L	181.64	2528.4 ppb	181.64	7.18%
Sn	189.927†	1178.7	497.14 µg/L	72.805	497.14 ppb	72.805	14.64%
Sr	421.552†	55404.3	511.11 µg/L	0.706	511.11 ppb	0.706	0.14%
Ti	334.940†	228393.4	504.92 µg/L	36.389	504.92 ppb	36.389	7.21%
Tl	190.801†	388.0	510.09 µg/L	40.923	510.09 ppb	40.923	8.02%
U	409.014†	6071.8	503.43 µg/L	52.204	503.43 ppb	52.204	10.37%
V	292.402†	51233.3	505.41 µg/L	48.044	505.41 ppb	48.044	9.51%
Zn	213.857†	21595.5	503.07 µg/L	44.204	503.07 ppb	44.204	8.79%

QC value within limits for Co 228.616 Recovery = 100.90%
 QC value within limits for Cr 267.716 Recovery = 100.22%
 QC value within limits for Cu 324.752 Recovery = 100.10%
 QC value within limits for Fe 238.204 Radial Recovery = 105.02%
 QC value within limits for K 766.490 Radial Recovery = 103.57%
 QC value within limits for Mg 279.077 IEC Recovery = 106.75%
 QC value within limits for Mn 257.610 Radial Recovery = 103.24%
 QC value within limits for Mo 202.031 Recovery = 99.50%
 QC value within limits for Na 589.592 Radial Recovery = 105.45%
 QC value within limits for Ni 231.604 Recovery = 101.03%
 QC value within limits for P 214.914 Recovery = 97.11%
 QC value within limits for Pb 220.353 Recovery = 99.94%
 QC value within limits for S 181.975 Axial Recovery = 101.02%
 QC value within limits for Sb 206.836 Recovery = 100.30%
 QC value within limits for Se 196.026 Recovery = 102.64%
 QC value within limits for SiO2 Recovery = 101.07%
 QC value within limits for Si 251.611 Recovery = 101.14%
 QC value within limits for Sn 189.927 Recovery = 99.43%
 QC value within limits for Sr 421.552 Recovery = 102.22%
 QC value within limits for Ti 334.940 Recovery = 100.98%
 QC value within limits for Tl 190.801 Recovery = 102.02%
 QC value within limits for U 409.014 Recovery = 100.69%
 QC value within limits for V 292.402 Recovery = 101.08%
 QC value within limits for Zn 213.857 Recovery = 100.61%

All analyte(s) passed QC.

Sequence No.: 8
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/19/2010 17:55:58
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55016.4	55016.4	97.4 %		17:56:30
1	Al 396.153Radial†	-25.6	-33.6	-23.423 µg/L	-23.423 ppb	17:56:30
1	Ca 317.933Radial†	188.9	-17.3	-14.738 µg/L	-14.738 ppb	17:56:51
1	Fe 238.204 Radial†	16.8	0.7	5.5284 µg/L	5.5284 ppb	17:56:51
1	K 766.490 Radial†	203.2	43.7	28.526 µg/L	28.526 ppb	17:56:30
1	Mg 279.077 IEC†	6.2	-6.4	-57.504 µg/L	-57.504 ppb	17:56:51
1	Na 589.592 Radial†	507.1	48.5	14.906 µg/L	14.906 ppb	17:56:30
1	Sr 421.552†	39.0	11.2	0.1037 µg/L	0.1037 ppb	17:56:30
1	Sc 361.383	1965901.2	1965901.2	100.14 %		17:57:53
1	Y 371.029	1354342.9	1354342.9	100.12 %		17:57:53
1	Ag 328.068†	-375.0	27.2	0.2015 µg/L	0.2015 ppb	17:57:58
1	As 188.979†	2.9	3.3	5.9435 µg/L	5.9435 ppb	17:58:19
1	B 249.677†	389.1	4.4	0.1765 µg/L	0.1765 ppb	17:58:19
1	Ba 233.527†	-21.5	-4.4	-0.1059 µg/L	-0.1059 ppb	17:58:19
1	Be 313.107†	-2713.7	145.8	0.0865 µg/L	0.0865 ppb	17:57:58
1	Cd 226.502†	-132.8	9.1	0.2255 µg/L	0.2255 ppb	17:58:19
1	Co 228.616†	-6.2	-8.1	-0.3659 µg/L	-0.3659 ppb	17:58:19
1	Cr 267.716†	-50.1	0.4	0.0078 µg/L	0.0078 ppb	17:57:58
1	Cu 324.752†	2544.7	-2.7	-0.0168 µg/L	-0.0168 ppb	17:57:58
1	Mn 257.610†	-245.9	10.5	0.0359 µg/L	0.0359 ppb	17:58:19
1	Mo 202.031†	3.8	9.1	0.8915 µg/L	0.8915 ppb	17:58:19
1	Ni 231.604†	300.7	-12.0	-0.5990 µg/L	-0.5990 ppb	17:58:19
1	P 214.914†	17.4	2.0	4.0305 µg/L	4.0305 ppb	17:58:19
1	Pb 220.353†	97.4	6.3	1.5269 µg/L	1.5269 ppb	17:58:19
1	S 181.975 Axial†	17.7	-1.2	-5.1360 µg/L	-5.1360 ppb	17:58:19
1	Sb 206.836†	24.8	2.2	2.0583 µg/L	2.0583 ppb	17:58:19
1	Se 196.026†	12.5	-6.8	-9.5059 µg/L	-9.5059 ppb	17:58:19
1	SiO2†	1426.2	32.7	6.4463 µg/L	6.4463 ppb	17:57:58
1	Si 251.611†	326.4	15.3	1.1636 µg/L	1.1636 ppb	17:58:19
1	Sn 189.927†	4.0	3.6	1.5081 µg/L	1.5081 ppb	17:58:19
1	Ti 334.940†	201.4	26.1	0.0620 µg/L	0.0620 ppb	17:57:58
1	Tl 190.801†	-21.5	0.9	1.1647 µg/L	1.1647 ppb	17:58:19
1	U 409.014†	-51.8	25.4	2.1068 µg/L	2.1068 ppb	17:57:58
1	V 292.402†	-46.0	-1.1	-0.0014 µg/L	-0.0014 ppb	17:57:58
1	Zn 213.857†	533.4	-1.7	-0.0344 µg/L	-0.0344 ppb	17:58:19
2	Sc RADIAL	55682.3	55682.3	98.6 %		17:56:56
2	Al 396.153Radial†	-28.9	-36.6	-25.497 µg/L	-25.497 ppb	17:56:56
2	Ca 317.933Radial†	190.4	-18.1	-15.487 µg/L	-15.487 ppb	17:57:17
2	Fe 238.204 Radial†	16.8	0.5	4.1171 µg/L	4.1171 ppb	17:57:17
2	K 766.490 Radial†	223.9	62.2	40.619 µg/L	40.619 ppb	17:56:56
2	Mg 279.077 IEC†	9.9	-2.8	-25.072 µg/L	-25.072 ppb	17:57:17
2	Na 589.592 Radial†	519.3	54.7	16.798 µg/L	16.798 ppb	17:56:56
2	Sr 421.552†	32.7	4.3	0.0401 µg/L	0.0401 ppb	17:56:56
2	Sc 361.383	1957019.5	1957019.5	99.689 %		17:58:25
2	Y 371.029	1350334.7	1350334.7	99.821 %		17:58:25
2	Ag 328.068†	-377.0	23.5	0.1757 µg/L	0.1757 ppb	17:58:30
2	As 188.979†	-0.8	-0.3	-0.5788 µg/L	-0.5788 ppb	17:58:51
2	B 249.677†	388.0	5.1	0.2060 µg/L	0.2060 ppb	17:58:51
2	Ba 233.527†	-16.1	0.9	0.0215 µg/L	0.0215 ppb	17:58:51
2	Be 313.107†	-2677.7	169.6	0.1006 µg/L	0.1006 ppb	17:58:30
2	Cd 226.502†	-142.7	-1.4	-0.0367 µg/L	-0.0367 ppb	17:58:51
2	Co 228.616†	7.4	5.5	0.2501 µg/L	0.2501 ppb	17:58:51
2	Cr 267.716†	-33.3	17.0	0.3420 µg/L	0.3420 ppb	17:58:30
2	Cu 324.752†	2564.5	28.8	0.1884 µg/L	0.1884 ppb	17:58:30
2	Mn 257.610†	-244.8	10.4	0.0341 µg/L	0.0341 ppb	17:58:51
2	Mo 202.031†	-1.9	3.5	0.3412 µg/L	0.3412 ppb	17:58:51
2	Ni 231.604†	305.0	-6.4	-0.3187 µg/L	-0.3187 ppb	17:58:51
2	P 214.914†	15.9	0.6	1.2381 µg/L	1.2381 ppb	17:58:51
2	Pb 220.353†	85.8	-4.9	-1.1822 µg/L	-1.1822 ppb	17:58:51

2	S 181.975 Axial†	16.3	-2.6	-10.626 µg/L	-10.626 ppb	17:58:51
2	Sb 206.836†	25.7	3.2	2.9825 µg/L	2.9825 ppb	17:58:51
2	Se 196.026†	18.4	-0.8	-1.1281 µg/L	-1.1281 ppb	17:58:51
2	SiO2†	1461.8	74.8	14.763 µg/L	14.763 ppb	17:58:30
2	Si 251.611†	344.9	35.3	2.6849 µg/L	2.6849 ppb	17:58:51
2	Sn 189.927†	-1.0	-1.4	-0.5943 µg/L	-0.5943 ppb	17:58:51
2	Ti 334.940†	216.4	42.0	0.0947 µg/L	0.0947 ppb	17:58:30
2	Tl 190.801†	-19.8	2.5	3.2612 µg/L	3.2612 ppb	17:58:51
2	U 409.014†	-50.4	26.6	2.2066 µg/L	2.2066 ppb	17:58:30
2	V 292.402†	-18.0	26.7	0.2662 µg/L	0.2662 ppb	17:58:30
2	Zn 213.857†	535.3	2.5	0.0614 µg/L	0.0614 ppb	17:58:51
3	Sc RADIAL	55053.2	55053.2	97.4 %		17:57:22
3	Al 396.153Radial†	-40.3	-48.7	-33.898 µg/L	-33.898 ppb	17:57:22
3	Ca 317.933Radial†	188.9	-17.4	-14.892 µg/L	-14.892 ppb	17:57:42
3	Fe 238.204 Radial†	16.1	-0.0	-0.3068 µg/L	-0.3068 ppb	17:57:42
3	K 766.490 Radial†	212.7	53.3	34.793 µg/L	34.793 ppb	17:57:22
3	Mg 279.077 IEC†	19.0	6.7	59.990 µg/L	59.990 ppb	17:57:42
3	Na 589.592 Radial†	541.5	83.5	25.652 µg/L	25.652 ppb	17:57:22
3	Sr 421.552†	50.1	22.6	0.2082 µg/L	0.2082 ppb	17:57:22
3	Sc 361.383	1965248.8	1965248.8	100.11 %		17:58:57
3	Y 371.029	1354189.1	1354189.1	100.11 %		17:58:57
3	Ag 328.068†	-450.0	-47.9	-0.3524 µg/L	-0.3524 ppb	17:59:03
3	As 188.979†	0.1	0.6	1.0726 µg/L	1.0726 ppb	17:59:23
3	B 249.677†	379.0	-5.5	-0.2247 µg/L	-0.2247 ppb	17:59:23
3	Ba 233.527†	-9.6	7.5	0.1800 µg/L	0.1800 ppb	17:59:23
3	Be 313.107†	-2642.2	216.4	0.1284 µg/L	0.1284 ppb	17:59:03
3	Cd 226.502†	-137.1	4.7	0.1164 µg/L	0.1164 ppb	17:59:23
3	Co 228.616†	5.7	3.7	0.1693 µg/L	0.1693 ppb	17:59:23
3	Cr 267.716†	-63.8	-13.4	-0.2679 µg/L	-0.2679 ppb	17:59:03
3	Cu 324.752†	2541.3	-5.2	-0.0342 µg/L	-0.0342 ppb	17:59:03
3	Mn 257.610†	-242.2	14.1	0.0418 µg/L	0.0418 ppb	17:59:23
3	Mo 202.031†	-0.6	4.8	0.4652 µg/L	0.4652 ppb	17:59:23
3	Ni 231.604†	301.2	-11.4	-0.5704 µg/L	-0.5704 ppb	17:59:23
3	P 214.914†	21.9	6.6	13.019 µg/L	13.019 ppb	17:59:23
3	Pb 220.353†	81.2	-9.9	-2.4060 µg/L	-2.4060 ppb	17:59:23
3	S 181.975 Axial†	14.0	-4.9	-20.443 µg/L	-20.443 ppb	17:59:23
3	Sb 206.836†	27.7	5.2	4.7514 µg/L	4.7514 ppb	17:59:23
3	Se 196.026†	17.1	-2.2	-3.1763 µg/L	-3.1763 ppb	17:59:23
3	SiO2†	1412.3	19.2	3.7961 µg/L	3.7961 ppb	17:59:03
3	Si 251.611†	335.9	24.9	1.8933 µg/L	1.8933 ppb	17:59:23
3	Sn 189.927†	3.9	3.5	1.4733 µg/L	1.4733 ppb	17:59:23
3	Ti 334.940†	206.9	31.6	0.0650 µg/L	0.0650 ppb	17:59:03
3	Tl 190.801†	-23.3	-0.9	-1.1798 µg/L	-1.1798 ppb	17:59:23
3	U 409.014†	2.6	79.6	6.6183 µg/L	6.6183 ppb	17:59:03
3	V 292.402†	-4.6	40.2	0.4016 µg/L	0.4016 ppb	17:59:03
3	Zn 213.857†	533.9	-1.1	-0.0271 µg/L	-0.0271 ppb	17:59:23

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1962723.2	99.980 %	0.2522			0.25%
Sc RADIAL	55250.6	97.8 %	0.66			0.68%
Y 371.029	1352955.6	100.01 %	0.168			0.17%
Ag 328.068†	0.9	0.0083 µg/L	0.31265	0.0083 ppb	0.31265	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-39.7	-27.606 µg/L	5.5466	-27.606 ppb	5.5466	20.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.2	2.1458 µg/L	3.39103	2.1458 ppb	3.39103	158.03%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	1.3	0.0526 µg/L	0.24059	0.0526 ppb	0.24059	457.43%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.3	0.0318 µg/L	0.14326	0.0318 ppb	0.14326	449.79%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	177.3	0.1052 µg/L	0.02132	0.1052 ppb	0.02132	20.27%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-17.6	-15.039 µg/L	0.3955	-15.039 ppb	0.3955	2.63%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.1	0.1017 µg/L	0.13173	0.1017 ppb	0.13173	129.53%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.4	0.0179 µg/L	0.33479	0.0179 ppb	0.33479	>999.9%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	1.4 0.0273 µg/L	0.30543 0.0273 ppb	0.30543 >999.9%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	7.0 0.0458 µg/L	0.12379 0.0458 ppb	0.12379 270.27%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.4 3.1129 µg/L	3.04443 3.1129 ppb	3.04443 97.80%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	53.0 34.646 µg/L	6.0478 34.646 ppb	6.0478 17.46%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.8 -7.5284 µg/L	60.67961 -7.5284 ppb	60.67961 806.01%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	11.7 0.0373 µg/L	0.00401 0.0373 ppb	0.00401 10.76%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	5.8 0.5659 µg/L	0.28866 0.5659 ppb	0.28866 51.01%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	62.2 19.119 µg/L	5.7369 19.119 ppb	5.7369 30.01%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-10.0 -0.4960 µg/L	0.15424 -0.4960 ppb	0.15424 31.09%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	3.1 6.0957 µg/L	6.15582 6.0957 ppb	6.15582 100.99%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-2.8 -0.6871 µg/L	2.01265 -0.6871 ppb	2.01265 292.92%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-2.9 -12.068 µg/L	7.7546 -12.068 ppb	7.7546 64.26%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	3.5 3.2641 µg/L	1.36846 3.2641 ppb	1.36846 41.92%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.3 -4.6035 µg/L	4.36743 -4.6035 ppb	4.36743 94.87%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	42.2 8.3350 µg/L	5.72201 8.3350 ppb	5.72201 68.65%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	25.2 1.9139 µg/L	0.76087 1.9139 ppb	0.76087 39.75%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	1.9 0.7957 µg/L	1.20387 0.7957 ppb	1.20387 151.30%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	12.7 0.1173 µg/L	0.08487 0.1173 ppb	0.08487 72.32%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	33.2 0.0739 µg/L	0.01807 0.0739 ppb	0.01807 24.45%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.8 1.0820 µg/L	2.22165 1.0820 ppb	2.22165 205.32%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	43.9 3.6439 µg/L	2.57643 3.6439 ppb	2.57643 70.71%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	21.9 0.2221 µg/L	0.20505 0.2221 ppb	0.20505 92.31%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-0.1 0.0000 µg/L	0.05335 0.0000 ppb	0.05335 >999.9%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 16

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 18:24:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58110.7	58110.7	103 %		18:24:59
1	Al 396.153Radial†	7350.7	7139.0	4955.6 µg/L	4955.6 ppb	18:24:59
1	Ca 317.933Radial†	6185.2	5802.1	4956.0 µg/L	4956.0 ppb	18:25:20
1	Fe 238.204 Radial†	675.1	639.8	5056.7 µg/L	5056.7 ppb	18:25:20
1	K 766.490 Radial†	7936.4	7550.9	4931.6 µg/L	4931.6 ppb	18:24:59
1	Mg 279.077 IEC†	594.2	564.9	5052.6 µg/L	5052.6 ppb	18:25:20
1	Na 589.592 Radial†	33978.9	32562.3	10001 µg/L	10001 ppb	18:24:59
1	Sr 421.552†	54344.8	52805.6	487.14 µg/L	487.14 ppb	18:24:59
1	Sc 361.383	2010503.2	2010503.2	102.41 %		18:26:23
1	Y 371.029	1378737.8	1378737.8	101.92 %		18:26:23
1	Ag 328.068†	69160.3	67932.0	506.90 µg/L	506.90 ppb	18:26:28
1	As 188.979†	303.0	296.3	530.04 µg/L	530.04 ppb	18:26:49
1	B 249.677†	13059.0	12367.1	502.24 µg/L	502.24 ppb	18:26:28
1	Ba 233.527†	21831.0	21333.5	513.08 µg/L	513.08 ppb	18:26:28
1	Be 313.107†	864886.0	847358.1	502.72 µg/L	502.72 ppb	18:26:23
1	Cd 226.502†	21036.3	20682.2	515.78 µg/L	515.78 ppb	18:26:28
1	Co 228.616†	11703.6	11425.8	516.87 µg/L	516.87 ppb	18:26:28
1	Cr 267.716†	26284.2	25715.1	516.82 µg/L	516.82 ppb	18:26:28
1	Cu 324.752†	82127.8	77648.4	507.55 µg/L	507.55 ppb	18:26:28
1	Mn 257.610†	166823.1	163147.4	511.37 µg/L	511.37 ppb	18:26:23
1	Mo 202.031†	5448.5	5325.4	521.69 µg/L	521.69 ppb	18:26:49
1	Ni 231.604†	10977.7	10406.6	518.22 µg/L	518.22 ppb	18:26:28
1	P 214.914†	1361.9	1314.4	2554.1 µg/L	2554.1 ppb	18:26:49
1	Pb 220.353†	2277.9	2133.2	518.76 µg/L	518.76 ppb	18:26:49
1	S 181.975 Axial†	276.1	250.7	1039.6 µg/L	1039.6 ppb	18:26:49
1	Sb 206.836†	598.0	561.4	517.60 µg/L	517.60 ppb	18:26:49
1	Se 196.026†	404.7	375.8	535.75 µg/L	535.75 ppb	18:26:49
1	SiO2†	29945.4	27848.1	5496.8 µg/L	5496.8 ppb	18:26:28
1	Si 251.611†	34979.9	33844.9	2573.0 µg/L	2573.0 ppb	18:26:28
1	Sn 189.927†	1294.8	1263.9	533.06 µg/L	533.06 ppb	18:26:49
1	Ti 334.940†	232405.2	226752.9	501.31 µg/L	501.31 ppb	18:26:23
1	Tl 190.801†	387.3	400.5	526.22 µg/L	526.22 ppb	18:26:49
1	U 409.014†	6254.1	6183.8	512.77 µg/L	512.77 ppb	18:26:28
1	V 292.402†	53539.0	52322.0	516.23 µg/L	516.23 ppb	18:26:28
1	Zn 213.857†	23135.9	22056.3	513.84 µg/L	513.84 ppb	18:26:28
2	Sc RADIAL	57983.0	57983.0	103 %		18:25:25
2	Al 396.153Radial†	7301.1	7106.5	4933.3 µg/L	4933.3 ppb	18:25:25
2	Ca 317.933Radial†	6156.7	5787.5	4943.6 µg/L	4943.6 ppb	18:25:45
2	Fe 238.204 Radial†	670.2	636.5	5030.5 µg/L	5030.5 ppb	18:25:45
2	K 766.490 Radial†	7863.7	7497.0	4896.4 µg/L	4896.4 ppb	18:25:25
2	Mg 279.077 IEC†	585.6	557.7	4988.7 µg/L	4988.7 ppb	18:25:45
2	Na 589.592 Radial†	33805.3	32465.9	9971.7 µg/L	9971.7 ppb	18:25:25
2	Sr 421.552†	54068.8	52653.0	485.73 µg/L	485.73 ppb	18:25:25
2	Sc 361.383	2038047.8	2038047.8	103.82 %		18:26:56
2	Y 371.029	1399253.6	1399253.6	103.44 %		18:26:56
2	Ag 328.068†	68906.4	66774.7	498.26 µg/L	498.26 ppb	18:27:02
2	As 188.979†	291.3	281.1	502.79 µg/L	502.79 ppb	18:27:22
2	B 249.677†	13031.9	12168.7	494.15 µg/L	494.15 ppb	18:27:02
2	Ba 233.527†	21788.4	21004.4	505.16 µg/L	505.16 ppb	18:27:02
2	Be 313.107†	871938.9	842738.2	499.98 µg/L	499.98 ppb	18:26:56
2	Cd 226.502†	20959.6	20330.7	507.01 µg/L	507.01 ppb	18:27:02
2	Co 228.616†	11663.7	11232.9	508.13 µg/L	508.13 ppb	18:27:02
2	Cr 267.716†	26195.8	25283.1	508.13 µg/L	508.13 ppb	18:27:02
2	Cu 324.752†	81865.7	76312.2	498.82 µg/L	498.82 ppb	18:27:02
2	Mn 257.610†	168150.2	162224.2	508.48 µg/L	508.48 ppb	18:26:56
2	Mo 202.031†	5330.8	5140.1	503.54 µg/L	503.54 ppb	18:27:22
2	Ni 231.604†	10880.8	10168.4	506.35 µg/L	506.35 ppb	18:27:02
2	P 214.914†	1337.9	1273.4	2473.4 µg/L	2473.4 ppb	18:27:22
2	Pb 220.353†	2238.1	2064.9	502.11 µg/L	502.11 ppb	18:27:22

2	S 181.975 Axial†	271.4	242.5	1005.7 µg/L	1005.7 ppb	18:27:22
2	Sb 206.836†	590.8	546.6	503.85 µg/L	503.85 ppb	18:27:22
2	Se 196.026†	401.0	366.9	523.19 µg/L	523.19 ppb	18:27:22
2	SiO2†	29842.8	27354.0	5399.3 µg/L	5399.3 ppb	18:27:02
2	Si 251.611†	34939.6	33344.4	2534.9 µg/L	2534.9 ppb	18:27:02
2	Sn 189.927†	1259.4	1212.7	511.46 µg/L	511.46 ppb	18:27:22
2	Ti 334.940†	233999.5	225221.6	497.93 µg/L	497.93 ppb	18:26:56
2	Tl 190.801†	377.0	385.6	506.75 µg/L	506.75 ppb	18:27:22
2	U 409.014†	6252.8	6100.0	505.82 µg/L	505.82 ppb	18:27:02
2	V 292.402†	53301.3	51386.4	506.94 µg/L	506.94 ppb	18:27:02
2	Zn 213.857†	23074.0	21691.3	505.35 µg/L	505.35 ppb	18:27:02
3	Sc RADIAL	58101.7	58101.7	103 %		18:25:51
3	Al 396.153Radial†	7325.2	7115.3	4941.3 µg/L	4941.3 ppb	18:25:51
3	Ca 317.933Radial†	6167.8	5786.1	4942.3 µg/L	4942.3 ppb	18:26:11
3	Fe 238.204 Radial†	673.8	638.6	5046.3 µg/L	5046.3 ppb	18:26:11
3	K 766.490 Radial†	7958.4	7573.4	4946.3 µg/L	4946.3 ppb	18:25:51
3	Mg 279.077 IEC†	598.9	569.5	5092.5 µg/L	5092.5 ppb	18:26:11
3	Na 589.592 Radial†	33931.7	32521.6	9988.8 µg/L	9988.8 ppb	18:25:51
3	Sr 421.552†	54158.1	52632.2	485.54 µg/L	485.54 ppb	18:25:51
3	Sc 361.383	2006960.6	2006960.6	102.23 %		18:27:29
3	Y 371.029	1377064.8	1377064.8	101.80 %		18:27:29
3	Ag 328.068†	63249.3	62269.2	464.47 µg/L	464.47 ppb	18:27:35
3	As 188.979†	239.9	235.1	420.56 µg/L	420.56 ppb	18:27:55
3	B 249.677†	11912.9	11268.6	457.34 µg/L	457.34 ppb	18:27:35
3	Ba 233.527†	19263.5	18859.7	453.56 µg/L	453.56 ppb	18:27:35
3	Be 313.107†	784759.4	770472.5	457.11 µg/L	457.11 ppb	18:27:29
3	Cd 226.502†	18434.4	18173.4	453.14 µg/L	453.14 ppb	18:27:35
3	Co 228.616†	10122.4	9899.4	447.75 µg/L	447.75 ppb	18:27:35
3	Cr 267.716†	21992.5	21562.5	433.36 µg/L	433.36 ppb	18:27:35
3	Cu 324.752†	71871.2	67757.5	442.99 µg/L	442.99 ppb	18:27:35
3	Mn 257.610†	152131.1	149063.9	467.26 µg/L	467.26 ppb	18:27:29
3	Mo 202.031†	4313.3	4224.4	413.87 µg/L	413.87 ppb	18:27:55
3	Ni 231.604†	9585.0	9063.2	451.33 µg/L	451.33 ppb	18:27:35
3	P 214.914†	1100.5	1061.1	2057.6 µg/L	2057.6 ppb	18:27:55
3	Pb 220.353†	1891.6	1759.4	427.76 µg/L	427.76 ppb	18:27:55
3	S 181.975 Axial†	229.0	205.1	850.35 µg/L	850.35 ppb	18:27:55
3	Sb 206.836†	491.8	458.5	422.37 µg/L	422.37 ppb	18:27:55
3	Se 196.026†	337.5	310.8	444.41 µg/L	444.41 ppb	18:27:55
3	SiO2†	27007.5	25025.9	4939.8 µg/L	4939.8 ppb	18:27:35
3	Si 251.611†	31393.7	30397.3	2310.9 µg/L	2310.9 ppb	18:27:35
3	Sn 189.927†	994.9	972.8	410.27 µg/L	410.27 ppb	18:27:55
3	Ti 334.940†	209196.0	204451.2	451.97 µg/L	451.97 ppb	18:27:29
3	Tl 190.801†	327.6	342.9	450.86 µg/L	450.86 ppb	18:27:55
3	U 409.014†	5293.3	5254.7	435.59 µg/L	435.59 ppb	18:27:35
3	V 292.402†	45934.6	44975.9	443.54 µg/L	443.54 ppb	18:27:35
3	Zn 213.857†	20247.3	19270.6	448.88 µg/L	448.88 ppb	18:27:35

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2018503.9	102.82 %	0.867			0.84%
Sc RADIAL	58065.1	103 %	0.1			0.12%
Y 371.029	1385018.8	102.38 %	0.913			0.89%
Ag 328.068†	65658.6	489.88 µg/L	22.418	489.88 ppb	22.418	4.58%
QC value within limits for Ag 328.068 Recovery = 97.98%						
Al 396.153Radial†	7120.3	4943.4 µg/L	11.28	4943.4 ppb	11.28	0.23%
QC value within limits for Al 396.153Radial Recovery = 98.87%						
As 188.979†	270.8	484.46 µg/L	56.991	484.46 ppb	56.991	11.76%
QC value within limits for As 188.979 Recovery = 96.89%						
B 249.677†	11934.8	484.58 µg/L	23.933	484.58 ppb	23.933	4.94%
QC value within limits for B 249.677 Recovery = 96.92%						
Ba 233.527†	20399.2	490.60 µg/L	32.321	490.60 ppb	32.321	6.59%
QC value within limits for Ba 233.527 Recovery = 98.12%						
Be 313.107†	820189.6	486.60 µg/L	25.580	486.60 ppb	25.580	5.26%
QC value within limits for Be 313.107 Recovery = 97.32%						
Ca 317.933Radial†	5791.9	4947.3 µg/L	7.57	4947.3 ppb	7.57	0.15%
QC value within limits for Ca 317.933Radial Recovery = 98.95%						
Cd 226.502†	19728.8	491.98 µg/L	33.915	491.98 ppb	33.915	6.89%
QC value within limits for Cd 226.502 Recovery = 98.40%						
Co 228.616†	10852.7	490.92 µg/L	37.639	490.92 ppb	37.639	7.67%

QC value within limits for Co 228.616 Recovery = 98.18%							
Cr	267.716†	24186.9	486.10 µg/L	45.880	486.10 ppb	45.880	9.44%
QC value within limits for Cr 267.716 Recovery = 97.22%							
Cu	324.752†	73906.0	483.12 µg/L	35.030	483.12 ppb	35.030	7.25%
QC value within limits for Cu 324.752 Recovery = 96.62%							
Fe	238.204 Radial†	638.3	5044.5 µg/L	13.19	5044.5 ppb	13.19	0.26%
QC value within limits for Fe 238.204 Radial Recovery = 100.89%							
K	766.490 Radial†	7540.4	4924.8 µg/L	25.64	4924.8 ppb	25.64	0.52%
QC value within limits for K 766.490 Radial Recovery = 98.50%							
Mg	279.077 IEC†	564.0	5044.6 µg/L	52.37	5044.6 ppb	52.37	1.04%
QC value within limits for Mg 279.077 IEC Recovery = 100.89%							
Mn	257.610†	158145.2	495.70 µg/L	24.672	495.70 ppb	24.672	4.98%
QC value within limits for Mn 257.610 Recovery = 99.14%							
Mo	202.031†	4896.7	479.70 µg/L	57.728	479.70 ppb	57.728	12.03%
QC value within limits for Mo 202.031 Recovery = 95.94%							
Na	589.592 Radial†	32516.6	9987.3 µg/L	14.87	9987.3 ppb	14.87	0.15%
QC value within limits for Na 589.592 Radial Recovery = 99.87%							
Ni	231.604†	9879.4	491.97 µg/L	35.688	491.97 ppb	35.688	7.25%
QC value within limits for Ni 231.604 Recovery = 98.39%							
P	214.914†	1216.3	2361.7 µg/L	266.42	2361.7 ppb	266.42	11.28%
QC value within limits for P 214.914 Recovery = 94.47%							
Pb	220.353†	1985.8	482.88 µg/L	48.455	482.88 ppb	48.455	10.03%
QC value within limits for Pb 220.353 Recovery = 96.58%							
S	181.975 Axial†	232.7	965.19 µg/L	100.884	965.19 ppb	100.884	10.45%
QC value within limits for S 181.975 Axial Recovery = 96.52%							
Sb	206.836†	522.2	481.27 µg/L	51.474	481.27 ppb	51.474	10.70%
QC value within limits for Sb 206.836 Recovery = 96.25%							
Se	196.026†	351.2	501.12 µg/L	49.509	501.12 ppb	49.509	9.88%
QC value within limits for Se 196.026 Recovery = 100.22%							
SiO2†		26742.7	5278.7 µg/L	297.49	5278.7 ppb	297.49	5.64%
QC value within limits for SiO2 Recovery = 98.71%							
Si	251.611†	32528.9	2472.9 µg/L	141.62	2472.9 ppb	141.62	5.73%
QC value within limits for Si 251.611 Recovery = 98.92%							
Sn	189.927†	1149.8	484.93 µg/L	65.553	484.93 ppb	65.553	13.52%
QC value within limits for Sn 189.927 Recovery = 96.99%							
Sr	421.552†	52696.9	486.14 µg/L	0.873	486.14 ppb	0.873	0.18%
QC value within limits for Sr 421.552 Recovery = 97.23%							
Ti	334.940†	218808.6	483.73 µg/L	27.562	483.73 ppb	27.562	5.70%
QC value within limits for Ti 334.940 Recovery = 96.75%							
Tl	190.801†	376.3	494.61 µg/L	39.121	494.61 ppb	39.121	7.91%
QC value within limits for Tl 190.801 Recovery = 98.92%							
U	409.014†	5846.2	484.73 µg/L	42.700	484.73 ppb	42.700	8.81%
QC value within limits for U 409.014 Recovery = 96.95%							
V	292.402†	49561.4	488.90 µg/L	39.562	488.90 ppb	39.562	8.09%
QC value within limits for V 292.402 Recovery = 97.78%							
Zn	213.857†	21006.1	489.36 µg/L	35.308	489.36 ppb	35.308	7.22%
QC value within limits for Zn 213.857 Recovery = 97.87%							

All analyte(s) passed QC.

Sequence No.: 17

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 18:28:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56920.6	56920.6	101 %		18:28:38
1	Al 396.153Radial†	-0.3	-7.6	-5.3346 µg/L	-5.3346 ppb	18:28:38
1	Ca 317.933Radial†	189.5	-23.2	-19.841 µg/L	-19.841 ppb	18:28:58
1	Fe 238.204 Radial†	19.4	2.7	21.377 µg/L	21.377 ppb	18:28:58
1	K 766.490 Radial†	221.6	55.0	35.912 µg/L	35.912 ppb	18:28:38
1	Mg 279.077 IEC†	10.8	-2.1	-18.380 µg/L	-18.380 ppb	18:28:58
1	Na 589.592 Radial†	498.2	22.3	6.8542 µg/L	6.8542 ppb	18:28:38
1	Sr 421.552†	54.9	25.7	0.2367 µg/L	0.2367 ppb	18:28:38
1	Sc 361.383	2032515.3	2032515.3	103.53 %		18:30:00
1	Y 371.029	1398820.8	1398820.8	103.41 %		18:30:00
1	Ag 328.068†	-457.1	-39.8	-0.2911 µg/L	-0.2911 ppb	18:30:06
1	As 188.979†	5.6	5.9	10.594 µg/L	10.594 ppb	18:30:26
1	B 249.677†	410.3	12.1	0.4845 µg/L	0.4845 ppb	18:30:26
1	Ba 233.527†	49.3	64.6	1.5526 µg/L	1.5526 ppb	18:30:26
1	Be 313.107†	-2857.0	96.2	0.0570 µg/L	0.0570 ppb	18:30:06
1	Cd 226.502†	-101.1	44.0	1.0963 µg/L	1.0963 ppb	18:30:26
1	Co 228.616†	28.1	25.2	1.1408 µg/L	1.1408 ppb	18:30:26
1	Cr 267.716†	-32.9	18.6	0.3731 µg/L	0.3731 ppb	18:30:06
1	Cu 324.752†	2585.0	-47.0	-0.3039 µg/L	-0.3039 ppb	18:30:06
1	Mn 257.610†	1142.9	1359.9	4.2620 µg/L	4.2620 ppb	18:30:26
1	Mo 202.031†	8.1	13.2	1.2945 µg/L	1.2945 ppb	18:30:26
1	Ni 231.604†	338.7	14.7	0.7339 µg/L	0.7339 ppb	18:30:26
1	P 214.914†	15.9	0.0	0.2437 µg/L	0.2437 ppb	18:30:26
1	Pb 220.353†	99.8	5.5	1.3339 µg/L	1.3339 ppb	18:30:26
1	S 181.975 Axial†	18.1	-1.5	-6.0253 µg/L	-6.0253 ppb	18:30:26
1	Sb 206.836†	22.7	-0.5	-0.4788 µg/L	-0.4788 ppb	18:30:26
1	Se 196.026†	18.0	-1.9	-2.6538 µg/L	-2.6538 ppb	18:30:26
1	SiO2†	1447.9	6.9	1.3541 µg/L	1.3541 ppb	18:30:06
1	Si 251.611†	659.6	326.5	24.820 µg/L	24.820 ppb	18:30:26
1	Sn 189.927†	38.3	36.6	15.441 µg/L	15.441 ppb	18:30:26
1	Ti 334.940†	321.1	135.1	0.3001 µg/L	0.3001 ppb	18:30:06
1	Tl 190.801†	-21.1	2.0	2.6395 µg/L	2.6395 ppb	18:30:26
1	U 409.014†	-28.7	49.4	4.1035 µg/L	4.1035 ppb	18:30:06
1	V 292.402†	-3.2	41.6	0.4232 µg/L	0.4232 ppb	18:30:06
1	Zn 213.857†	618.9	63.4	1.4848 µg/L	1.4848 ppb	18:30:26
2	Sc RADIAL	56709.3	56709.3	100 %		18:29:04
2	Al 396.153Radial†	-16.5	-23.8	-16.528 µg/L	-16.528 ppb	18:29:04
2	Ca 317.933Radial†	196.4	-15.6	-13.311 µg/L	-13.311 ppb	18:29:24
2	Fe 238.204 Radial†	19.1	2.4	18.992 µg/L	18.992 ppb	18:29:24
2	K 766.490 Radial†	204.3	38.5	25.150 µg/L	25.150 ppb	18:29:04
2	Mg 279.077 IEC†	11.8	-1.1	-9.6092 µg/L	-9.6092 ppb	18:29:24
2	Na 589.592 Radial†	485.8	11.8	3.6148 µg/L	3.6148 ppb	18:29:04
2	Sr 421.552†	30.8	1.9	0.0174 µg/L	0.0174 ppb	18:29:04
2	Sc 361.383	2017506.8	2017506.8	102.77 %		18:30:32
2	Y 371.029	1389281.0	1389281.0	102.70 %		18:30:32
2	Ag 328.068†	-439.2	-25.7	-0.1831 µg/L	-0.1831 ppb	18:30:38
2	As 188.979†	-2.8	-2.2	-4.0102 µg/L	-4.0102 ppb	18:30:58
2	B 249.677†	382.6	-11.8	-0.4899 µg/L	-0.4899 ppb	18:30:58
2	Ba 233.527†	4.3	21.2	0.5118 µg/L	0.5118 ppb	18:30:58
2	Be 313.107†	-2101.4	811.0	0.4800 µg/L	0.4800 ppb	18:30:38
2	Cd 226.502†	-138.5	6.9	0.1705 µg/L	0.1705 ppb	18:30:58
2	Co 228.616†	11.1	8.8	0.3922 µg/L	0.3922 ppb	18:30:58
2	Cr 267.716†	4.0	54.3	1.0911 µg/L	1.0911 ppb	18:30:38
2	Cu 324.752†	2748.4	130.6	0.8552 µg/L	0.8552 ppb	18:30:38
2	Mn 257.610†	83.5	337.3	1.0592 µg/L	1.0592 ppb	18:30:58
2	Mo 202.031†	-7.8	-2.2	-0.2192 µg/L	-0.2192 ppb	18:30:58
2	Ni 231.604†	324.9	3.8	0.1884 µg/L	0.1884 ppb	18:30:58
2	P 214.914†	13.0	-2.7	-5.2676 µg/L	-5.2676 ppb	18:30:58
2	Pb 220.353†	93.0	-0.4	-0.1127 µg/L	-0.1127 ppb	18:30:58

2	S 181.975 Axial†	20.2	0.7	2.8524 µg/L	2.8524 ppb	18:30:58
2	Sb 206.836†	24.9	1.7	1.5373 µg/L	1.5373 ppb	18:30:58
2	Se 196.026†	20.3	0.5	0.7192 µg/L	0.7192 ppb	18:30:58
2	SiO2†	1642.6	206.7	40.802 µg/L	40.802 ppb	18:30:38
2	Si 251.611†	453.6	130.8	9.9406 µg/L	9.9406 ppb	18:30:58
2	Sn 189.927†	19.1	18.2	7.6779 µg/L	7.6779 ppb	18:30:58
2	Ti 334.940†	1831.1	1606.7	3.5550 µg/L	3.5550 ppb	18:30:38
2	Tl 190.801†	-20.6	2.3	3.0926 µg/L	3.0926 ppb	18:30:58
2	U 409.014†	-17.3	60.3	5.0059 µg/L	5.0059 ppb	18:30:38
2	V 292.402†	54.7	98.0	0.9631 µg/L	0.9631 ppb	18:30:38
2	Zn 213.857†	549.1	-0.1	-0.0060 µg/L	-0.0060 ppb	18:30:58
3	Sc RADIAL	57463.0	57463.0	102 %		18:29:29
3	Al 396.153Radial†	-41.0	-47.6	-33.158 µg/L	-33.158 ppb	18:29:29
3	Ca 317.933Radial†	194.3	-20.2	-17.244 µg/L	-17.244 ppb	18:29:50
3	Fe 238.204 Radial†	18.7	1.8	14.201 µg/L	14.201 ppb	18:29:50
3	K 766.490 Radial†	178.1	10.2	6.6395 µg/L	6.6395 ppb	18:29:29
3	Mg 279.077 IEC†	8.7	-4.2	-37.957 µg/L	-37.957 ppb	18:29:50
3	Na 589.592 Radial†	506.8	26.1	8.0102 µg/L	8.0102 ppb	18:29:29
3	Sr 421.552†	42.9	13.3	0.1232 µg/L	0.1232 ppb	18:29:29
3	Sc 361.383	2013891.9	2013891.9	102.59 %		18:31:04
3	Y 371.029	1385497.7	1385497.7	102.42 %		18:31:04
3	Ag 328.068†	-434.1	-21.6	-0.1566 µg/L	-0.1566 ppb	18:31:10
3	As 188.979†	1.4	1.8	3.2592 µg/L	3.2592 ppb	18:31:31
3	B 249.677†	380.8	-12.9	-0.5336 µg/L	-0.5336 ppb	18:31:31
3	Ba 233.527†	-7.5	9.7	0.2343 µg/L	0.2343 ppb	18:31:31
3	Be 313.107†	-2627.4	294.5	0.1745 µg/L	0.1745 ppb	18:31:10
3	Cd 226.502†	-139.2	6.0	0.1475 µg/L	0.1475 ppb	18:31:31
3	Co 228.616†	-2.4	-4.2	-0.1927 µg/L	-0.1927 ppb	18:31:31
3	Cr 267.716†	-21.1	29.8	0.5980 µg/L	0.5980 ppb	18:31:10
3	Cu 324.752†	2619.6	9.8	0.0659 µg/L	0.0659 ppb	18:31:10
3	Mn 257.610†	-3.1	253.0	0.7956 µg/L	0.7956 ppb	18:31:31
3	Mo 202.031†	1.5	6.8	0.6637 µg/L	0.6637 ppb	18:31:31
3	Ni 231.604†	309.6	-10.5	-0.5253 µg/L	-0.5253 ppb	18:31:31
3	P 214.914†	10.7	-4.9	-9.6506 µg/L	-9.6506 ppb	18:31:31
3	Pb 220.353†	92.1	-1.1	-0.2804 µg/L	-0.2804 ppb	18:31:31
3	S 181.975 Axial†	20.6	1.2	4.9214 µg/L	4.9214 ppb	18:31:31
3	Sb 206.836†	22.0	-1.0	-0.9299 µg/L	-0.9299 ppb	18:31:31
3	Se 196.026†	22.4	2.6	3.6800 µg/L	3.6800 ppb	18:31:31
3	SiO2†	1531.3	101.1	19.951 µg/L	19.951 ppb	18:31:10
3	Si 251.611†	470.6	148.1	11.258 µg/L	11.258 ppb	18:31:31
3	Sn 189.927†	15.7	14.9	6.2845 µg/L	6.2845 ppb	18:31:31
3	Ti 334.940†	545.2	356.5	0.7913 µg/L	0.7913 ppb	18:31:10
3	Tl 190.801†	-18.8	4.0	5.2381 µg/L	5.2381 ppb	18:31:31
3	U 409.014†	-62.1	16.5	1.3714 µg/L	1.3714 ppb	18:31:10
3	V 292.402†	-10.9	34.2	0.3425 µg/L	0.3425 ppb	18:31:10
3	Zn 213.857†	537.6	-10.4	-0.2395 µg/L	-0.2395 ppb	18:31:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2021304.7	102.96 %	0.503			0.49%
Sc RADIAL	57030.9	101 %	0.7			0.68%
Y 371.029	1391199.8	102.84 %	0.508			0.49%
Ag 328.068†	-29.0	-0.2103 µg/L	0.07128	-0.2103 ppb	0.07128	33.90%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-26.3	-18.340 µg/L	14.0000	-18.340 ppb	14.0000	76.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.8	3.2809 µg/L	7.30195	3.2809 ppb	7.30195	222.56%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-4.2	-0.1797 µg/L	0.57561	-0.1797 ppb	0.57561	320.39%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	31.9	0.7662 µg/L	0.69500	0.7662 ppb	0.69500	90.70%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	400.6	0.2372 µg/L	0.21833	0.2372 ppb	0.21833	92.06%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-19.7	-16.799 µg/L	3.2876	-16.799 ppb	3.2876	19.57%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	19.0	0.4714 µg/L	0.54127	0.4714 ppb	0.54127	114.82%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.9	0.4468 µg/L	0.66842	0.4468 ppb	0.66842	149.61%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	34.2	0.6874 µg/L	0.36726	0.6874 ppb	0.36726 53.43%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	31.1	0.2057 µg/L	0.59207	0.2057 ppb	0.59207 287.77%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	2.3	18.190 µg/L	3.6545	18.190 ppb	3.6545 20.09%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	34.6	22.567 µg/L	14.8062	22.567 ppb	14.8062 65.61%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-2.5	-21.982 µg/L	14.5132	-21.982 ppb	14.5132 66.02%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	650.0	2.0389 µg/L	1.92974	2.0389 ppb	1.92974 94.65%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	5.9	0.5797 µg/L	0.76032	0.5797 ppb	0.76032 131.17%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	20.1	6.1597 µg/L	2.27853	6.1597 ppb	2.27853 36.99%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	2.7	0.1323 µg/L	0.63148	0.1323 ppb	0.63148 477.25%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-2.5	-4.8915 µg/L	4.95786	-4.8915 ppb	4.95786 101.36%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	1.3	0.3136 µg/L	0.88754	0.3136 ppb	0.88754 283.00%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	0.1	0.5829 µg/L	5.81558	0.5829 ppb	5.81558 997.77%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	0.0	0.0429 µg/L	1.31372	0.0429 ppb	1.31372 >999.9%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	0.4	0.5818 µg/L	3.16914	0.5818 ppb	3.16914 544.71%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	104.9	20.702 µg/L	19.7346	20.702 ppb	19.7346 95.33%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	201.8	15.340 µg/L	8.2366	15.340 ppb	8.2366 53.69%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	23.3	9.8010 µg/L	4.93347	9.8010 ppb	4.93347 50.34%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	13.6	0.1258 µg/L	0.10971	0.1258 ppb	0.10971 87.24%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	699.4	1.5488 µg/L	1.75468	1.5488 ppb	1.75468 113.30%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	2.8	3.6567 µg/L	1.38813	3.6567 ppb	1.38813 37.96%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	42.1	3.4936 µg/L	1.89246	3.4936 ppb	1.89246 54.17%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	57.9	0.5763 µg/L	0.33743	0.5763 ppb	0.33743 58.55%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	17.6	0.4131 µg/L	0.93546	0.4131 ppb	0.93546 226.45%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 18:57:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58333.6	58333.6	103 %		18:58:00
1	Al 396.153Radial†	7365.1	7125.7	4946.5 µg/L	4946.5 ppb	18:58:00
1	Ca 317.933Radial†	6192.0	5785.6	4942.0 µg/L	4942.0 ppb	18:58:20
1	Fe 238.204 Radial†	674.6	636.7	5032.7 µg/L	5032.7 ppb	18:58:20
1	K 766.490 Radial†	7915.6	7501.2	4899.2 µg/L	4899.2 ppb	18:58:00
1	Mg 279.077 IEC†	598.6	566.9	5070.8 µg/L	5070.8 ppb	18:58:20
1	Na 589.592 Radial†	33942.4	32400.8	9951.7 µg/L	9951.7 ppb	18:58:00
1	Sr 421.552†	54192.3	52456.0	483.91 µg/L	483.91 ppb	18:58:00
1	Sc 361.383	2038441.2	2038441.2	103.84 %		18:59:24
1	Y 371.029	1399434.4	1399434.4	103.45 %		18:59:24
1	Ag 328.068†	68624.6	66490.5	496.15 µg/L	496.15 ppb	18:59:29
1	As 188.979†	294.5	284.1	508.19 µg/L	508.19 ppb	18:59:50
1	B 249.677†	12921.2	12059.6	489.70 µg/L	489.70 ppb	18:59:29
1	Ba 233.527†	21646.3	20863.5	501.78 µg/L	501.78 ppb	18:59:29
1	Be 313.107†	864552.3	835462.4	495.66 µg/L	495.66 ppb	18:59:24
1	Cd 226.502†	20886.7	20256.6	505.16 µg/L	505.16 ppb	18:59:29
1	Co 228.616†	11617.5	11186.3	506.03 µg/L	506.03 ppb	18:59:29
1	Cr 267.716†	26041.8	25130.0	505.06 µg/L	505.06 ppb	18:59:29
1	Cu 324.752†	81610.2	76051.0	497.12 µg/L	497.12 ppb	18:59:29
1	Mn 257.610†	166517.1	160620.2	503.45 µg/L	503.45 ppb	18:59:24
1	Mo 202.031†	5420.2	5225.2	511.88 µg/L	511.88 ppb	18:59:50
1	Ni 231.604†	10851.5	10138.2	504.85 µg/L	504.85 ppb	18:59:29
1	P 214.914†	1356.9	1291.4	2509.3 µg/L	2509.3 ppb	18:59:50
1	Pb 220.353†	2274.9	2099.9	510.66 µg/L	510.66 ppb	18:59:50
1	S 181.975 Axial†	272.1	243.1	1008.0 µg/L	1008.0 ppb	18:59:50
1	Sb 206.836†	600.9	556.2	512.79 µg/L	512.79 ppb	18:59:50
1	Se 196.026†	401.3	367.2	523.52 µg/L	523.52 ppb	18:59:50
1	SiO2†	29690.3	27201.7	5369.3 µg/L	5369.3 ppb	18:59:29
1	Si 251.611†	34620.8	33030.9	2511.1 µg/L	2511.1 ppb	18:59:29
1	Sn 189.927†	1274.6	1227.1	517.53 µg/L	517.53 ppb	18:59:50
1	Ti 334.940†	232175.5	223421.5	493.94 µg/L	493.94 ppb	18:59:24
1	Tl 190.801†	380.4	388.7	510.84 µg/L	510.84 ppb	18:59:50
1	U 409.014†	6240.2	6086.8	504.71 µg/L	504.71 ppb	18:59:29
1	V 292.402†	53236.3	51313.9	506.29 µg/L	506.29 ppb	18:59:29
1	Zn 213.857†	23013.8	21629.0	503.89 µg/L	503.89 ppb	18:59:29
2	Sc RADIAL	58344.7	58344.7	103 %		18:58:26
2	Al 396.153Radial†	7317.7	7078.4	4913.9 µg/L	4913.9 ppb	18:58:26
2	Ca 317.933Radial†	6132.7	5727.0	4891.9 µg/L	4891.9 ppb	18:58:46
2	Fe 238.204 Radial†	665.9	628.2	4965.5 µg/L	4965.5 ppb	18:58:46
2	K 766.490 Radial†	7920.4	7504.4	4901.2 µg/L	4901.2 ppb	18:58:26
2	Mg 279.077 IEC†	590.4	558.9	4999.2 µg/L	4999.2 ppb	18:58:46
2	Na 589.592 Radial†	33811.9	32268.1	9910.9 µg/L	9910.9 ppb	18:58:26
2	Sr 421.552†	54099.6	52356.2	482.99 µg/L	482.99 ppb	18:58:26
2	Sc 361.383	2035256.6	2035256.6	103.67 %		18:59:57
2	Y 371.029	1396273.2	1396273.2	103.22 %		18:59:57
2	Ag 328.068†	68425.9	66402.2	495.48 µg/L	495.48 ppb	19:00:03
2	As 188.979†	292.9	282.9	506.17 µg/L	506.17 ppb	19:00:23
2	B 249.677†	12903.7	12062.2	489.84 µg/L	489.84 ppb	19:00:03
2	Ba 233.527†	21596.0	20847.7	501.39 µg/L	501.39 ppb	19:00:03
2	Be 313.107†	862338.3	834629.7	495.17 µg/L	495.17 ppb	18:59:57
2	Cd 226.502†	20772.6	20178.1	503.20 µg/L	503.20 ppb	19:00:03
2	Co 228.616†	11542.6	11131.5	503.54 µg/L	503.54 ppb	19:00:03
2	Cr 267.716†	25954.2	25084.7	504.15 µg/L	504.15 ppb	19:00:03
2	Cu 324.752†	81509.2	76076.5	497.28 µg/L	497.28 ppb	19:00:03
2	Mn 257.610†	166351.9	160711.8	503.73 µg/L	503.73 ppb	18:59:57
2	Mo 202.031†	5270.1	5088.7	498.51 µg/L	498.51 ppb	19:00:23
2	Ni 231.604†	10791.0	10096.2	502.76 µg/L	502.76 ppb	19:00:03
2	P 214.914†	1323.9	1261.6	2450.2 µg/L	2450.2 ppb	19:00:23
2	Pb 220.353†	2210.1	2040.8	496.26 µg/L	496.26 ppb	19:00:23

2	S 181.975 Axial†	270.0	241.5	1001.5 µg/L	1001.5 ppb	19:00:23
2	Sb 206.836†	587.9	544.6	501.96 µg/L	501.96 ppb	19:00:23
2	Se 196.026†	392.6	359.4	512.48 µg/L	512.48 ppb	19:00:23
2	SiO2†	29616.5	27175.2	5364.0 µg/L	5364.0 ppb	19:00:03
2	Si 251.611†	34657.6	33118.5	2517.7 µg/L	2517.7 ppb	19:00:03
2	Sn 189.927†	1231.7	1187.7	500.91 µg/L	500.91 ppb	19:00:23
2	Ti 334.940†	231864.1	223470.9	494.05 µg/L	494.05 ppb	18:59:57
2	Tl 190.801†	372.5	381.7	501.72 µg/L	501.72 ppb	19:00:23
2	U 409.014†	6180.9	6038.9	500.75 µg/L	500.75 ppb	19:00:03
2	V 292.402†	53024.3	51189.7	504.96 µg/L	504.96 ppb	19:00:03
2	Zn 213.857†	22918.2	21571.5	502.56 µg/L	502.56 ppb	19:00:03
3	Sc RADIAL	58456.7	58456.7	103 %		18:58:52
3	Al 396.153Radial†	7314.1	7061.4	4904.0 µg/L	4904.0 ppb	18:58:52
3	Ca 317.933Radial†	6160.3	5742.4	4905.0 µg/L	4905.0 ppb	18:59:12
3	Fe 238.204 Radial†	669.3	630.3	4980.2 µg/L	4980.2 ppb	18:59:12
3	K 766.490 Radial†	7905.3	7475.1	4882.1 µg/L	4882.1 ppb	18:58:52
3	Mg 279.077 IEC†	592.0	559.3	5000.9 µg/L	5000.9 ppb	18:59:12
3	Na 589.592 Radial†	33692.4	32089.9	9856.2 µg/L	9856.2 ppb	18:58:52
3	Sr 421.552†	53981.8	52142.0	481.02 µg/L	481.02 ppb	18:58:52
3	Sc 361.383	2047612.7	2047612.7	104.30 %		19:00:30
3	Y 371.029	1406490.5	1406490.5	103.97 %		19:00:30
3	Ag 328.068†	63103.6	60901.3	454.27 µg/L	454.27 ppb	19:00:36
3	As 188.979†	237.6	228.3	408.38 µg/L	408.38 ppb	19:00:57
3	B 249.677†	11765.8	10896.1	442.18 µg/L	442.18 ppb	19:00:36
3	Ba 233.527†	19176.1	18401.9	442.55 µg/L	442.55 ppb	19:00:36
3	Be 313.107†	782724.7	753282.0	446.91 µg/L	446.91 ppb	19:00:30
3	Cd 226.502†	18400.9	17783.3	443.41 µg/L	443.41 ppb	19:00:36
3	Co 228.616†	10109.3	9690.2	438.29 µg/L	438.29 ppb	19:00:36
3	Cr 267.716†	21969.5	21113.3	424.34 µg/L	424.34 ppb	19:00:36
3	Cu 324.752†	71747.0	66242.7	433.09 µg/L	433.09 ppb	19:00:36
3	Mn 257.610†	151555.7	145557.9	456.28 µg/L	456.28 ppb	19:00:30
3	Mo 202.031†	4263.1	4092.5	400.95 µg/L	400.95 ppb	19:00:57
3	Ni 231.604†	9465.5	8762.6	436.35 µg/L	436.35 ppb	19:00:36
3	P 214.914†	1103.2	1042.4	2021.3 µg/L	2021.3 ppb	19:00:57
3	Pb 220.353†	1887.4	1718.6	417.83 µg/L	417.83 ppb	19:00:57
3	S 181.975 Axial†	232.4	203.9	845.45 µg/L	845.45 ppb	19:00:57
3	Sb 206.836†	490.6	447.9	412.47 µg/L	412.47 ppb	19:00:57
3	Se 196.026†	335.5	302.3	432.38 µg/L	432.38 ppb	19:00:57
3	SiO2†	26801.6	24304.1	4797.3 µg/L	4797.3 ppb	19:00:36
3	Si 251.611†	31212.7	29614.1	2251.3 µg/L	2251.3 ppb	19:00:36
3	Sn 189.927†	987.7	946.6	399.24 µg/L	399.24 ppb	19:00:57
3	Ti 334.940†	208406.1	199631.3	441.31 µg/L	441.31 ppb	19:00:30
3	Tl 190.801†	322.4	331.5	435.96 µg/L	435.96 ppb	19:00:57
3	U 409.014†	5296.2	5154.8	427.29 µg/L	427.29 ppb	19:00:36
3	V 292.402†	45829.3	43982.9	433.72 µg/L	433.72 ppb	19:00:36
3	Zn 213.857†	20142.3	18776.7	437.38 µg/L	437.38 ppb	19:00:36

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2040436.8	103.94 %	0.327			0.31%
Sc RADIAL	58378.3	103 %	0.1			0.12%
Y 371.029	1400732.7	103.55 %	0.387			0.37%
Ag 328.068†	64598.0	481.97 µg/L	23.988	481.97 ppb	23.988	4.98%
QC value within limits for Ag 328.068 Recovery = 96.39%						
Al 396.153Radial†	7088.5	4921.5 µg/L	22.23	4921.5 ppb	22.23	0.45%
QC value within limits for Al 396.153Radial Recovery = 98.43%						
As 188.979†	265.1	474.24 µg/L	57.051	474.24 ppb	57.051	12.03%
QC value within limits for As 188.979 Recovery = 94.85%						
B 249.677†	11672.6	473.91 µg/L	27.477	473.91 ppb	27.477	5.80%
QC value within limits for B 249.677 Recovery = 94.78%						
Ba 233.527†	20037.7	481.91 µg/L	34.084	481.91 ppb	34.084	7.07%
QC value within limits for Ba 233.527 Recovery = 96.38%						
Be 313.107†	807791.4	479.25 µg/L	28.007	479.25 ppb	28.007	5.84%
QC value within limits for Be 313.107 Recovery = 95.85%						
Ca 317.933Radial†	5751.7	4913.0 µg/L	25.95	4913.0 ppb	25.95	0.53%
QC value within limits for Ca 317.933Radial Recovery = 98.26%						
Cd 226.502†	19406.0	483.92 µg/L	35.100	483.92 ppb	35.100	7.25%
QC value within limits for Cd 226.502 Recovery = 96.78%						
Co 228.616†	10669.3	482.62 µg/L	38.414	482.62 ppb	38.414	7.96%

QC value within limits for Co 228.616 Recovery = 96.52%							
Cr 267.716†	23776.0	477.85 µg/L	46.344	477.85 ppb	46.344	9.70%	
QC value within limits for Cr 267.716 Recovery = 95.57%							
Cu 324.752†	72790.1	475.83 µg/L	37.014	475.83 ppb	37.014	7.78%	
QC value within limits for Cu 324.752 Recovery = 95.17%							
Fe 238.204 Radial†	631.7	4992.8 µg/L	35.34	4992.8 ppb	35.34	0.71%	
QC value within limits for Fe 238.204 Radial Recovery = 99.86%							
K 766.490 Radial†	7493.6	4894.2 µg/L	10.48	4894.2 ppb	10.48	0.21%	
QC value within limits for K 766.490 Radial Recovery = 97.88%							
Mg 279.077 IEC†	561.7	5023.6 µg/L	40.85	5023.6 ppb	40.85	0.81%	
QC value within limits for Mg 279.077 IEC Recovery = 100.47%							
Mn 257.610†	155630.0	487.82 µg/L	27.316	487.82 ppb	27.316	5.60%	
QC value within limits for Mn 257.610 Recovery = 97.56%							
Mo 202.031†	4802.1	470.44 µg/L	60.553	470.44 ppb	60.553	12.87%	
QC value within limits for Mo 202.031 Recovery = 94.09%							
Na 589.592 Radial†	32252.9	9906.3 µg/L	47.92	9906.3 ppb	47.92	0.48%	
QC value within limits for Na 589.592 Radial Recovery = 99.06%							
Ni 231.604†	9665.7	481.32 µg/L	38.955	481.32 ppb	38.955	8.09%	
QC value within limits for Ni 231.604 Recovery = 96.26%							
P 214.914†	1198.4	2326.9 µg/L	266.31	2326.9 ppb	266.31	11.44%	
QC value within limits for P 214.914 Recovery = 93.08%							
Pb 220.353†	1953.1	474.92 µg/L	49.957	474.92 ppb	49.957	10.52%	
QC value within limits for Pb 220.353 Recovery = 94.98%							
S 181.975 Axial†	229.5	951.68 µg/L	92.053	951.68 ppb	92.053	9.67%	
QC value within limits for S 181.975 Axial Recovery = 95.17%							
Sb 206.836†	516.2	475.74 µg/L	55.061	475.74 ppb	55.061	11.57%	
QC value within limits for Sb 206.836 Recovery = 95.15%							
Se 196.026†	343.0	489.46 µg/L	49.737	489.46 ppb	49.737	10.16%	
QC value within limits for Se 196.026 Recovery = 97.89%							
SiO2†	26227.0	5176.9 µg/L	328.72	5176.9 ppb	328.72	6.35%	
QC value within limits for SiO2 Recovery = 96.81%							
Si 251.611†	31921.2	2426.7 µg/L	151.93	2426.7 ppb	151.93	6.26%	
QC value within limits for Si 251.611 Recovery = 97.07%							
Sn 189.927†	1120.5	472.56 µg/L	64.040	472.56 ppb	64.040	13.55%	
QC value within limits for Sn 189.927 Recovery = 94.51%							
Sr 421.552†	52318.1	482.64 µg/L	1.480	482.64 ppb	1.480	0.31%	
QC value within limits for Sr 421.552 Recovery = 96.53%							
Ti 334.940†	215507.9	476.43 µg/L	30.416	476.43 ppb	30.416	6.38%	
QC value within limits for Ti 334.940 Recovery = 95.29%							
Tl 190.801†	367.3	482.84 µg/L	40.853	482.84 ppb	40.853	8.46%	
QC value within limits for Tl 190.801 Recovery = 96.57%							
U 409.014†	5760.1	477.59 µg/L	43.602	477.59 ppb	43.602	9.13%	
QC value within limits for U 409.014 Recovery = 95.52%							
V 292.402†	48828.8	481.66 µg/L	41.521	481.66 ppb	41.521	8.62%	
QC value within limits for V 292.402 Recovery = 96.33%							
Zn 213.857†	20659.1	481.28 µg/L	38.019	481.28 ppb	38.019	7.90%	
QC value within limits for Zn 213.857 Recovery = 96.26%							

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 19:01:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57423.2	57423.2	102 %		19:01:39
1	Al 396.153Radial†	-18.9	-25.9	-18.036 µg/L	-18.036 ppb	19:01:39
1	Ca 317.933Radial†	194.6	-19.8	-16.907 µg/L	-16.907 ppb	19:02:00
1	Fe 238.204 Radial†	20.3	3.4	26.844 µg/L	26.844 ppb	19:02:00
1	K 766.490 Radial†	169.3	1.6	1.0514 µg/L	1.0514 ppb	19:01:39
1	Mg 279.077 IEC†	10.7	-2.3	-20.795 µg/L	-20.795 ppb	19:02:00
1	Na 589.592 Radial†	537.1	56.3	17.279 µg/L	17.279 ppb	19:01:39
1	Sr 421.552†	21.5	-7.7	-0.0709 µg/L	-0.0709 ppb	19:01:39
1	Sc 361.383	2013251.1	2013251.1	102.55 %		19:03:02
1	Y 371.029	1385844.0	1385844.0	102.45 %		19:03:02
1	Ag 328.068†	-425.6	-13.4	-0.0944 µg/L	-0.0944 ppb	19:03:07
1	As 188.979†	1.0	1.5	2.6013 µg/L	2.6013 ppb	19:03:28
1	B 249.677†	361.7	-31.5	-1.2963 µg/L	-1.2963 ppb	19:03:28
1	Ba 233.527†	-6.9	10.3	0.2492 µg/L	0.2492 ppb	19:03:28
1	Be 313.107†	-2769.2	155.5	0.0922 µg/L	0.0922 ppb	19:03:07
1	Cd 226.502†	-136.0	9.0	0.2223 µg/L	0.2223 ppb	19:03:28
1	Co 228.616†	7.0	4.9	0.2213 µg/L	0.2213 ppb	19:03:28
1	Cr 267.716†	-45.7	5.9	0.1181 µg/L	0.1181 ppb	19:03:07
1	Cu 324.752†	2554.2	-53.2	-0.3432 µg/L	-0.3432 ppb	19:03:07
1	Mn 257.610†	-168.0	92.2	0.2930 µg/L	0.2930 ppb	19:03:28
1	Mo 202.031†	-4.8	0.6	0.0615 µg/L	0.0615 ppb	19:03:28
1	Ni 231.604†	318.0	-2.3	-0.1132 µg/L	-0.1132 ppb	19:03:28
1	P 214.914†	14.8	-0.9	-1.7488 µg/L	-1.7488 ppb	19:03:28
1	Pb 220.353†	84.3	-8.7	-2.1358 µg/L	-2.1358 ppb	19:03:28
1	S 181.975 Axial†	16.4	-2.9	-12.184 µg/L	-12.184 ppb	19:03:28
1	Sb 206.836†	29.7	6.4	5.9047 µg/L	5.9047 ppb	19:03:28
1	Se 196.026†	21.6	1.7	2.5321 µg/L	2.5321 ppb	19:03:28
1	SiO2†	1445.6	18.1	3.5679 µg/L	3.5679 ppb	19:03:07
1	Si 251.611†	358.6	39.1	2.9715 µg/L	2.9715 ppb	19:03:28
1	Sn 189.927†	6.5	5.9	2.5018 µg/L	2.5018 ppb	19:03:28
1	Ti 334.940†	319.2	136.2	0.3026 µg/L	0.3026 ppb	19:03:07
1	Tl 190.801†	-23.1	-0.1	-0.1533 µg/L	-0.1533 ppb	19:03:28
1	U 409.014†	95.4	170.1	14.129 µg/L	14.129 ppb	19:03:07
1	V 292.402†	4.5	49.1	0.4975 µg/L	0.4975 ppb	19:03:07
1	Zn 213.857†	525.8	-21.7	-0.5072 µg/L	-0.5072 ppb	19:03:28
2	Sc RADIAL	57351.0	57351.0	102 %		19:02:05
2	Al 396.153Radial†	0.6	-6.8	-4.7217 µg/L	-4.7217 ppb	19:02:05
2	Ca 317.933Radial†	191.9	-22.2	-18.945 µg/L	-18.945 ppb	19:02:26
2	Fe 238.204 Radial†	16.4	-0.4	-2.9277 µg/L	-2.9277 ppb	19:02:26
2	K 766.490 Radial†	226.8	58.4	38.151 µg/L	38.151 ppb	19:02:05
2	Mg 279.077 IEC†	4.7	-8.2	-72.904 µg/L	-72.904 ppb	19:02:26
2	Na 589.592 Radial†	474.9	-4.4	-1.3380 µg/L	-1.3380 ppb	19:02:05
2	Sr 421.552†	49.2	19.7	0.1813 µg/L	0.1813 ppb	19:02:05
2	Sc 361.383	2012182.2	2012182.2	102.50 %		19:03:34
2	Y 371.029	1385686.0	1385686.0	102.43 %		19:03:34
2	Ag 328.068†	-448.4	-35.9	-0.2659 µg/L	-0.2659 ppb	19:03:39
2	As 188.979†	-1.5	-1.0	-1.7378 µg/L	-1.7378 ppb	19:04:00
2	B 249.677†	352.5	-40.3	-1.6393 µg/L	-1.6393 ppb	19:04:00
2	Ba 233.527†	-10.2	7.1	0.1714 µg/L	0.1714 ppb	19:04:00
2	Be 313.107†	-2906.5	20.0	0.0117 µg/L	0.0117 ppb	19:03:39
2	Cd 226.502†	-139.6	5.4	0.1354 µg/L	0.1354 ppb	19:04:00
2	Co 228.616†	8.8	6.6	0.3005 µg/L	0.3005 ppb	19:04:00
2	Cr 267.716†	-48.8	2.8	0.0565 µg/L	0.0565 ppb	19:03:39
2	Cu 324.752†	2585.7	-21.1	-0.1382 µg/L	-0.1382 ppb	19:03:39
2	Mn 257.610†	-165.3	94.7	0.2992 µg/L	0.2992 ppb	19:04:00
2	Mo 202.031†	-0.6	4.7	0.4624 µg/L	0.4624 ppb	19:04:00
2	Ni 231.604†	304.3	-15.4	-0.7700 µg/L	-0.7700 ppb	19:04:00
2	P 214.914†	20.3	4.4	8.7926 µg/L	8.7926 ppb	19:04:00
2	Pb 220.353†	93.2	-0.0	-0.0043 µg/L	-0.0043 ppb	19:04:00

2	S 181.975 Axial†	10.8	-8.4	-34.884 µg/L	-34.884 ppb	19:04:00
2	Sb 206.836†	19.1	-3.9	-3.5666 µg/L	-3.5666 ppb	19:04:00
2	Se 196.026†	15.1	-4.6	-6.4360 µg/L	-6.4360 ppb	19:04:00
2	SiO2†	1460.9	33.7	6.6594 µg/L	6.6594 ppb	19:03:39
2	Si 251.611†	358.4	39.0	2.9639 µg/L	2.9639 ppb	19:04:00
2	Sn 189.927†	4.7	4.2	1.7676 µg/L	1.7676 ppb	19:04:00
2	Ti 334.940†	408.1	223.1	0.4990 µg/L	0.4990 ppb	19:03:39
2	Tl 190.801†	-23.8	-0.9	-1.1422 µg/L	-1.1422 ppb	19:04:00
2	U 409.014†	-63.7	15.0	1.2443 µg/L	1.2443 ppb	19:03:39
2	V 292.402†	-44.3	1.5	0.0193 µg/L	0.0193 ppb	19:03:39
2	Zn 213.857†	528.3	-19.0	-0.4374 µg/L	-0.4374 ppb	19:04:00
3	Sc RADIAL	57190.0	57190.0	101 %		19:02:31
3	Al 396.153Radial†	-22.6	-29.7	-20.673 µg/L	-20.673 ppb	19:02:31
3	Ca 317.933Radial†	189.8	-23.8	-20.291 µg/L	-20.291 ppb	19:02:51
3	Fe 238.204 Radial†	18.6	1.8	13.987 µg/L	13.987 ppb	19:02:51
3	K 766.490 Radial†	197.7	30.3	19.782 µg/L	19.782 ppb	19:02:31
3	Mg 279.077 IEC†	10.1	-2.9	-25.784 µg/L	-25.784 ppb	19:02:51
3	Na 589.592 Radial†	485.7	7.6	2.3466 µg/L	2.3466 ppb	19:02:31
3	Sr 421.552†	55.0	25.5	0.2351 µg/L	0.2351 ppb	19:02:31
3	Sc 361.383	2000057.1	2000057.1	101.88 %		19:04:06
3	Y 371.029	1377155.5	1377155.5	101.80 %		19:04:06
3	Ag 328.068†	-451.3	-41.4	-0.3043 µg/L	-0.3043 ppb	19:04:11
3	As 188.979†	5.3	5.6	10.113 µg/L	10.113 ppb	19:04:32
3	B 249.677†	349.5	-41.1	-1.6816 µg/L	-1.6816 ppb	19:04:32
3	Ba 233.527†	-13.8	3.6	0.0860 µg/L	0.0860 ppb	19:04:32
3	Be 313.107†	-2997.1	-86.1	-0.0512 µg/L	-0.0512 ppb	19:04:11
3	Cd 226.502†	-137.9	6.3	0.1551 µg/L	0.1551 ppb	19:04:32
3	Co 228.616†	6.6	4.6	0.2062 µg/L	0.2062 ppb	19:04:32
3	Cr 267.716†	-22.6	28.2	0.5656 µg/L	0.5656 ppb	19:04:11
3	Cu 324.752†	2587.8	-3.8	-0.0226 µg/L	-0.0226 ppb	19:04:11
3	Mn 257.610†	-159.2	99.8	0.3153 µg/L	0.3153 ppb	19:04:32
3	Mo 202.031†	2.5	7.8	0.7608 µg/L	0.7608 ppb	19:04:32
3	Ni 231.604†	316.7	-1.4	-0.0722 µg/L	-0.0722 ppb	19:04:32
3	P 214.914†	14.3	-1.3	-2.5898 µg/L	-2.5898 ppb	19:04:32
3	Pb 220.353†	83.5	-8.9	-2.1741 µg/L	-2.1741 ppb	19:04:32
3	S 181.975 Axial†	16.2	-3.0	-12.393 µg/L	-12.393 ppb	19:04:32
3	Sb 206.836†	23.0	0.1	0.0887 µg/L	0.0887 ppb	19:04:32
3	Se 196.026†	9.9	-9.6	-13.418 µg/L	-13.418 ppb	19:04:32
3	SiO2†	1462.5	43.9	8.6651 µg/L	8.6651 ppb	19:04:11
3	Si 251.611†	360.6	43.4	3.2962 µg/L	3.2962 ppb	19:04:32
3	Sn 189.927†	6.4	5.9	2.4731 µg/L	2.4731 ppb	19:04:32
3	Ti 334.940†	309.8	129.0	0.2871 µg/L	0.2871 ppb	19:04:11
3	Tl 190.801†	-25.4	-2.6	-3.3285 µg/L	-3.3285 ppb	19:04:32
3	U 409.014†	-45.5	32.4	2.6931 µg/L	2.6931 ppb	19:04:11
3	V 292.402†	-23.1	22.0	0.2263 µg/L	0.2263 ppb	19:04:11
3	Zn 213.857†	527.6	-16.5	-0.3862 µg/L	-0.3862 ppb	19:04:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008496.8	102.31 %		0.373			0.36%
Sc RADIAL	57321.4	101 %		0.2			0.21%
Y 371.029	1382895.2	102.23 %		0.367			0.36%
Ag 328.068†	-30.2	-0.2215 µg/L		0.11176	-0.2215 ppb	0.11176	50.45%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-20.8	-14.477 µg/L		8.5505	-14.477 ppb	8.5505	59.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.0	3.6588 µg/L		5.99568	3.6588 ppb	5.99568	163.87%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-37.6	-1.5391 µg/L		0.21127	-1.5391 ppb	0.21127	13.73%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	7.0	0.1689 µg/L		0.08165	0.1689 ppb	0.08165	48.35%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	29.8	0.0176 µg/L		0.07185	0.0176 ppb	0.07185	409.21%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-21.9	-18.714 µg/L		1.7037	-18.714 ppb	1.7037	9.10%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	6.9	0.1709 µg/L		0.04557	0.1709 ppb	0.04557	26.66%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	5.4	0.2427 µg/L		0.05064	0.2427 ppb	0.05064	20.87%

QC value within limits	for Co 228.616	Recovery = Not calculated		
Cr 267.716†	12.3	0.2467 µg/L	0.27783	0.2467 ppb
QC value within limits	for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-26.0	-0.1680 µg/L	0.16236	-0.1680 ppb
QC value within limits	for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.6	12.634 µg/L	14.9319	12.634 ppb
QC value within limits	for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	30.1	19.662 µg/L	18.5502	19.662 ppb
QC value within limits	for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-4.5	-39.828 µg/L	28.7536	-39.828 ppb
QC value within limits	for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	95.6	0.3025 µg/L	0.01153	0.3025 ppb
QC value within limits	for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	4.4	0.4283 µg/L	0.35090	0.4283 ppb
QC value within limits	for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	19.8	6.0958 µg/L	9.85836	6.0958 ppb
QC value within limits	for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-6.4	-0.3185 µg/L	0.39156	-0.3185 ppb
QC value within limits	for Ni 231.604	Recovery = Not calculated		
P 214.914†	0.7	1.4847 µg/L	6.34276	1.4847 ppb
QC value within limits	for P 214.914	Recovery = Not calculated		
Pb 220.353†	-5.9	-1.4381 µg/L	1.24182	-1.4381 ppb
QC value within limits	for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-4.8	-19.820 µg/L	13.0459	-19.820 ppb
QC value within limits	for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	0.9	0.8090 µg/L	4.77653	0.8090 ppb
QC value within limits	for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-4.2	-5.7739 µg/L	7.99551	-5.7739 ppb
QC value within limits	for Se 196.026	Recovery = Not calculated		
SiO2†	31.9	6.2974 µg/L	2.56780	6.2974 ppb
QC value within limits	for SiO2	Recovery = Not calculated		
Si 251.611†	40.5	3.0772 µg/L	0.18971	3.0772 ppb
QC value within limits	for Si 251.611	Recovery = Not calculated		
Sn 189.927†	5.3	2.2475 µg/L	0.41585	2.2475 ppb
QC value within limits	for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	12.5	0.1152 µg/L	0.16339	0.1152 ppb
QC value within limits	for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	162.8	0.3629 µg/L	0.11813	0.3629 ppb
QC value within limits	for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-1.2	-1.5413 µg/L	1.62481	-1.5413 ppb
QC value within limits	for Tl 190.801	Recovery = Not calculated		
U 409.014†	72.5	6.0222 µg/L	7.05819	6.0222 ppb
QC value within limits	for U 409.014	Recovery = Not calculated		
V 292.402†	24.2	0.2477 µg/L	0.23982	0.2477 ppb
QC value within limits	for V 292.402	Recovery = Not calculated		
Zn 213.857†	-19.1	-0.4436 µg/L	0.06072	-0.4436 ppb
QC value within limits	for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 33

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 19:26:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58011.2	58011.2	103 %		19:27:24
1	Al 396.153Radial†	7306.1	7107.9	4934.0 µg/L	4934.0 ppb	19:27:24
1	Ca 317.933Radial†	6126.5	5755.1	4915.9 µg/L	4915.9 ppb	19:27:44
1	Fe 238.204 Radial†	670.2	636.1	5027.8 µg/L	5027.8 ppb	19:27:44
1	K 766.490 Radial†	7850.1	7480.0	4885.3 µg/L	4885.3 ppb	19:27:24
1	Mg 279.077 IEC†	589.4	561.2	5020.1 µg/L	5020.1 ppb	19:27:44
1	Na 589.592 Radial†	33642.4	32291.3	9918.0 µg/L	9918.0 ppb	19:27:24
1	Sr 421.552†	53727.7	52295.2	482.43 µg/L	482.43 ppb	19:27:24
1	Sc 361.383	2023941.6	2023941.6	103.10 %		19:28:48
1	Y 371.029	1390155.2	1390155.2	102.76 %		19:28:48
1	Ag 328.068†	68263.9	66614.1	497.07 µg/L	497.07 ppb	19:28:53
1	As 188.979†	297.5	289.1	517.08 µg/L	517.08 ppb	19:29:14
1	B 249.677†	12754.8	11987.3	486.76 µg/L	486.76 ppb	19:28:53
1	Ba 233.527†	21527.5	20897.6	502.60 µg/L	502.60 ppb	19:28:53
1	Be 313.107†	859738.4	836757.9	496.43 µg/L	496.43 ppb	19:28:48
1	Cd 226.502†	20670.0	20190.5	503.51 µg/L	503.51 ppb	19:28:53
1	Co 228.616†	11554.6	11205.5	506.90 µg/L	506.90 ppb	19:28:53
1	Cr 267.716†	25881.7	25154.3	505.55 µg/L	505.55 ppb	19:28:53
1	Cu 324.752†	81255.0	76269.5	498.55 µg/L	498.55 ppb	19:28:53
1	Mn 257.610†	166147.8	161410.9	505.93 µg/L	505.93 ppb	19:28:48
1	Mo 202.031†	5454.8	5296.3	518.83 µg/L	518.83 ppb	19:29:14
1	Ni 231.604†	10745.9	10110.7	503.47 µg/L	503.47 ppb	19:28:53
1	P 214.914†	1361.8	1305.6	2537.4 µg/L	2537.4 ppb	19:29:14
1	Pb 220.353†	2266.4	2107.4	512.48 µg/L	512.48 ppb	19:29:14
1	S 181.975 Axial†	273.5	246.4	1021.7 µg/L	1021.7 ppb	19:29:14
1	Sb 206.836†	610.7	569.8	525.42 µg/L	525.42 ppb	19:29:14
1	Se 196.026†	395.7	364.5	519.83 µg/L	519.83 ppb	19:29:14
1	SiO2†	29524.0	27245.2	5377.9 µg/L	5377.9 ppb	19:28:53
1	Si 251.611†	34545.7	33196.9	2523.7 µg/L	2523.7 ppb	19:28:53
1	Sn 189.927†	1282.8	1243.9	524.60 µg/L	524.60 ppb	19:29:14
1	Ti 334.940†	231474.2	224343.1	495.98 µg/L	495.98 ppb	19:28:48
1	Tl 190.801†	382.2	393.1	516.55 µg/L	516.55 ppb	19:29:14
1	U 409.014†	6240.4	6130.0	508.31 µg/L	508.31 ppb	19:28:53
1	V 292.402†	52860.7	51317.0	506.38 µg/L	506.38 ppb	19:28:53
1	Zn 213.857†	22851.7	21630.6	503.94 µg/L	503.94 ppb	19:28:53
2	Sc RADIAL	58208.4	58208.4	103 %		19:27:50
2	Al 396.153Radial†	7271.3	7050.0	4894.0 µg/L	4894.0 ppb	19:27:50
2	Ca 317.933Radial†	6163.6	5771.0	4929.4 µg/L	4929.4 ppb	19:28:10
2	Fe 238.204 Radial†	675.5	639.1	5051.0 µg/L	5051.0 ppb	19:28:10
2	K 766.490 Radial†	7866.0	7469.5	4878.5 µg/L	4878.5 ppb	19:27:50
2	Mg 279.077 IEC†	590.4	560.2	5010.8 µg/L	5010.8 ppb	19:28:10
2	Na 589.592 Radial†	33660.4	32197.8	9889.3 µg/L	9889.3 ppb	19:27:50
2	Sr 421.552†	53698.2	52089.4	480.53 µg/L	480.53 ppb	19:27:50
2	Sc 361.383	2026589.1	2026589.1	103.23 %		19:29:21
2	Y 371.029	1392880.6	1392880.6	102.97 %		19:29:21
2	Ag 328.068†	68809.4	67056.0	500.36 µg/L	500.36 ppb	19:29:27
2	As 188.979†	296.8	288.0	515.16 µg/L	515.16 ppb	19:29:47
2	B 249.677†	12885.4	12097.7	491.25 µg/L	491.25 ppb	19:29:27
2	Ba 233.527†	21677.5	21015.6	505.43 µg/L	505.43 ppb	19:29:27
2	Be 313.107†	865418.2	841170.5	499.05 µg/L	499.05 ppb	19:29:21
2	Cd 226.502†	20826.2	20315.7	506.63 µg/L	506.63 ppb	19:29:27
2	Co 228.616†	11598.5	11233.3	508.15 µg/L	508.15 ppb	19:29:27
2	Cr 267.716†	26109.2	25341.9	509.31 µg/L	509.31 ppb	19:29:27
2	Cu 324.752†	81892.1	76783.6	501.90 µg/L	501.90 ppb	19:29:27
2	Mn 257.610†	167199.4	162219.0	508.46 µg/L	508.46 ppb	19:29:21
2	Mo 202.031†	5288.0	5127.7	502.33 µg/L	502.33 ppb	19:29:47
2	Ni 231.604†	10828.5	10177.0	506.78 µg/L	506.78 ppb	19:29:27
2	P 214.914†	1324.9	1268.1	2462.5 µg/L	2462.5 ppb	19:29:47
2	Pb 220.353†	2219.6	2059.1	500.70 µg/L	500.70 ppb	19:29:47

2	S 181.975 Axial†	269.0	241.6	1001.9 µg/L	1001.9 ppb	19:29:47
2	Sb 206.836†	585.9	545.1	502.40 µg/L	502.40 ppb	19:29:47
2	Se 196.026†	401.2	369.3	526.64 µg/L	526.64 ppb	19:29:47
2	SiO2†	29674.8	27353.9	5399.3 µg/L	5399.3 ppb	19:29:27
2	Si 251.611†	34681.9	33285.1	2530.4 µg/L	2530.4 ppb	19:29:27
2	Sn 189.927†	1240.2	1201.0	506.52 µg/L	506.52 ppb	19:29:47
2	Ti 334.940†	232768.0	225303.0	498.10 µg/L	498.10 ppb	19:29:21
2	Tl 190.801†	370.9	381.6	501.66 µg/L	501.66 ppb	19:29:47
2	U 409.014†	6213.7	6096.2	505.50 µg/L	505.50 ppb	19:29:27
2	V 292.402†	53162.8	51542.6	508.46 µg/L	508.46 ppb	19:29:27
2	Zn 213.857†	22978.8	21724.8	506.12 µg/L	506.12 ppb	19:29:27
3	Sc RADIAL	57939.2	57939.2	103 %		19:28:16
3	Al 396.153Radial†	7262.7	7074.4	4912.9 µg/L	4912.9 ppb	19:28:16
3	Ca 317.933Radial†	6172.6	5807.6	4960.7 µg/L	4960.7 ppb	19:28:36
3	Fe 238.204 Radial†	672.1	638.8	5047.6 µg/L	5047.6 ppb	19:28:36
3	K 766.490 Radial†	7867.0	7506.0	4902.3 µg/L	4902.3 ppb	19:28:16
3	Mg 279.077 IEC†	596.5	568.8	5086.0 µg/L	5086.0 ppb	19:28:36
3	Na 589.592 Radial†	33675.5	32364.3	9940.5 µg/L	9940.5 ppb	19:28:16
3	Sr 421.552†	53684.5	52318.1	482.64 µg/L	482.64 ppb	19:28:16
3	Sc 361.383	2019244.9	2019244.9	102.86 %		19:29:54
3	Y 371.029	1386733.2	1386733.2	102.51 %		19:29:54
3	Ag 328.068†	63032.4	61682.0	460.10 µg/L	460.10 ppb	19:30:00
3	As 188.979†	244.2	237.9	425.60 µg/L	425.60 ppb	19:30:20
3	B 249.677†	11714.9	11005.2	446.60 µg/L	446.60 ppb	19:30:00
3	Ba 233.527†	19107.8	18593.8	447.17 µg/L	447.17 ppb	19:30:00
3	Be 313.107†	780455.8	761618.7	451.85 µg/L	451.85 ppb	19:29:54
3	Cd 226.502†	18286.2	17919.6	446.80 µg/L	446.80 ppb	19:30:00
3	Co 228.616†	10093.7	9811.2	443.77 µg/L	443.77 ppb	19:30:00
3	Cr 267.716†	21917.3	21358.4	429.26 µg/L	429.26 ppb	19:30:00
3	Cu 324.752†	71787.5	67248.4	439.66 µg/L	439.66 ppb	19:30:00
3	Mn 257.610†	151706.1	147745.4	463.13 µg/L	463.13 ppb	19:29:54
3	Mo 202.031†	4317.7	4203.0	411.78 µg/L	411.78 ppb	19:30:20
3	Ni 231.604†	9445.6	8870.7	441.74 µg/L	441.74 ppb	19:30:00
3	P 214.914†	1095.4	1049.6	2035.1 µg/L	2035.1 ppb	19:30:20
3	Pb 220.353†	1899.2	1755.5	426.81 µg/L	426.81 ppb	19:30:20
3	S 181.975 Axial†	229.2	203.9	845.45 µg/L	845.45 ppb	19:30:20
3	Sb 206.836†	491.4	455.2	419.32 µg/L	419.32 ppb	19:30:20
3	Se 196.026†	335.0	306.4	438.20 µg/L	438.20 ppb	19:30:20
3	SiO2†	26768.8	24633.2	4862.3 µg/L	4862.3 ppb	19:30:00
3	Si 251.611†	31095.2	29920.3	2274.6 µg/L	2274.6 ppb	19:30:00
3	Sn 189.927†	986.7	958.9	404.42 µg/L	404.42 ppb	19:30:20
3	Ti 334.940†	208387.6	202420.4	447.48 µg/L	447.48 ppb	19:29:54
3	Tl 190.801†	323.7	337.1	443.33 µg/L	443.33 ppb	19:30:20
3	U 409.014†	5278.3	5208.6	431.75 µg/L	431.75 ppb	19:30:00
3	V 292.402†	45791.0	44563.0	439.48 µg/L	439.48 ppb	19:30:00
3	Zn 213.857†	20107.0	19013.7	442.90 µg/L	442.90 ppb	19:30:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2023258.5	103.06 %	0.189			0.18%
Sc RADIAL	58052.9	103 %	0.2			0.24%
Y 371.029	1389923.0	102.75 %	0.228			0.22%
Ag 328.068†	65117.4	485.84 µg/L	22.354	485.84 ppb	22.354	4.60%
QC value within limits for Ag 328.068 Recovery = 97.17%						
Al 396.153Radial†	7077.4	4913.6 µg/L	19.97	4913.6 ppb	19.97	0.41%
QC value within limits for Al 396.153Radial Recovery = 98.27%						
As 188.979†	271.6	485.95 µg/L	52.268	485.95 ppb	52.268	10.76%
QC value within limits for As 188.979 Recovery = 97.19%						
B 249.677†	11696.7	474.87 µg/L	24.588	474.87 ppb	24.588	5.18%
QC value within limits for B 249.677 Recovery = 94.97%						
Ba 233.527†	20169.0	485.07 µg/L	32.850	485.07 ppb	32.850	6.77%
QC value within limits for Ba 233.527 Recovery = 97.01%						
Be 313.107†	813182.4	482.44 µg/L	26.525	482.44 ppb	26.525	5.50%
QC value within limits for Be 313.107 Recovery = 96.49%						
Ca 317.933Radial†	5777.9	4935.4 µg/L	22.97	4935.4 ppb	22.97	0.47%
QC value within limits for Ca 317.933Radial Recovery = 98.71%						
Cd 226.502†	19475.3	485.65 µg/L	33.674	485.65 ppb	33.674	6.93%
QC value within limits for Cd 226.502 Recovery = 97.13%						
Co 228.616†	10750.0	486.27 µg/L	36.817	486.27 ppb	36.817	7.57%

QC value within limits for Co 228.616 Recovery = 97.25%							
Cr 267.716†	23951.5	481.37 µg/L	45.169	481.37 ppb	45.169	9.38%	
QC value within limits for Cr 267.716 Recovery = 96.27%							
Cu 324.752†	73433.8	480.04 µg/L	35.005	480.04 ppb	35.005	7.29%	
QC value within limits for Cu 324.752 Recovery = 96.01%							
Fe 238.204 Radial†	638.0	5042.1 µg/L	12.53	5042.1 ppb	12.53	0.25%	
QC value within limits for Fe 238.204 Radial Recovery = 100.84%							
K 766.490 Radial†	7485.2	4888.7 µg/L	12.26	4888.7 ppb	12.26	0.25%	
QC value within limits for K 766.490 Radial Recovery = 97.77%							
Mg 279.077 IEC†	563.4	5039.0 µg/L	41.01	5039.0 ppb	41.01	0.81%	
QC value within limits for Mg 279.077 IEC Recovery = 100.78%							
Mn 257.610†	157125.1	492.51 µg/L	25.470	492.51 ppb	25.470	5.17%	
QC value within limits for Mn 257.610 Recovery = 98.50%							
Mo 202.031†	4875.7	477.65 µg/L	57.638	477.65 ppb	57.638	12.07%	
QC value within limits for Mo 202.031 Recovery = 95.53%							
Na 589.592 Radial†	32284.4	9915.9 µg/L	25.63	9915.9 ppb	25.63	0.26%	
QC value within limits for Na 589.592 Radial Recovery = 99.16%							
Ni 231.604†	9719.5	484.00 µg/L	36.636	484.00 ppb	36.636	7.57%	
QC value within limits for Ni 231.604 Recovery = 96.80%							
P 214.914†	1207.8	2345.0 µg/L	270.98	2345.0 ppb	270.98	11.56%	
QC value within limits for P 214.914 Recovery = 93.80%							
Pb 220.353†	1974.0	480.00 µg/L	46.437	480.00 ppb	46.437	9.67%	
QC value within limits for Pb 220.353 Recovery = 96.00%							
S 181.975 Axial†	230.6	956.35 µg/L	96.547	956.35 ppb	96.547	10.10%	
QC value within limits for S 181.975 Axial Recovery = 95.63%							
Sb 206.836†	523.4	482.38 µg/L	55.814	482.38 ppb	55.814	11.57%	
QC value within limits for Sb 206.836 Recovery = 96.48%							
Se 196.026†	346.8	494.89 µg/L	49.212	494.89 ppb	49.212	9.94%	
QC value within limits for Se 196.026 Recovery = 98.98%							
SiO2†	26410.8	5213.1 µg/L	304.05	5213.1 ppb	304.05	5.83%	
QC value within limits for SiO2 Recovery = 97.49%							
Si 251.611†	32134.1	2442.9 µg/L	145.79	2442.9 ppb	145.79	5.97%	
QC value within limits for Si 251.611 Recovery = 97.72%							
Sn 189.927†	1134.6	478.51 µg/L	64.799	478.51 ppb	64.799	13.54%	
QC value within limits for Sn 189.927 Recovery = 95.70%							
Sr 421.552†	52234.2	481.87 µg/L	1.162	481.87 ppb	1.162	0.24%	
QC value within limits for Sr 421.552 Recovery = 96.37%							
Ti 334.940†	217355.5	480.52 µg/L	28.636	480.52 ppb	28.636	5.96%	
QC value within limits for Ti 334.940 Recovery = 96.10%							
Tl 190.801†	370.6	487.18 µg/L	38.702	487.18 ppb	38.702	7.94%	
QC value within limits for Tl 190.801 Recovery = 97.44%							
U 409.014†	5811.6	481.85 µg/L	43.409	481.85 ppb	43.409	9.01%	
QC value within limits for U 409.014 Recovery = 96.37%							
V 292.402†	49140.8	484.77 µg/L	39.238	484.77 ppb	39.238	8.09%	
QC value within limits for V 292.402 Recovery = 96.95%							
Zn 213.857†	20789.7	484.32 µg/L	35.886	484.32 ppb	35.886	7.41%	
QC value within limits for Zn 213.857 Recovery = 96.86%							

All analyte(s) passed QC.

Sequence No.: 34

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 19:30:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57803.7	57803.7	102 %		19:31:04
1	Al 396.153Radial†	-10.0	-17.1	-11.924 µg/L	-11.924 ppb	19:31:04
1	Ca 317.933Radial†	196.7	-19.1	-16.278 µg/L	-16.278 ppb	19:31:24
1	Fe 238.204 Radial†	20.4	3.4	26.456 µg/L	26.456 ppb	19:31:24
1	K 766.490 Radial†	206.4	36.8	24.007 µg/L	24.007 ppb	19:31:04
1	Mg 279.077 IEC†	12.2	-0.9	-8.3904 µg/L	-8.3904 ppb	19:31:24
1	Na 589.592 Radial†	467.0	-15.7	-4.8300 µg/L	-4.8300 ppb	19:31:04
1	Sr 421.552†	46.6	16.7	0.1542 µg/L	0.1542 ppb	19:31:04
1	Sc 361.383	2025799.3	2025799.3	103.19 %		19:32:26
1	Y 371.029	1395690.7	1395690.7	103.17 %		19:32:26
1	Ag 328.068†	-418.9	-4.3	-0.0299 µg/L	-0.0299 ppb	19:32:32
1	As 188.979†	5.7	6.0	10.690 µg/L	10.690 ppb	19:32:52
1	B 249.677†	346.4	-48.5	-1.9903 µg/L	-1.9903 ppb	19:32:52
1	Ba 233.527†	-10.1	7.3	0.1761 µg/L	0.1761 ppb	19:32:52
1	Be 313.107†	-2840.4	103.2	0.0611 µg/L	0.0611 ppb	19:32:32
1	Cd 226.502†	-141.4	4.7	0.1130 µg/L	0.1130 ppb	19:32:52
1	Co 228.616†	3.9	1.9	0.0851 µg/L	0.0851 ppb	19:32:52
1	Cr 267.716†	-52.3	-0.3	-0.0059 µg/L	-0.0059 ppb	19:32:32
1	Cu 324.752†	2589.2	-34.6	-0.2223 µg/L	-0.2223 ppb	19:32:32
1	Mn 257.610†	-125.9	134.0	0.4234 µg/L	0.4234 ppb	19:32:52
1	Mo 202.031†	-3.8	1.7	0.1637 µg/L	0.1637 ppb	19:32:52
1	Ni 231.604†	312.5	-9.5	-0.4735 µg/L	-0.4735 ppb	19:32:52
1	P 214.914†	19.0	3.1	6.0665 µg/L	6.0665 ppb	19:32:52
1	Pb 220.353†	87.4	-6.2	-1.5170 µg/L	-1.5170 ppb	19:32:52
1	S 181.975 Axial†	16.2	-3.2	-13.428 µg/L	-13.428 ppb	19:32:52
1	Sb 206.836†	17.3	-5.7	-5.2171 µg/L	-5.2171 ppb	19:32:52
1	Se 196.026†	14.6	-5.2	-7.2159 µg/L	-7.2159 ppb	19:32:52
1	SiO2†	1457.3	20.6	4.0713 µg/L	4.0713 ppb	19:32:32
1	Si 251.611†	367.4	45.4	3.4484 µg/L	3.4484 ppb	19:32:52
1	Sn 189.927†	2.9	2.5	1.0388 µg/L	1.0388 ppb	19:32:52
1	Ti 334.940†	320.1	135.2	0.2995 µg/L	0.2995 ppb	19:32:32
1	Tl 190.801†	-20.2	2.8	3.6951 µg/L	3.6951 ppb	19:32:52
1	U 409.014†	5.9	82.8	6.8777 µg/L	6.8777 ppb	19:32:32
1	V 292.402†	-40.7	5.3	0.0634 µg/L	0.0634 ppb	19:32:32
1	Zn 213.857†	538.4	-12.7	-0.2952 µg/L	-0.2952 ppb	19:32:52
2	Sc RADIAL	57446.2	57446.2	102 %		19:31:29
2	Al 396.153Radial†	-13.6	-20.7	-14.413 µg/L	-14.413 ppb	19:31:29
2	Ca 317.933Radial†	196.2	-18.3	-15.615 µg/L	-15.615 ppb	19:31:50
2	Fe 238.204 Radial†	16.6	-0.3	-2.1967 µg/L	-2.1967 ppb	19:31:50
2	K 766.490 Radial†	247.6	78.5	51.300 µg/L	51.300 ppb	19:31:29
2	Mg 279.077 IEC†	10.6	-2.4	-21.567 µg/L	-21.567 ppb	19:31:50
2	Na 589.592 Radial†	483.2	3.0	0.9277 µg/L	0.9277 ppb	19:31:29
2	Sr 421.552†	2.4	-26.4	-0.2440 µg/L	-0.2440 ppb	19:31:29
2	Sc 361.383	2031745.9	2031745.9	103.50 %		19:32:58
2	Y 371.029	1401392.4	1401392.4	103.60 %		19:32:58
2	Ag 328.068†	-396.7	18.3	0.1368 µg/L	0.1368 ppb	19:33:04
2	As 188.979†	0.2	0.6	1.1375 µg/L	1.1375 ppb	19:33:24
2	B 249.677†	348.5	-47.4	-1.9319 µg/L	-1.9319 ppb	19:33:24
2	Ba 233.527†	-17.3	0.3	0.0083 µg/L	0.0083 ppb	19:33:24
2	Be 313.107†	-2882.3	70.8	0.0419 µg/L	0.0419 ppb	19:33:04
2	Cd 226.502†	-137.7	8.6	0.2144 µg/L	0.2144 ppb	19:33:24
2	Co 228.616†	-1.5	-3.4	-0.1547 µg/L	-0.1547 ppb	19:33:24
2	Cr 267.716†	-68.0	-15.3	-0.3078 µg/L	-0.3078 ppb	19:33:04
2	Cu 324.752†	2609.0	-22.8	-0.1493 µg/L	-0.1493 ppb	19:33:04
2	Mn 257.610†	-117.6	142.3	0.4463 µg/L	0.4463 ppb	19:33:24
2	Mo 202.031†	-2.4	3.0	0.2951 µg/L	0.2951 ppb	19:33:24
2	Ni 231.604†	312.9	-10.0	-0.4983 µg/L	-0.4983 ppb	19:33:24
2	P 214.914†	11.5	-4.2	-8.3725 µg/L	-8.3725 ppb	19:33:24
2	Pb 220.353†	83.2	-10.5	-2.5612 µg/L	-2.5612 ppb	19:33:24

2	S 181.975 Axial†	19.8	0.2	0.8387 µg/L	0.8387 ppb	19:33:24
2	Sb 206.836†	25.4	2.1	1.9038 µg/L	1.9038 ppb	19:33:24
2	Se 196.026†	16.0	-3.9	-5.4218 µg/L	-5.4218 ppb	19:33:24
2	SiO2†	1425.4	-14.3	-2.8218 µg/L	-2.8218 ppb	19:33:04
2	Si 251.611†	386.0	62.4	4.7401 µg/L	4.7401 ppb	19:33:24
2	Sn 189.927†	-0.4	-0.8	-0.3347 µg/L	-0.3347 ppb	19:33:24
2	Ti 334.940†	346.5	159.8	0.3550 µg/L	0.3550 ppb	19:33:04
2	Tl 190.801†	-19.1	3.9	5.0976 µg/L	5.0976 ppb	19:33:24
2	U 409.014†	-2.7	74.5	6.1922 µg/L	6.1922 ppb	19:33:04
2	V 292.402†	-29.1	16.7	0.1702 µg/L	0.1702 ppb	19:33:04
2	Zn 213.857†	529.8	-22.5	-0.5234 µg/L	-0.5234 ppb	19:33:24
3	Sc RADIAL	56634.0	56634.0	100 %		19:31:55
3	Al 396.153Radial†	3.4	-4.0	-2.7853 µg/L	-2.7853 ppb	19:31:55
3	Ca 317.933Radial†	194.5	-17.2	-14.719 µg/L	-14.719 ppb	19:32:16
3	Fe 238.204 Radial†	18.7	2.1	16.416 µg/L	16.416 ppb	19:32:16
3	K 766.490 Radial†	165.0	-0.4	-0.2546 µg/L	-0.2546 ppb	19:31:55
3	Mg 279.077 IEC†	11.4	-1.4	-12.921 µg/L	-12.921 ppb	19:32:16
3	Na 589.592 Radial†	499.6	26.2	8.0527 µg/L	8.0527 ppb	19:31:55
3	Sr 421.552†	20.0	-8.9	-0.0818 µg/L	-0.0818 ppb	19:31:55
3	Sc 361.383	2031784.6	2031784.6	103.50 %		19:33:30
3	Y 371.029	1401143.1	1401143.1	103.58 %		19:33:30
3	Ag 328.068†	-447.4	-30.7	-0.2248 µg/L	-0.2248 ppb	19:33:36
3	As 188.979†	-3.2	-2.6	-4.7006 µg/L	-4.7006 ppb	19:33:57
3	B 249.677†	355.0	-41.1	-1.6835 µg/L	-1.6835 ppb	19:33:57
3	Ba 233.527†	-12.0	5.5	0.1329 µg/L	0.1329 ppb	19:33:57
3	Be 313.107†	-2752.0	196.7	0.1167 µg/L	0.1167 ppb	19:33:36
3	Cd 226.502†	-133.4	12.8	0.3163 µg/L	0.3163 ppb	19:33:57
3	Co 228.616†	5.6	3.5	0.1593 µg/L	0.1593 ppb	19:33:57
3	Cr 267.716†	-3.9	46.6	0.9367 µg/L	0.9367 ppb	19:33:36
3	Cu 324.752†	2597.8	-33.7	-0.2180 µg/L	-0.2180 ppb	19:33:36
3	Mn 257.610†	-109.9	149.9	0.4720 µg/L	0.4720 ppb	19:33:57
3	Mo 202.031†	-0.0	5.3	0.5227 µg/L	0.5227 ppb	19:33:57
3	Ni 231.604†	321.2	-2.0	-0.0983 µg/L	-0.0983 ppb	19:33:57
3	P 214.914†	15.7	-0.2	-0.3967 µg/L	-0.3967 ppb	19:33:57
3	Pb 220.353†	93.0	-1.1	-0.2629 µg/L	-0.2629 ppb	19:33:57
3	S 181.975 Axial†	17.9	-1.7	-6.9059 µg/L	-6.9059 ppb	19:33:57
3	Sb 206.836†	24.5	1.2	1.0976 µg/L	1.0976 ppb	19:33:57
3	Se 196.026†	13.0	-6.8	-9.4419 µg/L	-9.4419 ppb	19:33:57
3	SiO2†	1471.5	30.2	5.9619 µg/L	5.9619 ppb	19:33:36
3	Si 251.611†	378.8	55.4	4.2091 µg/L	4.2091 ppb	19:33:57
3	Sn 189.927†	1.2	0.8	0.3212 µg/L	0.3212 ppb	19:33:57
3	Ti 334.940†	295.3	110.3	0.2447 µg/L	0.2447 ppb	19:33:36
3	Tl 190.801†	-22.9	0.3	0.3574 µg/L	0.3574 ppb	19:33:57
3	U 409.014†	-14.1	63.5	5.2725 µg/L	5.2725 ppb	19:33:36
3	V 292.402†	-25.9	19.7	0.2057 µg/L	0.2057 ppb	19:33:36
3	Zn 213.857†	530.6	-21.8	-0.5098 µg/L	-0.5098 ppb	19:33:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2029776.6	103.40 %	0.175			0.17%
Sc RADIAL	57294.7	101 %	1.1			1.05%
Y 371.029	1399408.7	103.45 %	0.238			0.23%
Ag 328.068†	-5.5	-0.0393 µg/L	0.18096	-0.0393 ppb	0.18096	460.14%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-13.9	-9.7076 µg/L	6.12268	-9.7076 ppb	6.12268	63.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.3	2.3757 µg/L	7.76979	2.3757 ppb	7.76979	327.05%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-45.7	-1.8686 µg/L	0.16289	-1.8686 ppb	0.16289	8.72%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.4	0.1057 µg/L	0.08714	0.1057 ppb	0.08714	82.40%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	123.6	0.0732 µg/L	0.03884	0.0732 ppb	0.03884	53.04%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-18.2	-15.537 µg/L	0.7823	-15.537 ppb	0.7823	5.04%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.7	0.2146 µg/L	0.10166	0.2146 ppb	0.10166	47.38%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.7	0.0299 µg/L	0.16412	0.0299 ppb	0.16412	548.91%

Cr	267.716†	10.3	0.2077 µg/L	0.64914	0.2077 ppb	0.64914	312.58%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-30.4	-0.1965 µg/L	0.04097	-0.1965 ppb	0.04097	20.85%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	1.7	13.558 µg/L	14.5386	13.558 ppb	14.5386	107.23%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	38.3	25.017 µg/L	25.7921	25.017 ppb	25.7921	103.10%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-1.6	-14.293 µg/L	6.6944	-14.293 ppb	6.6944	46.84%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	142.1	0.4473 µg/L	0.02431	0.4473 ppb	0.02431	5.44%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	3.3	0.3272 µg/L	0.18162	0.3272 ppb	0.18162	55.51%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	4.5	1.3835 µg/L	6.45342	1.3835 ppb	6.45342	466.47%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-7.2	-0.3567 µg/L	0.22417	-0.3567 ppb	0.22417	62.84%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-0.5	-0.9009 µg/L	7.23268	-0.9009 ppb	7.23268	802.85%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-5.9	-1.4470 µg/L	1.15074	-1.4470 ppb	1.15074	79.52%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-1.6	-6.4984 µg/L	7.14204	-6.4984 ppb	7.14204	109.90%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-0.8	-0.7386 µg/L	3.89940	-0.7386 ppb	3.89940	527.97%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-5.3	-7.3599 µg/L	2.01391	-7.3599 ppb	2.01391	27.36%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		12.2	2.4038 µg/L	4.62317	2.4038 ppb	4.62317	192.33%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	54.4	4.1325 µg/L	0.64925	4.1325 ppb	0.64925	15.71%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	0.8	0.3418 µg/L	0.68701	0.3418 ppb	0.68701	201.02%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-6.2	-0.0572 µg/L	0.20025	-0.0572 ppb	0.20025	350.12%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	135.1	0.2997 µg/L	0.05511	0.2997 ppb	0.05511	18.39%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	2.3	3.0500 µg/L	2.43504	3.0500 ppb	2.43504	79.84%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	73.6	6.1141 µg/L	0.80544	6.1141 ppb	0.80544	13.17%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	13.9	0.1464 µg/L	0.07408	0.1464 ppb	0.07408	50.58%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-19.0	-0.4428 µg/L	0.12799	-0.4428 ppb	0.12799	28.90%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 42

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 19:59:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58617.0	58617.0	104 %		19:59:42
1	Al 396.153Radial†	7256.0	6986.0	4849.5 µg/L	4849.5 ppb	19:59:42
1	Ca 317.933Radial†	6123.5	5690.6	4860.8 µg/L	4860.8 ppb	20:00:02
1	Fe 238.204 Radial†	667.2	626.5	4951.5 µg/L	4951.5 ppb	20:00:02
1	K 766.490 Radial†	7829.5	7381.2	4820.8 µg/L	4820.8 ppb	19:59:42
1	Mg 279.077 IEC†	588.8	554.6	4961.1 µg/L	4961.1 ppb	20:00:02
1	Na 589.592 Radial†	33301.2	31623.9	9713.1 µg/L	9713.1 ppb	19:59:42
1	Sr 421.552†	53397.7	51436.4	474.51 µg/L	474.51 ppb	19:59:42
1	Sc 361.383	2068511.8	2068511.8	105.37 %		20:01:05
1	Y 371.029	1423469.8	1423469.8	105.23 %		20:01:05
1	Ag 328.068†	67922.0	64862.9	484.01 µg/L	484.01 ppb	20:01:11
1	As 188.979†	296.0	281.4	503.36 µg/L	503.36 ppb	20:01:31
1	B 249.677†	12790.0	11754.2	477.28 µg/L	477.28 ppb	20:01:11
1	Ba 233.527†	21499.5	20421.1	491.13 µg/L	491.13 ppb	20:01:11
1	Be 313.107†	867694.3	826340.4	490.25 µg/L	490.25 ppb	20:01:05
1	Cd 226.502†	20783.9	19866.6	495.43 µg/L	495.43 ppb	20:01:11
1	Co 228.616†	11539.6	10949.8	495.33 µg/L	495.33 ppb	20:01:11
1	Cr 267.716†	25939.4	24668.1	495.77 µg/L	495.77 ppb	20:01:11
1	Cu 324.752†	80834.9	74172.6	484.85 µg/L	484.85 ppb	20:01:11
1	Mn 257.610†	167548.2	159267.5	499.21 µg/L	499.21 ppb	20:01:05
1	Mo 202.031†	5432.8	5161.4	505.62 µg/L	505.62 ppb	20:01:31
1	Ni 231.604†	10817.5	9954.0	495.67 µg/L	495.67 ppb	20:01:11
1	P 214.914†	1353.6	1269.3	2466.8 µg/L	2466.8 ppb	20:01:31
1	Pb 220.353†	2262.0	2055.8	499.95 µg/L	499.95 ppb	20:01:31
1	S 181.975 Axial†	272.7	239.9	994.69 µg/L	994.69 ppb	20:01:31
1	Sb 206.836†	591.4	538.8	496.84 µg/L	496.84 ppb	20:01:31
1	Se 196.026†	402.1	362.3	516.51 µg/L	516.51 ppb	20:01:31
1	SiO2†	29474.8	26581.5	5246.8 µg/L	5246.8 ppb	20:01:11
1	Si 251.611†	34348.3	32287.6	2454.6 µg/L	2454.6 ppb	20:01:11
1	Sn 189.927†	1273.6	1208.3	509.59 µg/L	509.59 ppb	20:01:31
1	Ti 334.940†	232532.4	220509.7	487.50 µg/L	487.50 ppb	20:01:05
1	Tl 190.801†	380.7	383.7	504.27 µg/L	504.27 ppb	20:01:31
1	U 409.014†	6183.0	5945.1	492.96 µg/L	492.96 ppb	20:01:11
1	V 292.402†	52726.6	50084.9	494.22 µg/L	494.22 ppb	20:01:11
1	Zn 213.857†	22867.3	21167.8	493.14 µg/L	493.14 ppb	20:01:11
2	Sc RADIAL	58636.6	58636.6	104 %		20:00:07
2	Al 396.153Radial†	7235.2	6963.6	4834.1 µg/L	4834.1 ppb	20:00:07
2	Ca 317.933Radial†	6136.1	5700.8	4869.5 µg/L	4869.5 ppb	20:00:28
2	Fe 238.204 Radial†	670.0	629.0	4971.2 µg/L	4971.2 ppb	20:00:28
2	K 766.490 Radial†	7740.8	7293.1	4763.3 µg/L	4763.3 ppb	20:00:07
2	Mg 279.077 IEC†	589.3	554.9	4963.5 µg/L	4963.5 ppb	20:00:28
2	Na 589.592 Radial†	33169.7	31486.4	9670.8 µg/L	9670.8 ppb	20:00:07
2	Sr 421.552†	53167.6	51197.6	472.31 µg/L	472.31 ppb	20:00:07
2	Sc 361.383	2055969.6	2055969.6	104.73 %		20:01:39
2	Y 371.029	1414871.3	1414871.3	104.59 %		20:01:39
2	Ag 328.068†	68170.5	65493.4	488.71 µg/L	488.71 ppb	20:01:44
2	As 188.979†	286.1	273.7	489.56 µg/L	489.56 ppb	20:02:05
2	B 249.677†	12871.2	11905.8	483.46 µg/L	483.46 ppb	20:01:44
2	Ba 233.527†	21540.4	20584.7	495.07 µg/L	495.07 ppb	20:01:44
2	Be 313.107†	866432.8	830159.5	492.52 µg/L	492.52 ppb	20:01:39
2	Cd 226.502†	20792.6	19995.3	498.64 µg/L	498.64 ppb	20:01:44
2	Co 228.616†	11548.2	11024.7	498.71 µg/L	498.71 ppb	20:01:44
2	Cr 267.716†	25975.2	24852.5	499.48 µg/L	499.48 ppb	20:01:44
2	Cu 324.752†	80962.2	74762.1	488.70 µg/L	488.70 ppb	20:01:44
2	Mn 257.610†	167284.8	159986.0	501.46 µg/L	501.46 ppb	20:01:39
2	Mo 202.031†	5294.1	5060.4	495.73 µg/L	495.73 ppb	20:02:05
2	Ni 231.604†	10791.2	9991.5	497.54 µg/L	497.54 ppb	20:01:44
2	P 214.914†	1329.3	1253.9	2435.7 µg/L	2435.7 ppb	20:02:05
2	Pb 220.353†	2213.3	2022.4	491.80 µg/L	491.80 ppb	20:02:05

2	S 181.975 Axial†	269.1	238.0	986.93 µg/L	986.93 ppb	20:02:05
2	Sb 206.836†	582.9	534.0	492.29 µg/L	492.29 ppb	20:02:05
2	Se 196.026†	393.7	356.6	508.59 µg/L	508.59 ppb	20:02:05
2	SiO2†	29657.1	26926.2	5314.9 µg/L	5314.9 ppb	20:01:44
2	Si 251.611†	34634.6	32759.9	2490.5 µg/L	2490.5 ppb	20:01:44
2	Sn 189.927†	1234.0	1177.9	496.78 µg/L	496.78 ppb	20:02:05
2	Ti 334.940†	231981.3	221329.7	489.32 µg/L	489.32 ppb	20:01:39
2	Tl 190.801†	381.4	386.5	507.93 µg/L	507.93 ppb	20:02:05
2	U 409.014†	6098.6	5900.3	489.23 µg/L	489.23 ppb	20:01:44
2	V 292.402†	52826.1	50485.1	498.06 µg/L	498.06 ppb	20:01:44
2	Zn 213.857†	22870.8	21303.6	496.31 µg/L	496.31 ppb	20:01:44
3	Sc RADIAL	59033.7	59033.7	104 %		20:00:33
3	Al 396.153Radial†	7290.5	6969.7	4840.1 µg/L	4840.1 ppb	20:00:33
3	Ca 317.933Radial†	6120.4	5646.0	4822.7 µg/L	4822.7 ppb	20:00:54
3	Fe 238.204 Radial†	666.4	621.2	4908.6 µg/L	4908.6 ppb	20:00:54
3	K 766.490 Radial†	7821.9	7320.6	4781.2 µg/L	4781.2 ppb	20:00:33
3	Mg 279.077 IEC†	587.2	549.1	4910.3 µg/L	4910.3 ppb	20:00:54
3	Na 589.592 Radial†	33485.2	31573.4	9697.6 µg/L	9697.6 ppb	20:00:33
3	Sr 421.552†	53913.2	51566.5	475.71 µg/L	475.71 ppb	20:00:33
3	Sc 361.383	2033065.7	2033065.7	103.56 %		20:02:12
3	Y 371.029	1398835.6	1398835.6	103.41 %		20:02:12
3	Ag 328.068†	63294.2	61518.2	458.88 µg/L	458.88 ppb	20:02:18
3	As 188.979†	245.5	237.5	424.87 µg/L	424.87 ppb	20:02:38
3	B 249.677†	11858.0	11065.9	449.15 µg/L	449.15 ppb	20:02:18
3	Ba 233.527†	19323.7	18676.0	449.14 µg/L	449.14 ppb	20:02:18
3	Be 313.107†	782866.8	758788.6	450.18 µg/L	450.18 ppb	20:02:12
3	Cd 226.502†	18556.4	18059.6	450.32 µg/L	450.32 ppb	20:02:18
3	Co 228.616†	10216.8	9863.3	446.13 µg/L	446.13 ppb	20:02:18
3	Cr 267.716†	22173.2	21460.7	431.32 µg/L	431.32 ppb	20:02:18
3	Cu 324.752†	72319.8	67287.9	439.90 µg/L	439.90 ppb	20:02:18
3	Mn 257.610†	151992.9	147019.7	460.85 µg/L	460.85 ppb	20:02:12
3	Mo 202.031†	4312.9	4169.9	408.53 µg/L	408.53 ppb	20:02:38
3	Ni 231.604†	9615.9	8972.7	446.82 µg/L	446.82 ppb	20:02:18
3	P 214.914†	1099.8	1046.6	2029.2 µg/L	2029.2 ppb	20:02:38
3	Pb 220.353†	1898.6	1742.3	423.60 µg/L	423.60 ppb	20:02:38
3	S 181.975 Axial†	229.2	202.4	839.15 µg/L	839.15 ppb	20:02:38
3	Sb 206.836†	490.6	451.2	415.60 µg/L	415.60 ppb	20:02:38
3	Se 196.026†	342.7	311.6	445.29 µg/L	445.29 ppb	20:02:38
3	SiO2†	27143.6	24818.1	4898.8 µg/L	4898.8 ppb	20:02:18
3	Si 251.611†	31477.2	30083.6	2287.0 µg/L	2287.0 ppb	20:02:18
3	Sn 189.927†	996.2	961.5	405.52 µg/L	405.52 ppb	20:02:38
3	Ti 334.940†	208374.6	201030.6	444.41 µg/L	444.41 ppb	20:02:12
3	Tl 190.801†	320.5	331.9	436.49 µg/L	436.49 ppb	20:02:38
3	U 409.014†	5350.1	5243.1	434.64 µg/L	434.64 ppb	20:02:18
3	V 292.402†	46198.8	44654.1	440.34 µg/L	440.34 ppb	20:02:18
3	Zn 213.857†	20325.7	19092.0	444.73 µg/L	444.73 ppb	20:02:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2052515.7	104.55 %	0.916			0.88%
Sc RADIAL	58762.4	104 %	0.4			0.40%
Y 371.029	1412392.2	104.41 %	0.924			0.89%
Ag 328.068†	63958.2	477.20 µg/L	16.037	477.20 ppb	16.037	3.36%
QC value within limits for Ag 328.068 Recovery = 95.44%						
Al 396.153Radial†	6973.1	4841.2 µg/L	7.74	4841.2 ppb	7.74	0.16%
QC value within limits for Al 396.153Radial Recovery = 96.82%						
As 188.979†	264.2	472.59 µg/L	41.905	472.59 ppb	41.905	8.87%
QC value within limits for As 188.979 Recovery = 94.52%						
B 249.677†	11575.3	469.96 µg/L	18.288	469.96 ppb	18.288	3.89%
QC value within limits for B 249.677 Recovery = 93.99%						
Ba 233.527†	19893.9	478.45 µg/L	25.456	478.45 ppb	25.456	5.32%
QC value within limits for Ba 233.527 Recovery = 95.69%						
Be 313.107†	805096.2	477.65 µg/L	23.819	477.65 ppb	23.819	4.99%
QC value within limits for Be 313.107 Recovery = 95.53%						
Ca 317.933Radial†	5679.2	4851.0 µg/L	24.88	4851.0 ppb	24.88	0.51%
QC value within limits for Ca 317.933Radial Recovery = 97.02%						
Cd 226.502†	19307.2	481.46 µg/L	27.019	481.46 ppb	27.019	5.61%
QC value within limits for Cd 226.502 Recovery = 96.29%						
Co 228.616†	10612.6	480.06 µg/L	29.431	480.06 ppb	29.431	6.13%

QC value within limits for Co 228.616	Recovery = 96.01%			
Cr 267.716†	23660.4	475.52 µg/L	38.328	475.52 ppb
QC value within limits for Cr 267.716	Recovery = 95.10%			
Cu 324.752†	72074.2	471.15 µg/L	27.129	471.15 ppb
QC value within limits for Cu 324.752	Recovery = 94.23%			
Fe 238.204 Radial†	625.5	4943.8 µg/L	32.02	4943.8 ppb
QC value within limits for Fe 238.204 Radial	Recovery = 98.88%			
K 766.490 Radial†	7331.7	4788.4 µg/L	29.43	4788.4 ppb
QC value within limits for K 766.490 Radial	Recovery = 95.77%			
Mg 279.077 IEC†	552.9	4944.9 µg/L	30.07	4944.9 ppb
QC value within limits for Mg 279.077 IEC	Recovery = 98.90%			
Mn 257.610†	155424.4	487.17 µg/L	22.824	487.17 ppb
QC value within limits for Mn 257.610	Recovery = 97.43%			
Mo 202.031†	4797.2	469.96 µg/L	53.431	469.96 ppb
QC value within limits for Mo 202.031	Recovery = 93.99%			
Na 589.592 Radial†	31561.2	9693.8 µg/L	21.36	9693.8 ppb
QC value within limits for Na 589.592 Radial	Recovery = 96.94%			
Ni 231.604†	9639.4	480.01 µg/L	28.762	480.01 ppb
QC value within limits for Ni 231.604	Recovery = 96.00%			
P 214.914†	1189.9	2310.6 µg/L	244.20	2310.6 ppb
QC value within limits for P 214.914	Recovery = 92.42%			
Pb 220.353†	1940.2	471.78 µg/L	41.928	471.78 ppb
QC value within limits for Pb 220.353	Recovery = 94.36%			
S 181.975 Axial†	226.7	940.25 µg/L	87.646	940.25 ppb
QC value within limits for S 181.975 Axial	Recovery = 94.03%			
Sb 206.836†	508.0	468.24 µg/L	45.646	468.24 ppb
QC value within limits for Sb 206.836	Recovery = 93.65%			
Se 196.026†	343.5	490.13 µg/L	39.036	490.13 ppb
QC value within limits for Se 196.026	Recovery = 98.03%			
SiO2†	26108.6	5153.5 µg/L	223.20	5153.5 ppb
QC value within limits for SiO2	Recovery = 96.37%			
Si 251.611†	31710.4	2410.7 µg/L	108.59	2410.7 ppb
QC value within limits for Si 251.611	Recovery = 96.43%			
Sn 189.927†	1115.9	470.63 µg/L	56.748	470.63 ppb
QC value within limits for Sn 189.927	Recovery = 94.13%			
Sr 421.552†	51400.1	474.17 µg/L	1.726	474.17 ppb
QC value within limits for Sr 421.552	Recovery = 94.83%			
Ti 334.940†	214290.0	473.74 µg/L	25.417	473.74 ppb
QC value within limits for Ti 334.940	Recovery = 94.75%			
Tl 190.801†	367.4	482.89 µg/L	40.230	482.89 ppb
QC value within limits for Tl 190.801	Recovery = 96.58%			
U 409.014†	5696.1	472.28 µg/L	32.647	472.28 ppb
QC value within limits for U 409.014	Recovery = 94.46%			
V 292.402†	48408.1	477.54 µg/L	32.275	477.54 ppb
QC value within limits for V 292.402	Recovery = 95.51%			
Zn 213.857†	20521.1	478.06 µg/L	28.907	478.06 ppb
QC value within limits for Zn 213.857	Recovery = 95.61%			

All analyte(s) passed QC.

Sequence No.: 43
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/19/2010 20:02:47
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57569.4	57569.4	102 %		20:03:20
1	Al 396.153Radial†	-22.6	-29.5	-20.579 µg/L	-20.579 ppb	20:03:20
1	Ca 317.933Radial†	198.2	-16.8	-14.330 µg/L	-14.330 ppb	20:03:40
1	Fe 238.204 Radial†	19.4	2.5	19.506 µg/L	19.506 ppb	20:03:40
1	K 766.490 Radial†	193.2	24.6	16.060 µg/L	16.060 ppb	20:03:20
1	Mg 279.077 IEC†	17.4	4.2	37.678 µg/L	37.678 ppb	20:03:40
1	Na 589.592 Radial†	507.7	26.1	8.0056 µg/L	8.0056 ppb	20:03:20
1	Sr 421.552†	69.4	39.3	0.3627 µg/L	0.3627 ppb	20:03:20
1	Sc 361.383	2028233.3	2028233.3	103.32 %		20:04:43
1	Y 371.029	1400221.9	1400221.9	103.51 %		20:04:43
1	Ag 328.068†	-425.8	-10.5	-0.0759 µg/L	-0.0759 ppb	20:04:48
1	As 188.979†	-0.0	0.4	0.7754 µg/L	0.7754 ppb	20:05:09
1	B 249.677†	384.2	-12.2	-0.5097 µg/L	-0.5097 ppb	20:05:09
1	Ba 233.527†	-8.4	9.0	0.2158 µg/L	0.2158 ppb	20:05:09
1	Be 313.107†	-2721.5	221.5	0.1313 µg/L	0.1313 ppb	20:04:48
1	Cd 226.502†	-138.1	8.0	0.1973 µg/L	0.1973 ppb	20:05:09
1	Co 228.616†	11.2	8.9	0.4024 µg/L	0.4024 ppb	20:05:09
1	Cr 267.716†	-77.7	-24.8	-0.4982 µg/L	-0.4982 ppb	20:04:48
1	Cu 324.752†	2603.6	-23.7	-0.1519 µg/L	-0.1519 ppb	20:04:48
1	Mn 257.610†	-163.1	98.1	0.3084 µg/L	0.3084 ppb	20:05:09
1	Mo 202.031†	7.5	12.6	1.2358 µg/L	1.2358 ppb	20:05:09
1	Ni 231.604†	299.1	-22.9	-1.1403 µg/L	-1.1403 ppb	20:05:09
1	P 214.914†	14.2	-1.6	-3.2353 µg/L	-3.2353 ppb	20:05:09
1	Pb 220.353†	90.8	-3.0	-0.7394 µg/L	-0.7394 ppb	20:05:09
1	S 181.975 Axial†	13.4	-5.9	-24.623 µg/L	-24.623 ppb	20:05:09
1	Sb 206.836†	25.4	2.1	1.9281 µg/L	1.9281 ppb	20:05:09
1	Se 196.026†	24.1	4.0	5.6292 µg/L	5.6292 ppb	20:05:09
1	SiO2†	1495.3	55.8	11.008 µg/L	11.008 ppb	20:04:48
1	Si 251.611†	422.4	98.2	7.4686 µg/L	7.4686 ppb	20:05:09
1	Sn 189.927†	3.5	3.0	1.2550 µg/L	1.2550 ppb	20:05:09
1	Ti 334.940†	384.2	196.9	0.4323 µg/L	0.4323 ppb	20:04:48
1	Tl 190.801†	-27.9	-4.6	-5.9805 µg/L	-5.9805 ppb	20:05:09
1	U 409.014†	2.8	79.8	6.6302 µg/L	6.6302 ppb	20:04:48
1	V 292.402†	-37.2	8.7	0.1027 µg/L	0.1027 ppb	20:04:48
1	Zn 213.857†	546.8	-5.1	-0.1177 µg/L	-0.1177 ppb	20:05:09
2	Sc RADIAL	57517.3	57517.3	102 %		20:03:46
2	Al 396.153Radial†	-0.6	-7.9	-5.5362 µg/L	-5.5362 ppb	20:03:46
2	Ca 317.933Radial†	193.6	-21.1	-17.995 µg/L	-17.995 ppb	20:04:06
2	Fe 238.204 Radial†	17.2	0.3	2.2760 µg/L	2.2760 ppb	20:04:06
2	K 766.490 Radial†	220.4	51.5	33.663 µg/L	33.663 ppb	20:03:46
2	Mg 279.077 IEC†	7.2	-5.8	-51.579 µg/L	-51.579 ppb	20:04:06
2	Na 589.592 Radial†	510.7	29.4	9.0386 µg/L	9.0386 ppb	20:03:46
2	Sr 421.552†	54.5	24.8	0.2285 µg/L	0.2285 ppb	20:03:46
2	Sc 361.383	2037744.1	2037744.1	103.80 %		20:05:15
2	Y 371.029	1408689.0	1408689.0	104.13 %		20:05:15
2	Ag 328.068†	-451.1	-32.9	-0.2433 µg/L	-0.2433 ppb	20:05:20
2	As 188.979†	-1.3	-0.8	-1.5061 µg/L	-1.5061 ppb	20:05:41
2	B 249.677†	373.4	-24.4	-0.9937 µg/L	-0.9937 ppb	20:05:41
2	Ba 233.527†	-11.7	5.8	0.1389 µg/L	0.1389 ppb	20:05:41
2	Be 313.107†	-2676.0	277.7	0.1647 µg/L	0.1647 ppb	20:05:20
2	Cd 226.502†	-133.2	13.4	0.3334 µg/L	0.3334 ppb	20:05:41
2	Co 228.616†	1.8	-0.2	-0.0098 µg/L	-0.0098 ppb	20:05:41
2	Cr 267.716†	-26.9	24.5	0.4922 µg/L	0.4922 ppb	20:05:20
2	Cu 324.752†	2624.5	-15.4	-0.0999 µg/L	-0.0999 ppb	20:05:20
2	Mn 257.610†	-174.3	88.1	0.2782 µg/L	0.2782 ppb	20:05:41
2	Mo 202.031†	-0.9	4.5	0.4383 µg/L	0.4383 ppb	20:05:41
2	Ni 231.604†	325.1	0.9	0.0446 µg/L	0.0446 ppb	20:05:41
2	P 214.914†	14.3	-1.6	-3.1937 µg/L	-3.1937 ppb	20:05:41
2	Pb 220.353†	89.5	-4.7	-1.1490 µg/L	-1.1490 ppb	20:05:41

2	S 181.975 Axial†	14.0	-5.5	-22.637 µg/L	-22.637 ppb	20:05:41
2	Sb 206.836†	15.2	-7.8	-7.1701 µg/L	-7.1701 ppb	20:05:41
2	Se 196.026†	20.1	0.0	0.0726 µg/L	0.0726 ppb	20:05:41
2	SiO2†	1557.2	108.6	21.433 µg/L	21.433 ppb	20:05:20
2	Si 251.611†	433.2	106.7	8.1144 µg/L	8.1144 ppb	20:05:41
2	Sn 189.927†	-0.5	-0.9	-0.3787 µg/L	-0.3787 ppb	20:05:41
2	Ti 334.940†	337.5	150.1	0.3359 µg/L	0.3359 ppb	20:05:20
2	Tl 190.801†	-19.6	3.5	4.5946 µg/L	4.5946 ppb	20:05:41
2	U 409.014†	-41.0	37.6	3.1255 µg/L	3.1255 ppb	20:05:20
2	V 292.402†	-37.8	8.4	0.0896 µg/L	0.0896 ppb	20:05:20
2	Zn 213.857†	536.8	-17.3	-0.4029 µg/L	-0.4029 ppb	20:05:41
3	Sc RADIAL	57101.8	57101.8	101 %		20:04:12
3	Al 396.153Radial†	-30.6	-37.6	-26.198 µg/L	-26.198 ppb	20:04:12
3	Ca 317.933Radial†	202.0	-11.4	-9.7154 µg/L	-9.7154 ppb	20:04:32
3	Fe 238.204 Radial†	16.6	-0.1	-0.8955 µg/L	-0.8955 ppb	20:04:32
3	K 766.490 Radial†	248.0	80.4	52.520 µg/L	52.520 ppb	20:04:12
3	Mg 279.077 IEC†	11.1	-1.9	-16.608 µg/L	-16.608 ppb	20:04:32
3	Na 589.592 Radial†	462.4	-14.7	-4.5060 µg/L	-4.5060 ppb	20:04:12
3	Sr 421.552†	86.8	57.1	0.5266 µg/L	0.5266 ppb	20:04:12
3	Sc 361.383	2024969.7	2024969.7	103.15 %		20:05:47
3	Y 371.029	1398302.4	1398302.4	103.37 %		20:05:47
3	Ag 328.068†	-423.6	-9.1	-0.0674 µg/L	-0.0674 ppb	20:05:53
3	As 188.979†	-1.6	-1.1	-1.9285 µg/L	-1.9285 ppb	20:06:13
3	B 249.677†	379.2	-16.5	-0.6717 µg/L	-0.6717 ppb	20:06:13
3	Ba 233.527†	0.7	17.8	0.4269 µg/L	0.4269 ppb	20:06:13
3	Be 313.107†	-2714.8	223.8	0.1327 µg/L	0.1327 ppb	20:05:53
3	Cd 226.502†	-132.0	13.7	0.3404 µg/L	0.3404 ppb	20:06:13
3	Co 228.616†	-1.2	-3.1	-0.1385 µg/L	-0.1385 ppb	20:06:13
3	Cr 267.716†	-33.0	18.3	0.3686 µg/L	0.3686 ppb	20:05:53
3	Cu 324.752†	2577.7	-44.8	-0.2926 µg/L	-0.2926 ppb	20:05:53
3	Mn 257.610†	-197.2	64.8	0.2036 µg/L	0.2036 ppb	20:06:13
3	Mo 202.031†	6.7	11.8	1.1572 µg/L	1.1572 ppb	20:06:13
3	Ni 231.604†	298.5	-22.9	-1.1431 µg/L	-1.1431 ppb	20:06:13
3	P 214.914†	13.3	-2.5	-4.8521 µg/L	-4.8521 ppb	20:06:13
3	Pb 220.353†	83.9	-9.6	-2.3299 µg/L	-2.3299 ppb	20:06:13
3	S 181.975 Axial†	20.3	0.8	3.2471 µg/L	3.2471 ppb	20:06:13
3	Sb 206.836†	24.6	1.3	1.2371 µg/L	1.2371 ppb	20:06:13
3	Se 196.026†	22.2	2.2	3.1385 µg/L	3.1385 ppb	20:06:13
3	SiO2†	1561.1	121.8	24.043 µg/L	24.043 ppb	20:05:53
3	Si 251.611†	451.8	127.4	9.6851 µg/L	9.6851 ppb	20:06:13
3	Sn 189.927†	2.9	2.4	1.0100 µg/L	1.0100 ppb	20:06:13
3	Ti 334.940†	371.5	185.1	0.4107 µg/L	0.4107 ppb	20:05:53
3	Tl 190.801†	-21.0	2.0	2.6499 µg/L	2.6499 ppb	20:06:13
3	U 409.014†	-27.8	50.1	4.1641 µg/L	4.1641 ppb	20:05:53
3	V 292.402†	-46.3	-0.1	0.0127 µg/L	0.0127 ppb	20:05:53
3	Zn 213.857†	547.9	-3.2	-0.0687 µg/L	-0.0687 ppb	20:06:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2030315.7	103.42 %	0.338			0.33%
Sc RADIAL	57396.2	102 %	0.5			0.45%
Y 371.029	1402404.4	103.67 %	0.409			0.39%
Ag 328.068†	-17.5	-0.1289 µg/L	0.09924	-0.1289 ppb	0.09924	77.01%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-25.0	-17.437 µg/L	10.6828	-17.437 ppb	10.6828	61.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.5	-0.8864 µg/L	1.45458	-0.8864 ppb	1.45458	164.10%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-17.7	-0.7250 µg/L	0.24636	-0.7250 ppb	0.24636	33.98%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.8	0.2605 µg/L	0.14916	0.2605 ppb	0.14916	57.25%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	241.0	0.1429 µg/L	0.01888	0.1429 ppb	0.01888	13.21%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-16.4	-14.013 µg/L	4.1488	-14.013 ppb	4.1488	29.61%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	11.7	0.2904 µg/L	0.08067	0.2904 ppb	0.08067	27.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	1.9	0.0847 µg/L	0.28258	0.0847 ppb	0.28258	333.70%

QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	6.0	0.1209 µg/L	0.53966	0.1209 ppb	0.53966 446.50%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-27.9	-0.1815 µg/L	0.09969	-0.1815 ppb	0.09969 54.94%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	0.9	6.9622 µg/L	10.97852	6.9622 ppb	10.97852 157.69%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	52.2	34.081 µg/L	18.2334	34.081 ppb	18.2334 53.50%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-1.1	-10.170 µg/L	44.9756	-10.170 ppb	44.9756 442.25%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	83.7	0.2634 µg/L	0.05392	0.2634 ppb	0.05392 20.47%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	9.6	0.9437 µg/L	0.43952	0.9437 ppb	0.43952 46.57%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	13.6	4.1794 µg/L	7.53951	4.1794 ppb	7.53951 180.40%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-15.0	-0.7463 µg/L	0.68489	-0.7463 ppb	0.68489 91.77%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-1.9	-3.7603 µg/L	0.94573	-3.7603 ppb	0.94573 25.15%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-5.8	-1.4061 µg/L	0.82584	-1.4061 ppb	0.82584 58.73%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-3.5	-14.671 µg/L	15.5492	-14.671 ppb	15.5492 105.99%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-1.5	-1.3350 µg/L	5.06517	-1.3350 ppb	5.06517 379.42%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	2.1	2.9468 µg/L	2.78328	2.9468 ppb	2.78328 94.45%
QC value within limits for Se 196.026 Recovery = Not calculated					
SiO2†	95.4	18.828 µg/L	6.8971	18.828 ppb	6.8971 36.63%
QC value within limits for SiO2 Recovery = Not calculated					
Si 251.611†	110.8	8.4227 µg/L	1.13993	8.4227 ppb	1.13993 13.53%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	1.5	0.6288 µg/L	0.88102	0.6288 ppb	0.88102 140.12%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	40.4	0.3726 µg/L	0.14931	0.3726 ppb	0.14931 40.07%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	177.4	0.3930 µg/L	0.05061	0.3930 ppb	0.05061 12.88%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	0.3	0.4213 µg/L	5.62878	0.4213 ppb	5.62878 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	55.8	4.6399 µg/L	1.80015	4.6399 ppb	1.80015 38.80%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	5.7	0.0683 µg/L	0.04863	0.0683 ppb	0.04863 71.18%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-8.5	-0.1964 µg/L	0.18047	-0.1964 ppb	0.18047 91.89%
QC value within limits for Zn 213.857 Recovery = Not calculated					
All analyte(s) passed QC.					

Sequence No.: 52

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 20:35:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57811.0	57811.0	102 %		20:36:24
1	Al 396.153Radial†	7388.1	7212.6	5006.8 µg/L	5006.8 ppb	20:36:24
1	Ca 317.933Radial†	6190.3	5838.2	4986.9 µg/L	4986.9 ppb	20:36:45
1	Fe 238.204 Radial†	686.3	654.2	5170.0 µg/L	5170.0 ppb	20:36:45
1	K 766.490 Radial†	7863.0	7519.2	4910.9 µg/L	4910.9 ppb	20:36:24
1	Mg 279.077 IEC†	595.3	569.0	5089.2 µg/L	5089.2 ppb	20:36:45
1	Na 589.592 Radial†	33730.1	32490.4	9979.2 µg/L	9979.2 ppb	20:36:24
1	Sr 421.552†	54087.0	52827.6	487.34 µg/L	487.34 ppb	20:36:24
1	Sc 361.383	2027762.0	2027762.0	103.29 %		20:37:48
1	Y 371.029	1396189.5	1396189.5	103.21 %		20:37:48
1	Ag 328.068†	68163.2	66391.9	495.42 µg/L	495.42 ppb	20:37:54
1	As 188.979†	292.5	283.7	507.44 µg/L	507.44 ppb	20:38:14
1	B 249.677†	12787.8	11996.0	487.04 µg/L	487.04 ppb	20:37:54
1	Ba 233.527†	21558.1	20888.0	502.36 µg/L	502.36 ppb	20:37:54
1	Be 313.107†	866205.3	841447.6	499.21 µg/L	499.21 ppb	20:37:48
1	Cd 226.502†	20872.3	20348.6	507.44 µg/L	507.44 ppb	20:37:54
1	Co 228.616†	11546.5	11176.4	505.59 µg/L	505.59 ppb	20:37:54
1	Cr 267.716†	26035.2	25255.6	507.58 µg/L	507.58 ppb	20:37:54
1	Cu 324.752†	80912.1	75789.0	495.43 µg/L	495.43 ppb	20:37:54
1	Mn 257.610†	167567.2	162481.4	509.30 µg/L	509.30 ppb	20:37:48
1	Mo 202.031†	5499.7	5329.7	522.12 µg/L	522.12 ppb	20:38:14
1	Ni 231.604†	10852.6	10194.3	507.64 µg/L	507.64 ppb	20:37:54
1	P 214.914†	1371.9	1312.8	2552.0 µg/L	2552.0 ppb	20:38:14
1	Pb 220.353†	2293.7	2129.7	517.93 µg/L	517.93 ppb	20:38:14
1	S 181.975 Axial†	271.3	243.7	1010.7 µg/L	1010.7 ppb	20:38:14
1	Sb 206.836†	610.9	568.9	524.60 µg/L	524.60 ppb	20:38:14
1	Se 196.026†	405.3	373.1	532.19 µg/L	532.19 ppb	20:38:14
1	SiO2†	29562.8	27228.8	5374.6 µg/L	5374.6 ppb	20:37:54
1	Si 251.611†	34535.5	33124.0	2518.1 µg/L	2518.1 ppb	20:37:54
1	Sn 189.927†	1288.7	1247.3	526.02 µg/L	526.02 ppb	20:38:14
1	Ti 334.940†	232020.0	224448.5	496.21 µg/L	496.21 ppb	20:37:48
1	Tl 190.801†	381.3	391.6	514.57 µg/L	514.57 ppb	20:38:14
1	U 409.014†	6126.5	6008.3	498.17 µg/L	498.17 ppb	20:37:54
1	V 292.402†	52790.3	51152.2	504.81 µg/L	504.81 ppb	20:37:54
1	Zn 213.857†	22965.6	21699.1	505.52 µg/L	505.52 ppb	20:37:54
2	Sc RADIAL	57688.1	57688.1	102 %		20:36:50
2	Al 396.153Radial†	7347.5	7188.2	4990.2 µg/L	4990.2 ppb	20:36:50
2	Ca 317.933Radial†	6170.4	5831.6	4981.2 µg/L	4981.2 ppb	20:37:11
2	Fe 238.204 Radial†	679.7	649.0	5129.7 µg/L	5129.7 ppb	20:37:11
2	K 766.490 Radial†	7862.4	7534.9	4921.2 µg/L	4921.2 ppb	20:36:50
2	Mg 279.077 IEC†	586.2	561.2	5019.8 µg/L	5019.8 ppb	20:37:11
2	Na 589.592 Radial†	33629.0	32461.7	9970.4 µg/L	9970.4 ppb	20:36:50
2	Sr 421.552†	53906.2	52763.0	486.75 µg/L	486.75 ppb	20:36:50
2	Sc 361.383	2033079.9	2033079.9	103.56 %		20:38:21
2	Y 371.029	1400966.0	1400966.0	103.56 %		20:38:21
2	Ag 328.068†	68767.8	66803.0	498.49 µg/L	498.49 ppb	20:38:27
2	As 188.979†	289.6	280.1	501.07 µg/L	501.07 ppb	20:38:48
2	B 249.677†	12962.6	12132.4	492.63 µg/L	492.63 ppb	20:38:27
2	Ba 233.527†	21784.9	21052.3	506.31 µg/L	506.31 ppb	20:38:27
2	Be 313.107†	868836.4	841794.7	499.42 µg/L	499.42 ppb	20:38:21
2	Cd 226.502†	21029.8	20447.8	509.92 µg/L	509.92 ppb	20:38:27
2	Co 228.616†	11697.0	11292.5	510.83 µg/L	510.83 ppb	20:38:27
2	Cr 267.716†	26246.5	25393.7	510.36 µg/L	510.36 ppb	20:38:27
2	Cu 324.752†	81619.6	76267.2	498.55 µg/L	498.55 ppb	20:38:27
2	Mn 257.610†	168162.1	162631.5	509.76 µg/L	509.76 ppb	20:38:21
2	Mo 202.031†	5295.6	5118.8	501.46 µg/L	501.46 ppb	20:38:48
2	Ni 231.604†	10929.3	10240.9	509.96 µg/L	509.96 ppb	20:38:27
2	P 214.914†	1331.9	1270.7	2468.1 µg/L	2468.1 ppb	20:38:48
2	Pb 220.353†	2225.5	2057.9	500.41 µg/L	500.41 ppb	20:38:48

2	S 181.975 Axial†	269.1	240.9	999.11 µg/L	999.11 ppb	20:38:48
2	Sb 206.836†	587.1	544.4	501.78 µg/L	501.78 ppb	20:38:48
2	Se 196.026†	397.3	364.3	519.74 µg/L	519.74 ppb	20:38:48
2	SiO2†	29990.1	27566.6	5441.3 µg/L	5441.3 ppb	20:38:27
2	Si 251.611†	34935.7	33422.9	2540.9 µg/L	2540.9 ppb	20:38:27
2	Sn 189.927†	1242.7	1199.6	505.90 µg/L	505.90 ppb	20:38:48
2	Ti 334.940†	232729.3	224545.8	496.43 µg/L	496.43 ppb	20:38:21
2	Tl 190.801†	371.6	381.2	501.12 µg/L	501.12 ppb	20:38:48
2	U 409.014†	6316.5	6176.2	512.13 µg/L	512.13 ppb	20:38:27
2	V 292.402†	53367.3	51575.7	508.79 µg/L	508.79 ppb	20:38:27
2	Zn 213.857†	23160.5	21829.2	508.56 µg/L	508.56 ppb	20:38:27
3	Sc RADIAL	57760.3	57760.3	102 %		20:37:16
3	Al 396.153Radial†	7302.7	7135.4	4955.4 µg/L	4955.4 ppb	20:37:16
3	Ca 317.933Radial†	6153.2	5807.2	4960.4 µg/L	4960.4 ppb	20:37:37
3	Fe 238.204 Radial†	676.8	645.4	5100.0 µg/L	5100.0 ppb	20:37:37
3	K 766.490 Radial†	7938.5	7599.7	4963.5 µg/L	4963.5 ppb	20:37:16
3	Mg 279.077 IEC†	588.7	563.0	5033.9 µg/L	5033.9 ppb	20:37:37
3	Na 589.592 Radial†	33538.1	32331.6	9930.4 µg/L	9930.4 ppb	20:37:16
3	Sr 421.552†	53805.7	52598.9	485.23 µg/L	485.23 ppb	20:37:16
3	Sc 361.383	2033958.3	2033958.3	103.61 %		20:38:55
3	Y 371.029	1400977.3	1400977.3	103.56 %		20:38:55
3	Ag 328.068†	62963.6	61172.3	456.31 µg/L	456.31 ppb	20:39:00
3	As 188.979†	248.4	240.2	429.67 µg/L	429.67 ppb	20:39:21
3	B 249.677†	11744.3	10951.1	444.37 µg/L	444.37 ppb	20:39:00
3	Ba 233.527†	19280.0	18625.6	447.93 µg/L	447.93 ppb	20:39:00
3	Be 313.107†	786101.6	761579.0	451.83 µg/L	451.83 ppb	20:38:55
3	Cd 226.502†	18540.5	18036.5	449.72 µg/L	449.72 ppb	20:39:00
3	Co 228.616†	10152.5	9797.0	443.12 µg/L	443.12 ppb	20:39:00
3	Cr 267.716†	22048.4	21330.9	428.71 µg/L	428.71 ppb	20:39:00
3	Cu 324.752†	71642.8	66603.9	435.46 µg/L	435.46 ppb	20:39:00
3	Mn 257.610†	152739.1	147675.5	462.92 µg/L	462.92 ppb	20:38:55
3	Mo 202.031†	4325.4	4180.1	409.54 µg/L	409.54 ppb	20:39:21
3	Ni 231.604†	9564.0	8918.6	444.13 µg/L	444.13 ppb	20:39:00
3	P 214.914†	1113.3	1059.1	2054.4 µg/L	2054.4 ppb	20:39:21
3	Pb 220.353†	1908.3	1750.9	425.71 µg/L	425.71 ppb	20:39:21
3	S 181.975 Axial†	235.9	208.8	865.74 µg/L	865.74 ppb	20:39:21
3	Sb 206.836†	489.0	449.5	414.04 µg/L	414.04 ppb	20:39:21
3	Se 196.026†	343.4	312.2	446.46 µg/L	446.46 ppb	20:39:21
3	SiO2†	26970.8	24639.8	4863.6 µg/L	4863.6 ppb	20:39:00
3	Si 251.611†	31321.6	29920.1	2274.6 µg/L	2274.6 ppb	20:39:00
3	Sn 189.927†	1005.3	969.9	409.06 µg/L	409.06 ppb	20:39:21
3	Ti 334.940†	209022.0	201567.2	445.59 µg/L	445.59 ppb	20:38:55
3	Tl 190.801†	324.2	335.3	441.01 µg/L	441.01 ppb	20:39:21
3	U 409.014†	5266.4	5160.0	427.71 µg/L	427.71 ppb	20:39:00
3	V 292.402†	45851.9	44299.7	436.90 µg/L	436.90 ppb	20:39:00
3	Zn 213.857†	20248.2	19008.5	442.78 µg/L	442.78 ppb	20:39:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2031600.1	103.49 %	0.171			0.17%
Sc RADIAL	57753.1	102 %	0.1			0.11%
Y 371.029	1399377.6	103.45 %	0.204			0.20%
Ag 328.068†	64789.1	483.41 µg/L	23.516	483.41 ppb	23.516	4.86%
QC value within limits for Ag 328.068 Recovery = 96.68%						
Al 396.153Radial†	7178.8	4984.1 µg/L	26.23	4984.1 ppb	26.23	0.53%
QC value within limits for Al 396.153Radial Recovery = 99.68%						
As 188.979†	268.0	479.39 µg/L	43.175	479.39 ppb	43.175	9.01%
QC value within limits for As 188.979 Recovery = 95.88%						
B 249.677†	11693.1	474.68 µg/L	26.400	474.68 ppb	26.400	5.56%
QC value within limits for B 249.677 Recovery = 94.94%						
Ba 233.527†	20188.6	485.53 µg/L	32.628	485.53 ppb	32.628	6.72%
QC value within limits for Ba 233.527 Recovery = 97.11%						
Be 313.107†	814940.4	483.49 µg/L	27.416	483.49 ppb	27.416	5.67%
QC value within limits for Be 313.107 Recovery = 96.70%						
Ca 317.933Radial†	5825.7	4976.2 µg/L	13.94	4976.2 ppb	13.94	0.28%
QC value within limits for Ca 317.933Radial Recovery = 99.52%						
Cd 226.502†	19610.9	489.02 µg/L	34.065	489.02 ppb	34.065	6.97%
QC value within limits for Cd 226.502 Recovery = 97.80%						
Co 228.616†	10755.3	486.52 µg/L	37.669	486.52 ppb	37.669	7.74%

QC value within limits for Co 228.616 Recovery = 97.30%					
Cr 267.716†	23993.4	482.21 µg/L	46.358	482.21 ppb	9.61%
QC value within limits for Cr 267.716 Recovery = 96.44%					
Cu 324.752†	72886.7	476.48 µg/L	35.555	476.48 ppb	7.46%
QC value within limits for Cu 324.752 Recovery = 95.30%					
Fe 238.204 Radial†	649.5	5133.2 µg/L	35.15	5133.2 ppb	0.68%
QC value within limits for Fe 238.204 Radial Recovery = 102.66%					
K 766.490 Radial†	7551.3	4931.9 µg/L	27.89	4931.9 ppb	0.57%
QC value within limits for K 766.490 Radial Recovery = 98.64%					
Mg 279.077 IEC†	564.4	5047.6 µg/L	36.69	5047.6 ppb	0.73%
QC value within limits for Mg 279.077 IEC Recovery = 100.95%					
Mn 257.610†	157596.1	494.00 µg/L	26.909	494.00 ppb	5.45%
QC value within limits for Mn 257.610 Recovery = 98.80%					
Mo 202.031†	4876.2	477.70 µg/L	59.931	477.70 ppb	12.55%
QC value within limits for Mo 202.031 Recovery = 95.54%					
Na 589.592 Radial†	32427.9	9960.0 µg/L	26.00	9960.0 ppb	0.26%
QC value within limits for Na 589.592 Radial Recovery = 99.60%					
Ni 231.604†	9784.6	487.24 µg/L	37.359	487.24 ppb	7.67%
QC value within limits for Ni 231.604 Recovery = 97.45%					
P 214.914†	1214.2	2358.2 µg/L	266.40	2358.2 ppb	11.30%
QC value within limits for P 214.914 Recovery = 94.33%					
Pb 220.353†	1979.5	481.35 µg/L	48.976	481.35 ppb	10.17%
QC value within limits for Pb 220.353 Recovery = 96.27%					
S 181.975 Axial†	231.1	958.52 µg/L	80.559	958.52 ppb	8.40%
QC value within limits for S 181.975 Axial Recovery = 95.85%					
Sb 206.836†	520.9	480.14 µg/L	58.372	480.14 ppb	12.16%
QC value within limits for Sb 206.836 Recovery = 96.03%					
Se 196.026†	349.9	499.46 µg/L	46.321	499.46 ppb	9.27%
QC value within limits for Se 196.026 Recovery = 99.89%					
SiO2†	26478.4	5226.5 µg/L	316.05	5226.5 ppb	6.05%
QC value within limits for SiO2 Recovery = 97.74%					
Si 251.611†	32155.7	2444.5 µg/L	147.62	2444.5 ppb	6.04%
QC value within limits for Si 251.611 Recovery = 97.78%					
Sn 189.927†	1138.9	480.33 µg/L	62.530	480.33 ppb	13.02%
QC value within limits for Sn 189.927 Recovery = 96.07%					
Sr 421.552†	52729.8	486.44 µg/L	1.088	486.44 ppb	0.22%
QC value within limits for Sr 421.552 Recovery = 97.29%					
Ti 334.940†	216853.8	479.41 µg/L	29.286	479.41 ppb	6.11%
QC value within limits for Ti 334.940 Recovery = 95.88%					
Tl 190.801†	369.4	485.57 µg/L	39.170	485.57 ppb	8.07%
QC value within limits for Tl 190.801 Recovery = 97.11%					
U 409.014†	5781.5	479.34 µg/L	45.254	479.34 ppb	9.44%
QC value within limits for U 409.014 Recovery = 95.87%					
V 292.402†	49009.2	483.50 µg/L	40.407	483.50 ppb	8.36%
QC value within limits for V 292.402 Recovery = 96.70%					
Zn 213.857†	20845.6	485.62 µg/L	37.132	485.62 ppb	7.65%
QC value within limits for Zn 213.857 Recovery = 97.12%					

All analyte(s) passed QC.

Sequence No.: 53
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/19/2010 20:39:30
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57162.5	57162.5	101 %		20:40:03
1	Al 396.153Radial†	-20.6	-27.7	-19.312 µg/L	-19.312 ppb	20:40:03
1	Ca 317.933Radial†	195.3	-18.2	-15.572 µg/L	-15.572 ppb	20:40:24
1	Fe 238.204 Radial†	18.3	1.6	12.247 µg/L	12.247 ppb	20:40:24
1	K 766.490 Radial†	190.9	23.7	15.502 µg/L	15.502 ppb	20:40:03
1	Mg 279.077 IEC†	9.0	-3.9	-34.969 µg/L	-34.969 ppb	20:40:24
1	Na 589.592 Radial†	476.5	-1.2	-0.3760 µg/L	-0.3760 ppb	20:40:03
1	Sr 421.552†	42.5	13.2	0.1218 µg/L	0.1218 ppb	20:40:03
1	Sc 361.383	2005809.0	2005809.0	102.17 %		20:41:26
1	Y 371.029	1386566.9	1386566.9	102.50 %		20:41:26
1	Ag 328.068†	-356.9	52.3	0.3879 µg/L	0.3879 ppb	20:41:31
1	As 188.979†	-5.8	-5.3	-9.4245 µg/L	-9.4245 ppb	20:41:52
1	B 249.677†	364.0	-27.9	-1.1423 µg/L	-1.1423 ppb	20:41:52
1	Ba 233.527†	-8.2	9.1	0.2179 µg/L	0.2179 ppb	20:41:52
1	Be 313.107†	-2726.8	187.0	0.1108 µg/L	0.1108 ppb	20:41:31
1	Cd 226.502†	-147.9	-3.1	-0.0778 µg/L	-0.0778 ppb	20:41:52
1	Co 228.616†	7.1	5.0	0.2268 µg/L	0.2268 ppb	20:41:52
1	Cr 267.716†	-43.6	7.7	0.1543 µg/L	0.1543 ppb	20:41:31
1	Cu 324.752†	2639.9	39.9	0.2624 µg/L	0.2624 ppb	20:41:31
1	Mn 257.610†	-151.5	107.7	0.3403 µg/L	0.3403 ppb	20:41:52
1	Mo 202.031†	6.4	11.6	1.1391 µg/L	1.1391 ppb	20:41:52
1	Ni 231.604†	316.5	-2.6	-0.1301 µg/L	-0.1301 ppb	20:41:52
1	P 214.914†	12.1	-3.5	-7.0029 µg/L	-7.0029 ppb	20:41:52
1	Pb 220.353†	81.5	-11.1	-2.7059 µg/L	-2.7059 ppb	20:41:52
1	S 181.975 Axial†	13.5	-5.7	-23.814 µg/L	-23.814 ppb	20:41:52
1	Sb 206.836†	24.3	1.2	1.1646 µg/L	1.1646 ppb	20:41:52
1	Se 196.026†	7.0	-12.5	-17.428 µg/L	-17.428 ppb	20:41:52
1	SiO2†	1501.0	77.5	15.292 µg/L	15.292 ppb	20:41:31
1	Si 251.611†	421.6	102.0	7.7577 µg/L	7.7577 ppb	20:41:52
1	Sn 189.927†	1.5	1.1	0.4747 µg/L	0.4747 ppb	20:41:52
1	Ti 334.940†	398.8	215.3	0.4788 µg/L	0.4788 ppb	20:41:31
1	Tl 190.801†	-25.8	-2.8	-3.6663 µg/L	-3.6663 ppb	20:41:52
1	U 409.014†	-80.7	-1.9	-0.1586 µg/L	-0.1586 ppb	20:41:31
1	V 292.402†	-54.6	-8.7	-0.0740 µg/L	-0.0740 ppb	20:41:31
1	Zn 213.857†	530.1	-15.6	-0.3645 µg/L	-0.3645 ppb	20:41:52
2	Sc RADIAL	57110.3	57110.3	101 %		20:40:29
2	Al 396.153Radial†	-14.1	-21.4	-14.870 µg/L	-14.870 ppb	20:40:29
2	Ca 317.933Radial†	198.8	-14.6	-12.455 µg/L	-12.455 ppb	20:40:49
2	Fe 238.204 Radial†	16.0	-0.7	-5.6974 µg/L	-5.6974 ppb	20:40:49
2	K 766.490 Radial†	221.1	53.7	35.087 µg/L	35.087 ppb	20:40:29
2	Mg 279.077 IEC†	11.7	-1.2	-10.895 µg/L	-10.895 ppb	20:40:49
2	Na 589.592 Radial†	429.7	-47.1	-14.471 µg/L	-14.471 ppb	20:40:29
2	Sr 421.552†	18.0	-11.0	-0.1015 µg/L	-0.1015 ppb	20:40:29
2	Sc 361.383	2018163.8	2018163.8	102.80 %		20:41:58
2	Y 371.029	1394669.2	1394669.2	103.10 %		20:41:58
2	Ag 328.068†	-380.5	31.5	0.2331 µg/L	0.2331 ppb	20:42:03
2	As 188.979†	-3.5	-2.9	-5.2309 µg/L	-5.2309 ppb	20:42:24
2	B 249.677†	356.6	-37.3	-1.5164 µg/L	-1.5164 ppb	20:42:24
2	Ba 233.527†	0.7	17.8	0.4272 µg/L	0.4272 ppb	20:42:24
2	Be 313.107†	-2645.1	282.8	0.1677 µg/L	0.1677 ppb	20:42:03
2	Cd 226.502†	-142.5	3.0	0.0759 µg/L	0.0759 ppb	20:42:24
2	Co 228.616†	8.4	6.3	0.2840 µg/L	0.2840 ppb	20:42:24
2	Cr 267.716†	-35.6	15.8	0.3172 µg/L	0.3172 ppb	20:42:03
2	Cu 324.752†	2611.1	-3.9	-0.0261 µg/L	-0.0261 ppb	20:42:03
2	Mn 257.610†	-153.4	106.8	0.3340 µg/L	0.3340 ppb	20:42:24
2	Mo 202.031†	1.6	6.9	0.6745 µg/L	0.6745 ppb	20:42:24
2	Ni 231.604†	310.9	-9.9	-0.4961 µg/L	-0.4961 ppb	20:42:24
2	P 214.914†	14.4	-1.3	-2.5139 µg/L	-2.5139 ppb	20:42:24
2	Pb 220.353†	85.6	-7.7	-1.8763 µg/L	-1.8763 ppb	20:42:24

2	S 181.975 Axial†	16.1	-3.2	-13.393 µg/L	-13.393 ppb	20:42:24
2	Sb 206.836†	24.8	1.7	1.5353 µg/L	1.5353 ppb	20:42:24
2	Se 196.026†	18.4	-1.4	-1.9764 µg/L	-1.9764 ppb	20:42:24
2	SiO2†	1495.4	63.0	12.440 µg/L	12.440 ppb	20:42:03
2	Si 251.611†	417.9	95.9	7.2895 µg/L	7.2895 ppb	20:42:24
2	Sn 189.927†	7.5	6.9	2.9027 µg/L	2.9027 ppb	20:42:24
2	Ti 334.940†	363.4	178.5	0.3955 µg/L	0.3955 ppb	20:42:03
2	Tl 190.801†	-20.3	2.6	3.4259 µg/L	3.4259 ppb	20:42:24
2	U 409.014†	-48.9	29.5	2.4528 µg/L	2.4528 ppb	20:42:03
2	V 292.402†	-44.8	1.2	0.0192 µg/L	0.0192 ppb	20:42:03
2	Zn 213.857†	537.2	-11.8	-0.2740 µg/L	-0.2740 ppb	20:42:24
3	Sc RADIAL	56287.1	56287.1	99.6 %		20:40:55
3	Al 396.153Radial†	-17.5	-24.9	-17.369 µg/L	-17.369 ppb	20:40:55
3	Ca 317.933Radial†	205.6	-4.9	-4.1718 µg/L	-4.1718 ppb	20:41:15
3	Fe 238.204 Radial†	18.7	2.2	17.059 µg/L	17.059 ppb	20:41:15
3	K 766.490 Radial†	216.2	52.0	33.972 µg/L	33.972 ppb	20:40:55
3	Mg 279.077 IEC†	14.3	1.5	13.643 µg/L	13.643 ppb	20:41:15
3	Na 589.592 Radial†	474.9	4.5	1.3843 µg/L	1.3843 ppb	20:40:55
3	Sr 421.552†	69.4	40.8	0.3766 µg/L	0.3766 ppb	20:40:55
3	Sc 361.383	2011137.2	2011137.2	102.45 %		20:42:30
3	Y 371.029	1391137.6	1391137.6	102.84 %		20:42:30
3	Ag 328.068†	-401.5	9.7	0.0756 µg/L	0.0756 ppb	20:42:35
3	As 188.979†	-0.8	-0.3	-0.5665 µg/L	-0.5665 ppb	20:42:56
3	B 249.677†	346.6	-45.8	-1.8768 µg/L	-1.8768 ppb	20:42:56
3	Ba 233.527†	-8.1	9.2	0.2209 µg/L	0.2209 ppb	20:42:56
3	Be 313.107†	-2811.5	111.4	0.0659 µg/L	0.0659 ppb	20:42:35
3	Cd 226.502†	-144.9	0.2	0.0027 µg/L	0.0027 ppb	20:42:56
3	Co 228.616†	2.5	0.5	0.0230 µg/L	0.0230 ppb	20:42:56
3	Cr 267.716†	-35.3	16.0	0.3209 µg/L	0.3209 ppb	20:42:35
3	Cu 324.752†	2596.5	-9.2	-0.0576 µg/L	-0.0576 ppb	20:42:35
3	Mn 257.610†	-144.2	115.3	0.3628 µg/L	0.3628 ppb	20:42:56
3	Mo 202.031†	5.0	10.2	1.0037 µg/L	1.0037 ppb	20:42:56
3	Ni 231.604†	304.8	-14.8	-0.7372 µg/L	-0.7372 ppb	20:42:56
3	P 214.914†	12.9	-2.8	-5.4792 µg/L	-5.4792 ppb	20:42:56
3	Pb 220.353†	85.3	-7.7	-1.8682 µg/L	-1.8682 ppb	20:42:56
3	S 181.975 Axial†	20.2	0.8	3.1941 µg/L	3.1941 ppb	20:42:56
3	Sb 206.836†	18.9	-4.0	-3.6766 µg/L	-3.6766 ppb	20:42:56
3	Se 196.026†	18.1	-1.7	-2.3416 µg/L	-2.3416 ppb	20:42:56
3	SiO2†	1495.2	67.9	13.403 µg/L	13.403 ppb	20:42:35
3	Si 251.611†	434.6	113.6	8.6363 µg/L	8.6363 ppb	20:42:56
3	Sn 189.927†	2.2	1.8	0.7385 µg/L	0.7385 ppb	20:42:56
3	Ti 334.940†	476.2	289.8	0.6400 µg/L	0.6400 ppb	20:42:35
3	Tl 190.801†	-22.5	0.4	0.5912 µg/L	0.5912 ppb	20:42:56
3	U 409.014†	-60.8	17.7	1.4714 µg/L	1.4714 ppb	20:42:35
3	V 292.402†	-1.0	43.8	0.4391 µg/L	0.4391 ppb	20:42:35
3	Zn 213.857†	528.9	-18.1	-0.4235 µg/L	-0.4235 ppb	20:42:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2011703.4	102.47 %	0.316			0.31%
Sc RADIAL	56853.3	101 %	0.9			0.86%
Y 371.029	1390791.2	102.81 %	0.300			0.29%
Ag 328.068†	31.2	0.2322 µg/L	0.15616	0.2322 ppb	0.15616	67.25%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-24.7	-17.184 µg/L	2.2266	-17.184 ppb	2.2266	12.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.8	-5.0740 µg/L	4.43112	-5.0740 ppb	4.43112	87.33%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-37.0	-1.5118 µg/L	0.36725	-1.5118 ppb	0.36725	24.29%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	12.0	0.2887 µg/L	0.11995	0.2887 ppb	0.11995	41.55%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	193.7	0.1148 µg/L	0.05103	0.1148 ppb	0.05103	44.46%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-12.6	-10.733 µg/L	5.8919	-10.733 ppb	5.8919	54.90%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	0.1	0.0002 µg/L	0.07690	0.0002 ppb	0.07690	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	3.9	0.1779 µg/L	0.13721	0.1779 ppb	0.13721	77.12%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	13.1	0.2641 µg/L	0.09516	0.2641 ppb	0.09516 36.03%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	9.0	0.0596 µg/L	0.17639	0.0596 ppb	0.17639 296.17%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	1.0	7.8695 µg/L	11.99309	7.8695 ppb	11.99309 152.40%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	43.2	28.187 µg/L	10.9995	28.187 ppb	10.9995 39.02%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-1.2	-10.740 µg/L	24.3062	-10.740 ppb	24.3062 226.30%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	109.9	0.3457 µg/L	0.01513	0.3457 ppb	0.01513 4.38%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	9.6	0.9391 µg/L	0.23895	0.9391 ppb	0.23895 25.45%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	-14.6	-4.4874 µg/L	8.69036	-4.4874 ppb	8.69036 193.66%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-9.1	-0.4545 µg/L	0.30571	-0.4545 ppb	0.30571 67.27%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-2.5	-4.9987 µg/L	2.28274	-4.9987 ppb	2.28274 45.67%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-8.8	-2.1501 µg/L	0.48133	-2.1501 ppb	0.48133 22.39%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-2.7	-11.337 µg/L	13.6207	-11.337 ppb	13.6207 120.14%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	-0.4	-0.3256 µg/L	2.90798	-0.3256 ppb	2.90798 893.20%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-5.2	-7.2486 µg/L	8.81736	-7.2486 ppb	8.81736 121.64%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	69.5	13.712 µg/L	1.4510	13.712 ppb	1.4510 10.58%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	103.8	7.8945 µg/L	0.68372	7.8945 ppb	0.68372 8.66%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	3.3	1.3720 µg/L	1.33219	1.3720 ppb	1.33219 97.10%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	14.3	0.1323 µg/L	0.23923	0.1323 ppb	0.23923 180.85%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	227.9	0.5048 µg/L	0.12431	0.5048 ppb	0.12431 24.63%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	0.1	0.1169 µg/L	3.56976	0.1169 ppb	3.56976 >999.9%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	15.1	1.2552 µg/L	1.31907	1.2552 ppb	1.31907 105.09%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	12.1	0.1281 µg/L	0.27331	0.1281 ppb	0.27331 213.36%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-15.2	-0.3540 µg/L	0.07531	-0.3540 ppb	0.07531 21.27%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 61

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 21:08:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58780.4	58780.4	104 %		21:08:58
1	Al 396.153Radial†	7195.1	6908.1	4795.0 µg/L	4795.0 ppb	21:08:58
1	Ca 317.933Radial†	6074.4	5627.0	4806.5 µg/L	4806.5 ppb	21:09:18
1	Fe 238.204 Radial†	666.1	623.6	4928.9 µg/L	4928.9 ppb	21:09:18
1	K 766.490 Radial†	7823.5	7354.4	4803.3 µg/L	4803.3 ppb	21:08:58
1	Mg 279.077 IEC†	587.1	551.5	4933.1 µg/L	4933.1 ppb	21:09:18
1	Na 589.592 Radial†	33229.4	31465.6	9664.4 µg/L	9664.4 ppb	21:08:58
1	Sr 421.552†	53405.2	51300.6	473.26 µg/L	473.26 ppb	21:08:58
1	Sc 361.383	2031693.4	2031693.4	103.49 %		21:10:22
1	Y 371.029	1400531.0	1400531.0	103.53 %		21:10:22
1	Ag 328.068†	67476.4	65600.6	489.51 µg/L	489.51 ppb	21:10:27
1	As 188.979†	292.3	282.9	506.06 µg/L	506.06 ppb	21:10:48
1	B 249.677†	12687.3	11875.0	482.23 µg/L	482.23 ppb	21:10:27
1	Ba 233.527†	21301.5	20599.6	495.43 µg/L	495.43 ppb	21:10:27
1	Be 313.107†	857576.3	831487.1	493.30 µg/L	493.30 ppb	21:10:22
1	Cd 226.502†	20668.3	20112.4	501.57 µg/L	501.57 ppb	21:10:27
1	Co 228.616†	11438.4	11050.4	499.89 µg/L	499.89 ppb	21:10:27
1	Cr 267.716†	25764.0	24944.8	501.33 µg/L	501.33 ppb	21:10:27
1	Cu 324.752†	80279.0	75025.7	490.41 µg/L	490.41 ppb	21:10:27
1	Mn 257.610†	165571.7	160239.4	502.25 µg/L	502.25 ppb	21:10:22
1	Mo 202.031†	5439.6	5261.4	515.41 µg/L	515.41 ppb	21:10:48
1	Ni 231.604†	10750.1	10074.9	501.70 µg/L	501.70 ppb	21:10:27
1	P 214.914†	1349.1	1288.2	2503.9 µg/L	2503.9 ppb	21:10:48
1	Pb 220.353†	2254.8	2087.7	507.72 µg/L	507.72 ppb	21:10:48
1	S 181.975 Axial†	277.5	249.2	1033.4 µg/L	1033.4 ppb	21:10:48
1	Sb 206.836†	587.9	545.6	503.19 µg/L	503.19 ppb	21:10:48
1	Se 196.026†	400.3	367.5	523.81 µg/L	523.81 ppb	21:10:48
1	SiO2†	29116.0	26741.7	5278.5 µg/L	5278.5 ppb	21:10:27
1	Si 251.611†	33907.1	32452.1	2467.1 µg/L	2467.1 ppb	21:10:27
1	Sn 189.927†	1278.1	1234.6	520.67 µg/L	520.67 ppb	21:10:48
1	Ti 334.940†	229666.3	221739.6	490.22 µg/L	490.22 ppb	21:10:22
1	Tl 190.801†	374.5	384.2	504.96 µg/L	504.96 ppb	21:10:48
1	U 409.014†	6113.1	5983.9	496.19 µg/L	496.19 ppb	21:10:27
1	V 292.402†	52349.3	50627.2	499.60 µg/L	499.60 ppb	21:10:27
1	Zn 213.857†	22683.3	21383.2	498.16 µg/L	498.16 ppb	21:10:27
2	Sc RADIAL	57808.7	57808.7	102 %		21:09:24
2	Al 396.153Radial†	7047.8	6880.4	4776.2 µg/L	4776.2 ppb	21:09:24
2	Ca 317.933Radial†	6096.5	5746.7	4908.7 µg/L	4908.7 ppb	21:09:44
2	Fe 238.204 Radial†	663.6	632.0	4994.7 µg/L	4994.7 ppb	21:09:44
2	K 766.490 Radial†	7642.6	7304.0	4770.4 µg/L	4770.4 ppb	21:09:24
2	Mg 279.077 IEC†	579.2	553.3	4948.6 µg/L	4948.6 ppb	21:09:44
2	Na 589.592 Radial†	32775.0	31558.4	9692.9 µg/L	9692.9 ppb	21:09:24
2	Sr 421.552†	52410.5	51191.2	472.25 µg/L	472.25 ppb	21:09:24
2	Sc 361.383	2049495.0	2049495.0	104.40 %		21:10:55
2	Y 371.029	1411660.7	1411660.7	104.35 %		21:10:55
2	Ag 328.068†	67550.5	65105.2	485.82 µg/L	485.82 ppb	21:11:01
2	As 188.979†	289.6	277.9	497.13 µg/L	497.13 ppb	21:11:21
2	B 249.677†	12725.6	11805.1	479.34 µg/L	479.34 ppb	21:11:01
2	Ba 233.527†	21349.4	20466.7	492.23 µg/L	492.23 ppb	21:11:01
2	Be 313.107†	866033.8	832390.8	493.84 µg/L	493.84 ppb	21:10:55
2	Cd 226.502†	20727.2	19995.3	498.64 µg/L	498.64 ppb	21:11:01
2	Co 228.616†	11460.7	10975.7	496.49 µg/L	496.49 ppb	21:11:01
2	Cr 267.716†	25871.8	24831.8	499.06 µg/L	499.06 ppb	21:11:01
2	Cu 324.752†	80404.8	74472.4	486.81 µg/L	486.81 ppb	21:11:01
2	Mn 257.610†	167118.2	160331.1	502.55 µg/L	502.55 ppb	21:10:55
2	Mo 202.031†	5254.1	5038.0	493.54 µg/L	493.54 ppb	21:11:21
2	Ni 231.604†	10763.2	9997.2	497.83 µg/L	497.83 ppb	21:11:01
2	P 214.914†	1302.2	1232.0	2392.5 µg/L	2392.5 ppb	21:11:21
2	Pb 220.353†	2211.3	2027.1	492.93 µg/L	492.93 ppb	21:11:21

2	S 181.975 Axial†	268.4	238.1	987.50 µg/L	987.50 ppb	21:11:21
2	Sb 206.836†	582.5	535.4	493.50 µg/L	493.50 ppb	21:11:21
2	Se 196.026†	387.4	351.8	501.93 µg/L	501.93 ppb	21:11:21
2	SiO2†	29211.0	26588.3	5248.2 µg/L	5248.2 ppb	21:11:01
2	Si 251.611†	34096.5	32348.9	2459.2 µg/L	2459.2 ppb	21:11:01
2	Sn 189.927†	1232.7	1180.4	497.82 µg/L	497.82 ppb	21:11:21
2	Ti 334.940†	231940.6	221990.5	490.78 µg/L	490.78 ppb	21:10:55
2	Tl 190.801†	370.0	376.8	495.24 µg/L	495.24 ppb	21:11:21
2	U 409.014†	6104.7	5924.5	491.24 µg/L	491.24 ppb	21:11:01
2	V 292.402†	52450.2	50284.5	496.09 µg/L	496.09 ppb	21:11:01
2	Zn 213.857†	22753.7	21260.4	495.30 µg/L	495.30 ppb	21:11:01
3	Sc RADIAL	57645.3	57645.3	102 %		21:09:50
3	Al 396.153Radial†	7101.7	6952.7	4828.5 µg/L	4828.5 ppb	21:09:50
3	Ca 317.933Radial†	6127.9	5794.4	4949.5 µg/L	4949.5 ppb	21:10:10
3	Fe 238.204 Radial†	665.9	636.0	5025.6 µg/L	5025.6 ppb	21:10:10
3	K 766.490 Radial†	7687.0	7368.7	4812.6 µg/L	4812.6 ppb	21:09:50
3	Mg 279.077 IEC†	588.9	564.4	5046.2 µg/L	5046.2 ppb	21:10:10
3	Na 589.592 Radial†	32797.2	31670.9	9727.5 µg/L	9727.5 ppb	21:09:50
3	Sr 421.552†	52594.3	51516.6	475.25 µg/L	475.25 ppb	21:09:50
3	Sc 361.383	2043330.2	2043330.2	104.09 %		21:11:28
3	Y 371.029	1408836.0	1408836.0	104.15 %		21:11:28
3	Ag 328.068†	61712.7	59691.8	445.28 µg/L	445.28 ppb	21:11:34
3	As 188.979†	240.0	231.0	413.29 µg/L	413.29 ppb	21:11:54
3	B 249.677†	11528.4	10691.7	433.82 µg/L	433.82 ppb	21:11:34
3	Ba 233.527†	18793.6	18072.9	434.64 µg/L	434.64 ppb	21:11:34
3	Be 313.107†	773952.6	746427.0	442.84 µg/L	442.84 ppb	21:11:28
3	Cd 226.502†	18104.4	17535.4	437.21 µg/L	437.21 ppb	21:11:34
3	Co 228.616†	9919.4	9528.1	430.96 µg/L	430.96 ppb	21:11:34
3	Cr 267.716†	21628.5	20829.9	418.64 µg/L	418.64 ppb	21:11:34
3	Cu 324.752†	70293.2	64990.1	424.92 µg/L	424.92 ppb	21:11:34
3	Mn 257.610†	150318.2	144673.6	453.51 µg/L	453.51 ppb	21:11:28
3	Mo 202.031†	4250.4	4088.9	400.60 µg/L	400.60 ppb	21:11:54
3	Ni 231.604†	9317.9	8639.7	430.24 µg/L	430.24 ppb	21:11:34
3	P 214.914†	1076.0	1018.4	1974.8 µg/L	1974.8 ppb	21:11:54
3	Pb 220.353†	1875.8	1711.2	416.06 µg/L	416.06 ppb	21:11:54
3	S 181.975 Axial†	231.3	203.3	842.98 µg/L	842.98 ppb	21:11:54
3	Sb 206.836†	484.5	443.0	408.08 µg/L	408.08 ppb	21:11:54
3	Se 196.026†	334.8	302.4	432.47 µg/L	432.47 ppb	21:11:54
3	SiO2†	26265.0	23842.4	4706.2 µg/L	4706.2 ppb	21:11:34
3	Si 251.611†	30430.4	28925.2	2199.0 µg/L	2199.0 ppb	21:11:34
3	Sn 189.927†	990.4	951.2	401.15 µg/L	401.15 ppb	21:11:54
3	Ti 334.940†	205711.5	197461.3	436.51 µg/L	436.51 ppb	21:11:28
3	Tl 190.801†	323.8	333.4	438.43 µg/L	438.43 ppb	21:11:54
3	U 409.014†	5199.4	5072.4	420.44 µg/L	420.44 ppb	21:11:34
3	V 292.402†	45058.2	43334.2	427.38 µg/L	427.38 ppb	21:11:34
3	Zn 213.857†	19790.2	18479.0	430.43 µg/L	430.43 ppb	21:11:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2041506.2	103.99 %	0.460			0.44%
Sc RADIAL	58078.1	103 %	1.1			1.06%
Y 371.029	1407009.2	104.01 %	0.428			0.41%
Ag 328.068†	63465.9	473.53 µg/L	24.543	473.53 ppb	24.543	5.18%
QC value within limits for Ag 328.068 Recovery = 94.71%						
Al 396.153Radial†	6913.7	4799.9 µg/L	26.45	4799.9 ppb	26.45	0.55%
QC value within limits for Al 396.153Radial Recovery = 96.00%						
As 188.979†	263.9	472.16 µg/L	51.179	472.16 ppb	51.179	10.84%
QC value within limits for As 188.979 Recovery = 94.43%						
B 249.677†	11457.3	465.13 µg/L	27.155	465.13 ppb	27.155	5.84%
QC value within limits for B 249.677 Recovery = 93.03%						
Ba 233.527†	19713.1	474.10 µg/L	34.210	474.10 ppb	34.210	7.22%
QC value within limits for Ba 233.527 Recovery = 94.82%						
Be 313.107†	803435.0	476.66 µg/L	29.291	476.66 ppb	29.291	6.15%
QC value within limits for Be 313.107 Recovery = 95.33%						
Ca 317.933Radial†	5722.7	4888.2 µg/L	73.67	4888.2 ppb	73.67	1.51%
QC value within limits for Ca 317.933Radial Recovery = 97.76%						
Cd 226.502†	19214.4	479.14 µg/L	36.339	479.14 ppb	36.339	7.58%
QC value within limits for Cd 226.502 Recovery = 95.83%						
Co 228.616†	10518.1	475.78 µg/L	38.855	475.78 ppb	38.855	8.17%

QC value within limits for Co 228.616 Recovery = 95.16%					
Cr 267.716†	23535.5	473.01 µg/L	47.102	473.01 ppb	47.102 9.96%
QC value within limits for Cr 267.716 Recovery = 94.60%					
Cu 324.752†	71496.1	467.38 µg/L	36.817	467.38 ppb	36.817 7.88%
QC value within limits for Cu 324.752 Recovery = 93.48%					
Fe 238.204 Radial†	630.5	4983.1 µg/L	49.36	4983.1 ppb	49.36 0.99%
QC value within limits for Fe 238.204 Radial Recovery = 99.66%					
K 766.490 Radial†	7342.4	4795.4 µg/L	22.20	4795.4 ppb	22.20 0.46%
QC value within limits for K 766.490 Radial Recovery = 95.91%					
Mg 279.077 IEC†	556.4	4976.0 µg/L	61.30	4976.0 ppb	61.30 1.23%
QC value within limits for Mg 279.077 IEC Recovery = 99.52%					
Mn 257.610†	155081.3	486.10 µg/L	28.223	486.10 ppb	28.223 5.81%
QC value within limits for Mn 257.610 Recovery = 97.22%					
Mo 202.031†	4796.1	469.85 µg/L	60.963	469.85 ppb	60.963 12.97%
QC value within limits for Mo 202.031 Recovery = 93.97%					
Na 589.592 Radial†	31564.9	9695.0 µg/L	31.58	9695.0 ppb	31.58 0.33%
QC value within limits for Na 589.592 Radial Recovery = 96.95%					
Ni 231.604†	9570.6	476.59 µg/L	40.187	476.59 ppb	40.187 8.43%
QC value within limits for Ni 231.604 Recovery = 95.32%					
P 214.914†	1179.5	2290.4 µg/L	278.94	2290.4 ppb	278.94 12.18%
QC value within limits for P 214.914 Recovery = 91.62%					
Pb 220.353†	1942.0	472.24 µg/L	49.211	472.24 ppb	49.211 10.42%
QC value within limits for Pb 220.353 Recovery = 94.45%					
S 181.975 Axial†	230.2	954.62 µg/L	99.373	954.62 ppb	99.373 10.41%
QC value within limits for S 181.975 Axial Recovery = 95.46%					
Sb 206.836†	508.0	468.26 µg/L	52.337	468.26 ppb	52.337 11.18%
QC value within limits for Sb 206.836 Recovery = 93.65%					
Se 196.026†	340.5	486.07 µg/L	47.691	486.07 ppb	47.691 9.81%
QC value within limits for Se 196.026 Recovery = 97.21%					
SiO2†	25724.1	5077.6 µg/L	322.02	5077.6 ppb	322.02 6.34%
QC value within limits for SiO2 Recovery = 94.95%					
Si 251.611†	31242.1	2375.1 µg/L	152.58	2375.1 ppb	152.58 6.42%
QC value within limits for Si 251.611 Recovery = 95.00%					
Sn 189.927†	1122.0	473.21 µg/L	63.445	473.21 ppb	63.445 13.41%
QC value within limits for Sn 189.927 Recovery = 94.64%					
Sr 421.552†	51336.1	473.58 µg/L	1.527	473.58 ppb	1.527 0.32%
QC value within limits for Sr 421.552 Recovery = 94.72%					
Ti 334.940†	213730.5	472.50 µg/L	31.174	472.50 ppb	31.174 6.60%
QC value within limits for Ti 334.940 Recovery = 94.50%					
Tl 190.801†	364.8	479.54 µg/L	35.938	479.54 ppb	35.938 7.49%
QC value within limits for Tl 190.801 Recovery = 95.91%					
U 409.014†	5660.3	469.29 µg/L	42.377	469.29 ppb	42.377 9.03%
QC value within limits for U 409.014 Recovery = 93.86%					
V 292.402†	48082.0	474.36 µg/L	40.718	474.36 ppb	40.718 8.58%
QC value within limits for V 292.402 Recovery = 94.87%					
Zn 213.857†	20374.2	474.63 µg/L	38.303	474.63 ppb	38.303 8.07%
QC value within limits for Zn 213.857 Recovery = 94.93%					

All analyte(s) passed QC.

Sequence No.: 62
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/19/2010 21:12:05
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57648.5	57648.5	102 %		21:12:37
1	Al 396.153Radial†	-14.7	-21.7	-15.138 µg/L	-15.138 ppb	21:12:37
1	Ca 317.933Radial†	203.7	-11.6	-9.9121 µg/L	-9.9121 ppb	21:12:58
1	Fe 238.204 Radial†	16.4	-0.5	-4.2458 µg/L	-4.2458 ppb	21:12:58
1	K 766.490 Radial†	239.5	69.8	45.559 µg/L	45.559 ppb	21:12:37
1	Mg 279.077 IEC†	8.9	-4.1	-36.403 µg/L	-36.403 ppb	21:12:58
1	Na 589.592 Radial†	512.1	29.6	9.0983 µg/L	9.0983 ppb	21:12:37
1	Sr 421.552†	48.1	18.3	0.1688 µg/L	0.1688 ppb	21:12:37
1	Sc 361.383	2024672.5	2024672.5	103.14 %		21:14:00
1	Y 371.029	1400432.3	1400432.3	103.52 %		21:14:00
1	Ag 328.068†	-413.0	1.2	0.0111 µg/L	0.0111 ppb	21:14:05
1	As 188.979†	-0.7	-0.3	-0.4624 µg/L	-0.4624 ppb	21:14:26
1	B 249.677†	378.7	-16.9	-0.6888 µg/L	-0.6888 ppb	21:14:26
1	Ba 233.527†	-12.8	4.6	0.1123 µg/L	0.1123 ppb	21:14:26
1	Be 313.107†	-2775.1	164.9	0.0978 µg/L	0.0978 ppb	21:14:05
1	Cd 226.502†	-135.5	10.3	0.2573 µg/L	0.2573 ppb	21:14:26
1	Co 228.616†	7.3	5.2	0.2337 µg/L	0.2337 ppb	21:14:26
1	Cr 267.716†	-69.0	-16.5	-0.3312 µg/L	-0.3312 ppb	21:14:05
1	Cu 324.752†	2629.4	5.8	0.0370 µg/L	0.0370 ppb	21:14:05
1	Mn 257.610†	-259.5	4.4	0.0146 µg/L	0.0146 ppb	21:14:26
1	Mo 202.031†	0.2	5.6	0.5442 µg/L	0.5442 ppb	21:14:26
1	Ni 231.604†	315.8	-6.1	-0.3065 µg/L	-0.3065 ppb	21:14:26
1	P 214.914†	22.8	6.8	13.475 µg/L	13.475 ppb	21:14:26
1	Pb 220.353†	88.5	-5.2	-1.2633 µg/L	-1.2633 ppb	21:14:26
1	S 181.975 Axial†	14.4	-5.0	-20.717 µg/L	-20.717 ppb	21:14:26
1	Sb 206.836†	29.4	6.0	5.5139 µg/L	5.5139 ppb	21:14:26
1	Se 196.026†	18.0	-1.8	-2.5508 µg/L	-2.5508 ppb	21:14:26
1	SiO2†	1453.6	17.9	3.5281 µg/L	3.5281 ppb	21:14:05
1	Si 251.611†	344.2	23.1	1.7570 µg/L	1.7570 ppb	21:14:26
1	Sn 189.927†	6.9	6.3	2.6452 µg/L	2.6452 ppb	21:14:26
1	Ti 334.940†	260.8	77.8	0.1748 µg/L	0.1748 ppb	21:14:05
1	Tl 190.801†	-22.9	0.2	0.2097 µg/L	0.2097 ppb	21:14:26
1	U 409.014†	13.7	90.4	7.5095 µg/L	7.5095 ppb	21:14:05
1	V 292.402†	-3.7	41.2	0.4118 µg/L	0.4118 ppb	21:14:05
1	Zn 213.857†	548.2	-2.9	-0.0641 µg/L	-0.0641 ppb	21:14:26
2	Sc RADIAL	57532.9	57532.9	102 %		21:13:03
2	Al 396.153Radial†	12.0	4.4	3.0811 µg/L	3.0811 ppb	21:13:03
2	Ca 317.933Radial†	199.1	-15.8	-13.477 µg/L	-13.477 ppb	21:13:24
2	Fe 238.204 Radial†	16.8	-0.1	-0.4573 µg/L	-0.4573 ppb	21:13:24
2	K 766.490 Radial†	217.9	49.0	32.018 µg/L	32.018 ppb	21:13:03
2	Mg 279.077 IEC†	13.2	0.1	1.1462 µg/L	1.1462 ppb	21:13:24
2	Na 589.592 Radial†	531.4	49.6	15.230 µg/L	15.230 ppb	21:13:03
2	Sr 421.552†	44.8	15.2	0.1403 µg/L	0.1403 ppb	21:13:03
2	Sc 361.383	2034376.0	2034376.0	103.63 %		21:14:32
2	Y 371.029	1406950.8	1406950.8	104.01 %		21:14:32
2	Ag 328.068†	-398.7	16.9	0.1249 µg/L	0.1249 ppb	21:14:37
2	As 188.979†	3.7	4.1	7.2905 µg/L	7.2905 ppb	21:14:58
2	B 249.677†	367.6	-29.4	-1.1995 µg/L	-1.1995 ppb	21:14:58
2	Ba 233.527†	-11.7	5.8	0.1382 µg/L	0.1382 ppb	21:14:58
2	Be 313.107†	-2725.4	225.8	0.1339 µg/L	0.1339 ppb	21:14:37
2	Cd 226.502†	-127.6	18.5	0.4618 µg/L	0.4618 ppb	21:14:58
2	Co 228.616†	1.0	-1.0	-0.0440 µg/L	-0.0440 ppb	21:14:58
2	Cr 267.716†	-41.5	10.4	0.2082 µg/L	0.2082 ppb	21:14:37
2	Cu 324.752†	2590.3	-44.1	-0.2880 µg/L	-0.2880 ppb	21:14:37
2	Mn 257.610†	-252.5	12.4	0.0387 µg/L	0.0387 ppb	21:14:58
2	Mo 202.031†	-1.6	3.8	0.3741 µg/L	0.3741 ppb	21:14:58
2	Ni 231.604†	312.0	-11.3	-0.5640 µg/L	-0.5640 ppb	21:14:58
2	P 214.914†	12.2	-3.6	-7.0402 µg/L	-7.0402 ppb	21:14:58
2	Pb 220.353†	83.5	-10.4	-2.5295 µg/L	-2.5295 ppb	21:14:58

2	S 181.975 Axial†	19.3	-0.3	-1.1792 µg/L	-1.1792 ppb	21:14:58
2	Sb 206.836†	27.7	4.2	3.8619 µg/L	3.8619 ppb	21:14:58
2	Se 196.026†	19.1	-0.8	-1.1798 µg/L	-1.1798 ppb	21:14:58
2	SiO2†	1460.9	18.1	3.5783 µg/L	3.5783 ppb	21:14:37
2	Si 251.611†	357.2	34.1	2.5907 µg/L	2.5907 ppb	21:14:58
2	Sn 189.927†	1.7	1.3	0.5463 µg/L	0.5463 ppb	21:14:58
2	Ti 334.940†	290.1	104.9	0.2318 µg/L	0.2318 ppb	21:14:37
2	Tl 190.801†	-21.1	2.0	2.6077 µg/L	2.6077 ppb	21:14:58
2	U 409.014†	-69.8	9.7	0.8107 µg/L	0.8107 ppb	21:14:37
2	V 292.402†	-49.8	-3.3	-0.0276 µg/L	-0.0276 ppb	21:14:37
2	Zn 213.857†	547.2	-6.4	-0.1467 µg/L	-0.1467 ppb	21:14:58
3	Sc RADIAL	57754.3	57754.3	102 %		21:13:29
3	Al 396.153Radial†	-7.4	-14.6	-10.181 µg/L	-10.181 ppb	21:13:29
3	Ca 317.933Radial†	198.7	-16.9	-14.434 µg/L	-14.434 ppb	21:13:50
3	Fe 238.204 Radial†	15.1	-1.8	-14.173 µg/L	-14.173 ppb	21:13:50
3	K 766.490 Radial†	210.2	40.6	26.521 µg/L	26.521 ppb	21:13:29
3	Mg 279.077 IEC†	12.2	-0.9	-7.7282 µg/L	-7.7282 ppb	21:13:50
3	Na 589.592 Radial†	514.7	31.3	9.6113 µg/L	9.6113 ppb	21:13:29
3	Sr 421.552†	36.6	7.0	0.0646 µg/L	0.0646 ppb	21:13:29
3	Sc 361.383	2036784.5	2036784.5	103.75 %		21:15:04
3	Y 371.029	1408626.3	1408626.3	104.13 %		21:15:04
3	Ag 328.068†	-389.3	26.4	0.1980 µg/L	0.1980 ppb	21:15:10
3	As 188.979†	1.3	1.8	3.1417 µg/L	3.1417 ppb	21:15:30
3	B 249.677†	362.6	-34.7	-1.4060 µg/L	-1.4060 ppb	21:15:30
3	Ba 233.527†	-7.2	10.1	0.2434 µg/L	0.2434 ppb	21:15:30
3	Be 313.107†	-2768.8	187.1	0.1110 µg/L	0.1110 ppb	21:15:10
3	Cd 226.502†	-144.7	2.2	0.0556 µg/L	0.0556 ppb	21:15:30
3	Co 228.616†	-8.3	-9.9	-0.4480 µg/L	-0.4480 ppb	21:15:30
3	Cr 267.716†	-54.9	-2.5	-0.0503 µg/L	-0.0503 ppb	21:15:10
3	Cu 324.752†	2622.8	-15.8	-0.1051 µg/L	-0.1051 ppb	21:15:10
3	Mn 257.610†	-264.4	1.2	0.0020 µg/L	0.0020 ppb	21:15:30
3	Mo 202.031†	-0.5	4.9	0.4803 µg/L	0.4803 ppb	21:15:30
3	Ni 231.604†	316.5	-7.3	-0.3620 µg/L	-0.3620 ppb	21:15:30
3	P 214.914†	15.2	-0.7	-1.2959 µg/L	-1.2959 ppb	21:15:30
3	Pb 220.353†	89.8	-4.4	-1.0668 µg/L	-1.0668 ppb	21:15:30
3	S 181.975 Axial†	20.3	0.6	2.6598 µg/L	2.6598 ppb	21:15:30
3	Sb 206.836†	20.9	-2.4	-2.1959 µg/L	-2.1959 ppb	21:15:30
3	Se 196.026†	19.2	-0.8	-1.1695 µg/L	-1.1695 ppb	21:15:30
3	SiO2†	1478.1	33.0	6.5234 µg/L	6.5234 ppb	21:15:10
3	Si 251.611†	346.7	23.5	1.7856 µg/L	1.7856 ppb	21:15:30
3	Sn 189.927†	2.2	1.7	0.7297 µg/L	0.7297 ppb	21:15:30
3	Ti 334.940†	181.9	0.3	0.0010 µg/L	0.0010 ppb	21:15:10
3	Tl 190.801†	-25.3	-2.0	-2.6178 µg/L	-2.6178 ppb	21:15:30
3	U 409.014†	-25.5	52.5	4.3661 µg/L	4.3661 ppb	21:15:10
3	V 292.402†	9.1	53.5	0.5276 µg/L	0.5276 ppb	21:15:10
3	Zn 213.857†	536.2	-17.6	-0.4107 µg/L	-0.4107 ppb	21:15:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2031944.3	103.51 %		0.327			0.32%
Sc RADIAL	57645.2	102 %		0.2			0.19%
Y 371.029	1405336.4	103.89 %		0.320			0.31%
Ag 328.068†	14.8	0.1113 µg/L		0.09420	0.1113 ppb	0.09420	84.60%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-10.6	-7.4128 µg/L		9.41994	-7.4128 ppb	9.41994	127.08%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.9	3.3232 µg/L		3.87965	3.3232 ppb	3.87965	116.74%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-27.0	-1.0981 µg/L		0.36915	-1.0981 ppb	0.36915	33.62%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.8	0.1646 µg/L		0.06947	0.1646 ppb	0.06947	42.19%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	192.6	0.1142 µg/L		0.01827	0.1142 ppb	0.01827	15.99%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-14.8	-12.608 µg/L		2.3832	-12.608 ppb	2.3832	18.90%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	10.3	0.2582 µg/L		0.20309	0.2582 ppb	0.20309	78.66%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-1.9	-0.0861 µg/L		0.34278	-0.0861 ppb	0.34278	398.18%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-2.9	-0.0578 µg/L	0.26977	-0.0578 ppb	0.26977 467.05%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	-18.1	-0.1187 µg/L	0.16294	-0.1187 ppb	0.16294 137.27%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	-0.8	-6.2921 µg/L	7.08315	-6.2921 ppb	7.08315 112.57%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	53.1	34.699 µg/L	9.7985	34.699 ppb	9.7985 28.24%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-1.6	-14.328 µg/L	19.6256	-14.328 ppb	19.6256 136.97%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	6.0	0.0185 µg/L	0.01862	0.0185 ppb	0.01862 100.93%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	4.8	0.4662 µg/L	0.08595	0.4662 ppb	0.08595 18.44%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	36.8	11.313 µg/L	3.4017	11.313 ppb	3.4017 30.07%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-8.2	-0.4108 µg/L	0.13551	-0.4108 ppb	0.13551 32.98%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	0.8	1.7128 µg/L	10.58316	1.7128 ppb	10.58316 617.88%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-6.7	-1.6199 µg/L	0.79389	-1.6199 ppb	0.79389 49.01%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-1.5	-6.4120 µg/L	12.53600	-6.4120 ppb	12.53600 195.51%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	2.6	2.3933 µg/L	4.05930	2.3933 ppb	4.05930 169.61%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-1.2	-1.6333 µg/L	0.79453	-1.6333 ppb	0.79453 48.64%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	23.0	4.5433 µg/L	1.71504	4.5433 ppb	1.71504 37.75%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	26.9	2.0444 µg/L	0.47330	2.0444 ppb	0.47330 23.15%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	3.1	1.3071 µg/L	1.16248	1.3071 ppb	1.16248 88.94%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	13.5	0.1246 µg/L	0.05381	0.1246 ppb	0.05381 43.20%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	61.0	0.1359 µg/L	0.12021	0.1359 ppb	0.12021 88.48%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	0.0	0.0665 µg/L	2.61569	0.0665 ppb	2.61569 >999.9%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	50.9	4.2288 µg/L	3.35151	4.2288 ppb	3.35151 79.26%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	30.5	0.3039 µg/L	0.29290	0.3039 ppb	0.29290 96.38%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-9.0	-0.2072 µg/L	0.18103	-0.2072 ppb	0.18103 87.39%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 21:52:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58294.3	58294.3	103 %		21:52:41
1	Al 396.153Radial†	7182.0	6953.0	4826.2 µg/L	4826.2 ppb	21:52:41
1	Ca 317.933Radial†	6144.9	5744.1	4906.5 µg/L	4906.5 ppb	21:53:01
1	Fe 238.204 Radial†	674.3	636.9	5034.3 µg/L	5034.3 ppb	21:53:01
1	K 766.490 Radial†	7708.3	7305.5	4771.3 µg/L	4771.3 ppb	21:52:41
1	Mg 279.077 IEC†	585.5	554.7	4961.5 µg/L	4961.5 ppb	21:53:01
1	Na 589.592 Radial†	33172.0	31676.2	9729.1 µg/L	9729.1 ppb	21:52:41
1	Sr 421.552†	53074.5	51408.1	474.25 µg/L	474.25 ppb	21:52:41
1	Sc 361.383	2038801.4	2038801.4	103.86 %		21:54:04
1	Y 371.029	1405502.7	1405502.7	103.90 %		21:54:04
1	Ag 328.068†	68855.2	66700.9	497.72 µg/L	497.72 ppb	21:54:10
1	As 188.979†	301.6	290.9	520.35 µg/L	520.35 ppb	21:54:30
1	B 249.677†	12936.2	12071.9	490.21 µg/L	490.21 ppb	21:54:10
1	Ba 233.527†	21777.9	20986.5	504.73 µg/L	504.73 ppb	21:54:10
1	Be 313.107†	877883.1	848151.2	503.19 µg/L	503.19 ppb	21:54:04
1	Cd 226.502†	21105.9	20464.1	510.33 µg/L	510.33 ppb	21:54:10
1	Co 228.616†	11658.9	11224.2	507.74 µg/L	507.74 ppb	21:54:10
1	Cr 267.716†	26274.1	25349.1	509.46 µg/L	509.46 ppb	21:54:10
1	Cu 324.752†	81876.3	76293.3	498.70 µg/L	498.70 ppb	21:54:10
1	Mn 257.610†	169788.5	163741.9	513.23 µg/L	513.23 ppb	21:54:04
1	Mo 202.031†	5498.7	5299.9	519.19 µg/L	519.19 ppb	21:54:30
1	Ni 231.604†	10915.6	10198.1	507.83 µg/L	507.83 ppb	21:54:10
1	P 214.914†	1366.5	1300.5	2527.2 µg/L	2527.2 ppb	21:54:30
1	Pb 220.353†	2295.3	2119.1	515.34 µg/L	515.34 ppb	21:54:30
1	S 181.975 Axial†	270.9	241.9	1003.1 µg/L	1003.1 ppb	21:54:30
1	Sb 206.836†	593.9	549.4	506.62 µg/L	506.62 ppb	21:54:30
1	Se 196.026†	409.1	374.6	534.08 µg/L	534.08 ppb	21:54:30
1	SiO2†	29747.3	27251.5	5379.1 µg/L	5379.1 ppb	21:54:10
1	Si 251.611†	34761.7	33160.6	2520.9 µg/L	2520.9 ppb	21:54:10
1	Sn 189.927†	1289.3	1241.1	523.40 µg/L	523.40 ppb	21:54:30
1	Ti 334.940†	235226.3	226319.5	500.36 µg/L	500.36 ppb	21:54:04
1	Tl 190.801†	380.7	389.0	511.20 µg/L	511.20 ppb	21:54:30
1	U 409.014†	6210.9	6057.5	502.28 µg/L	502.28 ppb	21:54:10
1	V 292.402†	53474.0	51533.7	508.50 µg/L	508.50 ppb	21:54:10
1	Zn 213.857†	23135.3	21742.1	506.54 µg/L	506.54 ppb	21:54:10
2	Sc RADIAL	58681.1	58681.1	104 %		21:53:06
2	Al 396.153Radial†	7270.0	6991.8	4853.5 µg/L	4853.5 ppb	21:53:06
2	Ca 317.933Radial†	6085.0	5647.1	4823.6 µg/L	4823.6 ppb	21:53:27
2	Fe 238.204 Radial†	670.2	628.7	4969.3 µg/L	4969.3 ppb	21:53:27
2	K 766.490 Radial†	7805.0	7349.3	4800.0 µg/L	4800.0 ppb	21:53:06
2	Mg 279.077 IEC†	586.2	551.6	4933.9 µg/L	4933.9 ppb	21:53:27
2	Na 589.592 Radial†	33396.3	31680.3	9730.4 µg/L	9730.4 ppb	21:53:06
2	Sr 421.552†	53644.8	51618.1	476.18 µg/L	476.18 ppb	21:53:06
2	Sc 361.383	2035611.6	2035611.6	103.69 %		21:54:38
2	Y 371.029	1402256.7	1402256.7	103.66 %		21:54:38
2	Ag 328.068†	68542.9	66503.5	496.25 µg/L	496.25 ppb	21:54:43
2	As 188.979†	295.1	285.0	509.86 µg/L	509.86 ppb	21:55:04
2	B 249.677†	12897.2	12053.8	489.51 µg/L	489.51 ppb	21:54:43
2	Ba 233.527†	21658.8	20904.6	502.76 µg/L	502.76 ppb	21:54:43
2	Be 313.107†	876936.1	848562.5	503.44 µg/L	503.44 ppb	21:54:38
2	Cd 226.502†	20999.3	20393.1	508.57 µg/L	508.57 ppb	21:54:43
2	Co 228.616†	11591.9	11177.2	505.60 µg/L	505.60 ppb	21:54:43
2	Cr 267.716†	26197.4	25314.8	508.77 µg/L	508.77 ppb	21:54:43
2	Cu 324.752†	81474.1	76028.9	496.97 µg/L	496.97 ppb	21:54:43
2	Mn 257.610†	169436.5	163658.6	512.96 µg/L	512.96 ppb	21:54:38
2	Mo 202.031†	5362.1	5176.5	507.10 µg/L	507.10 ppb	21:55:04
2	Ni 231.604†	10886.7	10186.7	507.26 µg/L	507.26 ppb	21:54:43
2	P 214.914†	1342.5	1279.3	2485.4 µg/L	2485.4 ppb	21:55:04
2	Pb 220.353†	2248.7	2077.6	505.24 µg/L	505.24 ppb	21:55:04

2	S 181.975 Axial†	273.9	245.2	1016.8 µg/L	1016.8 ppb	21:55:04
2	Sb 206.836†	581.9	538.7	496.67 µg/L	496.67 ppb	21:55:04
2	Se 196.026†	397.7	364.2	519.29 µg/L	519.29 ppb	21:55:04
2	SiO2†	29634.0	27187.2	5366.4 µg/L	5366.4 ppb	21:54:43
2	Si 251.611†	34631.9	33087.9	2515.4 µg/L	2515.4 ppb	21:54:43
2	Sn 189.927†	1251.2	1206.2	508.72 µg/L	508.72 ppb	21:55:04
2	Ti 334.940†	234968.5	226425.8	500.59 µg/L	500.59 ppb	21:54:38
2	Tl 190.801†	379.2	388.0	510.01 µg/L	510.01 ppb	21:55:04
2	U 409.014†	6096.3	5956.3	493.89 µg/L	493.89 ppb	21:54:43
2	V 292.402†	53226.6	51375.9	506.85 µg/L	506.85 ppb	21:54:43
2	Zn 213.857†	23007.5	21653.8	504.47 µg/L	504.47 ppb	21:54:43
3	Sc RADIAL	57886.6	57886.6	102 %		21:53:32
3	Al 396.153Radial†	7257.6	7075.9	4913.9 µg/L	4913.9 ppb	21:53:32
3	Ca 317.933Radial†	6157.6	5798.4	4952.8 µg/L	4952.8 ppb	21:53:53
3	Fe 238.204 Radial†	675.4	642.6	5077.7 µg/L	5077.7 ppb	21:53:53
3	K 766.490 Radial†	7760.4	7409.0	4838.9 µg/L	4838.9 ppb	21:53:32
3	Mg 279.077 IEC†	588.1	561.1	5017.3 µg/L	5017.3 ppb	21:53:53
3	Na 589.592 Radial†	33284.0	32012.0	9832.3 µg/L	9832.3 ppb	21:53:32
3	Sr 421.552†	53489.2	52175.1	481.32 µg/L	481.32 ppb	21:53:32
3	Sc 361.383	2029490.9	2029490.9	103.38 %		21:55:11
3	Y 371.029	1398933.7	1398933.7	103.41 %		21:55:11
3	Ag 328.068†	63112.5	61450.2	458.38 µg/L	458.38 ppb	21:55:16
3	As 188.979†	245.3	237.8	425.38 µg/L	425.38 ppb	21:55:37
3	B 249.677†	11837.4	11066.1	449.07 µg/L	449.07 ppb	21:55:16
3	Ba 233.527†	19154.5	18545.2	446.00 µg/L	446.00 ppb	21:55:16
3	Be 313.107†	788293.6	765369.5	454.08 µg/L	454.08 ppb	21:55:11
3	Cd 226.502†	18488.3	18025.4	449.44 µg/L	449.44 ppb	21:55:16
3	Co 228.616†	10118.0	9785.2	442.59 µg/L	442.59 ppb	21:55:16
3	Cr 267.716†	22060.3	21389.3	429.88 µg/L	429.88 ppb	21:55:16
3	Cu 324.752†	71764.5	66873.8	437.22 µg/L	437.22 ppb	21:55:16
3	Mn 257.610†	153169.4	148416.2	465.24 µg/L	465.24 ppb	21:55:11
3	Mo 202.031†	4341.5	4204.8	411.96 µg/L	411.96 ppb	21:55:37
3	Ni 231.604†	9550.0	8925.4	444.46 µg/L	444.46 ppb	21:55:16
3	P 214.914†	1104.5	1053.0	2042.0 µg/L	2042.0 ppb	21:55:37
3	Pb 220.353†	1894.1	1741.3	423.37 µg/L	423.37 ppb	21:55:37
3	S 181.975 Axial†	230.7	204.2	846.98 µg/L	846.98 ppb	21:55:37
3	Sb 206.836†	492.3	453.7	417.96 µg/L	417.96 ppb	21:55:37
3	Se 196.026†	339.0	308.6	441.39 µg/L	441.39 ppb	21:55:37
3	SiO2†	26881.8	24611.1	4857.9 µg/L	4857.9 ppb	21:55:16
3	Si 251.611†	31176.8	29846.6	2269.0 µg/L	2269.0 ppb	21:55:16
3	Sn 189.927†	996.0	963.1	406.17 µg/L	406.17 ppb	21:55:37
3	Ti 334.940†	209447.8	202423.1	447.49 µg/L	447.49 ppb	21:55:11
3	Tl 190.801†	327.8	339.5	446.42 µg/L	446.42 ppb	21:55:37
3	U 409.014†	5220.1	5126.5	424.93 µg/L	424.93 ppb	21:55:16
3	V 292.402†	46012.1	44552.1	439.38 µg/L	439.38 ppb	21:55:16
3	Zn 213.857†	20191.8	18997.1	442.51 µg/L	442.51 ppb	21:55:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2034634.6	103.64 %	0.241			0.23%
Sc RADIAL	58287.3	103 %	0.7			0.68%
Y 371.029	1402231.0	103.66 %	0.243			0.23%
Ag 328.068†	64884.9	484.12 µg/L	22.300	484.12 ppb	22.300	4.61%
QC value within limits for Ag 328.068 Recovery = 96.82%						
Al 396.153Radial†	7006.9	4864.5 µg/L	44.88	4864.5 ppb	44.88	0.92%
QC value within limits for Al 396.153Radial Recovery = 97.29%						
As 188.979†	271.2	485.20 µg/L	52.069	485.20 ppb	52.069	10.73%
QC value within limits for As 188.979 Recovery = 97.04%						
B 249.677†	11730.6	476.26 µg/L	23.552	476.26 ppb	23.552	4.95%
QC value within limits for B 249.677 Recovery = 95.25%						
Ba 233.527†	20145.4	484.50 µg/L	33.355	484.50 ppb	33.355	6.88%
QC value within limits for Ba 233.527 Recovery = 96.90%						
Be 313.107†	820694.4	486.90 µg/L	28.425	486.90 ppb	28.425	5.84%
QC value within limits for Be 313.107 Recovery = 97.38%						
Ca 317.933Radial†	5729.8	4894.3 µg/L	65.45	4894.3 ppb	65.45	1.34%
QC value within limits for Ca 317.933Radial Recovery = 97.89%						
Cd 226.502†	19627.6	489.45 µg/L	34.658	489.45 ppb	34.658	7.08%
QC value within limits for Cd 226.502 Recovery = 97.89%						
Co 228.616†	10728.9	485.31 µg/L	37.015	485.31 ppb	37.015	7.63%

Cr	267.716†	24017.7	482.70 µg/L	45.746	482.70 ppb	45.746	9.48%
				Recovery = 96.54%			
Cu	324.752†	73065.3	477.63 µg/L	35.005	477.63 ppb	35.005	7.33%
				Recovery = 95.53%			
Fe	238.204 Radial†	636.1	5027.1 µg/L	54.54	5027.1 ppb	54.54	1.08%
				Recovery = 100.54%			
K	766.490 Radial†	7354.6	4803.4 µg/L	33.93	4803.4 ppb	33.93	0.71%
				Recovery = 96.07%			
Mg	279.077 IEC†	555.8	4970.9 µg/L	42.48	4970.9 ppb	42.48	0.85%
				Recovery = 99.42%			
Mn	257.610†	158605.5	497.15 µg/L	27.629	497.15 ppb	27.629	5.56%
				Recovery = 99.43%			
Mo	202.031†	4893.7	479.42 µg/L	58.734	479.42 ppb	58.734	12.25%
				Recovery = 95.88%			
Na	589.592 Radial†	31789.5	9763.9 µg/L	59.18	9763.9 ppb	59.18	0.61%
				Recovery = 97.64%			
Ni	231.604†	9770.1	486.52 µg/L	36.423	486.52 ppb	36.423	7.49%
				Recovery = 97.30%			
P	214.914†	1210.9	2351.5 µg/L	268.87	2351.5 ppb	268.87	11.43%
				Recovery = 94.06%			
Pb	220.353†	1979.3	481.31 µg/L	50.440	481.31 ppb	50.440	10.48%
				Recovery = 96.26%			
S	181.975 Axial†	230.4	955.62 µg/L	94.337	955.62 ppb	94.337	9.87%
				Recovery = 95.56%			
Sb	206.836†	513.9	473.75 µg/L	48.569	473.75 ppb	48.569	10.25%
				Recovery = 94.75%			
Se	196.026†	349.1	498.25 µg/L	49.795	498.25 ppb	49.795	9.99%
				Recovery = 99.65%			
SiO2†		26349.9	5201.1 µg/L	297.31	5201.1 ppb	297.31	5.72%
				Recovery = 97.26%			
Si	251.611†	32031.7	2435.1 µg/L	143.89	2435.1 ppb	143.89	5.91%
				Recovery = 97.40%			
Sn	189.927†	1136.8	479.43 µg/L	63.868	479.43 ppb	63.868	13.32%
				Recovery = 95.89%			
Sr	421.552†	51733.8	477.25 µg/L	3.657	477.25 ppb	3.657	0.77%
				Recovery = 95.45%			
Ti	334.940†	218389.5	482.81 µg/L	30.592	482.81 ppb	30.592	6.34%
				Recovery = 96.56%			
Tl	190.801†	372.2	489.21 µg/L	37.063	489.21 ppb	37.063	7.58%
				Recovery = 97.84%			
U	409.014†	5713.4	473.70 µg/L	42.447	473.70 ppb	42.447	8.96%
				Recovery = 94.74%			
V	292.402†	49153.9	484.91 µg/L	39.441	484.91 ppb	39.441	8.13%
				Recovery = 96.98%			
Zn	213.857†	20797.7	484.50 µg/L	36.387	484.50 ppb	36.387	7.51%
				Recovery = 96.90%			

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 21:55:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56008.4	56008.4	99.1 %		21:56:19
1	Al 396.153Radial†	-22.0	-29.6	-20.580 µg/L	-20.580 ppb	21:56:19
1	Ca 317.933Radial†	199.9	-9.6	-8.2382 µg/L	-8.2382 ppb	21:56:40
1	Fe 238.204 Radial†	17.9	1.5	11.526 µg/L	11.526 ppb	21:56:40
1	K 766.490 Radial†	220.6	57.6	37.606 µg/L	37.606 ppb	21:56:19
1	Mg 279.077 IEC†	11.6	-1.1	-9.8037 µg/L	-9.8037 ppb	21:56:40
1	Na 589.592 Radial†	493.3	25.4	7.7861 µg/L	7.7861 ppb	21:56:19
1	Sr 421.552†	76.4	48.2	0.4449 µg/L	0.4449 ppb	21:56:19
1	Sc 361.383	2005725.5	2005725.5	102.17 %		21:57:41
1	Y 371.029	1388119.7	1388119.7	102.61 %		21:57:41
1	Ag 328.068†	-414.5	-4.1	-0.0292 µg/L	-0.0292 ppb	21:57:47
1	As 188.979†	-0.2	0.2	0.3889 µg/L	0.3889 ppb	21:58:07
1	B 249.677†	373.9	-18.2	-0.7465 µg/L	-0.7465 ppb	21:58:07
1	Ba 233.527†	-14.8	2.6	0.0623 µg/L	0.0623 ppb	21:58:07
1	Be 313.107†	-2754.8	159.4	0.0946 µg/L	0.0946 ppb	21:57:47
1	Cd 226.502†	-146.2	-1.4	-0.0360 µg/L	-0.0360 ppb	21:58:07
1	Co 228.616†	0.9	-1.0	-0.0474 µg/L	-0.0474 ppb	21:58:07
1	Cr 267.716†	-37.0	14.2	0.2854 µg/L	0.2854 ppb	21:57:47
1	Cu 324.752†	2573.5	-24.9	-0.1610 µg/L	-0.1610 ppb	21:57:47
1	Mn 257.610†	-199.9	60.3	0.1908 µg/L	0.1908 ppb	21:58:07
1	Mo 202.031†	0.2	5.5	0.5418 µg/L	0.5418 ppb	21:58:07
1	Ni 231.604†	310.8	-8.1	-0.4047 µg/L	-0.4047 ppb	21:58:07
1	P 214.914†	12.5	-3.1	-6.0711 µg/L	-6.0711 ppb	21:58:07
1	Pb 220.353†	85.5	-7.3	-1.7723 µg/L	-1.7723 ppb	21:58:07
1	S 181.975 Axial†	18.2	-1.2	-4.7784 µg/L	-4.7784 ppb	21:58:07
1	Sb 206.836†	26.7	3.7	3.3830 µg/L	3.3830 ppb	21:58:07
1	Se 196.026†	14.0	-5.6	-7.7903 µg/L	-7.7903 ppb	21:58:07
1	SiO2†	1480.0	57.0	11.258 µg/L	11.258 ppb	21:57:47
1	Si 251.611†	360.8	42.5	3.2304 µg/L	3.2304 ppb	21:58:07
1	Sn 189.927†	5.1	4.6	1.9521 µg/L	1.9521 ppb	21:58:07
1	Ti 334.940†	260.5	80.0	0.1775 µg/L	0.1775 ppb	21:57:47
1	Tl 190.801†	-26.0	-3.1	-4.0069 µg/L	-4.0069 ppb	21:58:07
1	U 409.014†	-86.5	-7.5	-0.6279 µg/L	-0.6279 ppb	21:57:47
1	V 292.402†	-37.7	7.9	0.0821 µg/L	0.0821 ppb	21:57:47
1	Zn 213.857†	552.4	6.2	0.1486 µg/L	0.1486 ppb	21:58:07
2	Sc RADIAL	57173.7	57173.7	101 %		21:56:45
2	Al 396.153Radial†	-31.7	-38.7	-26.934 µg/L	-26.934 ppb	21:56:45
2	Ca 317.933Radial†	191.8	-21.7	-18.545 µg/L	-18.545 ppb	21:57:05
2	Fe 238.204 Radial†	17.2	0.4	3.3000 µg/L	3.3000 ppb	21:57:05
2	K 766.490 Radial†	225.8	58.1	37.968 µg/L	37.968 ppb	21:56:45
2	Mg 279.077 IEC†	9.7	-3.2	-28.801 µg/L	-28.801 ppb	21:57:05
2	Na 589.592 Radial†	447.5	-30.0	-9.2124 µg/L	-9.2124 ppb	21:56:45
2	Sr 421.552†	50.5	21.1	0.1949 µg/L	0.1949 ppb	21:56:45
2	Sc 361.383	2026912.1	2026912.1	103.25 %		21:58:13
2	Y 371.029	1401779.3	1401779.3	103.62 %		21:58:13
2	Ag 328.068†	-380.0	33.5	0.2477 µg/L	0.2477 ppb	21:58:19
2	As 188.979†	-0.5	-0.1	-0.1267 µg/L	-0.1267 ppb	21:58:39
2	B 249.677†	375.7	-20.3	-0.8273 µg/L	-0.8273 ppb	21:58:39
2	Ba 233.527†	-18.4	-0.7	-0.0176 µg/L	-0.0176 ppb	21:58:39
2	Be 313.107†	-2695.7	244.9	0.1452 µg/L	0.1452 ppb	21:58:19
2	Cd 226.502†	-138.0	8.1	0.2002 µg/L	0.2002 ppb	21:58:39
2	Co 228.616†	2.7	0.7	0.0322 µg/L	0.0322 ppb	21:58:39
2	Cr 267.716†	-33.8	17.6	0.3538 µg/L	0.3538 ppb	21:58:19
2	Cu 324.752†	2615.0	-11.1	-0.0717 µg/L	-0.0717 ppb	21:58:19
2	Mn 257.610†	-217.0	45.8	0.1451 µg/L	0.1451 ppb	21:58:39
2	Mo 202.031†	-0.5	4.9	0.4797 µg/L	0.4797 ppb	21:58:39
2	Ni 231.604†	315.6	-6.7	-0.3341 µg/L	-0.3341 ppb	21:58:39
2	P 214.914†	6.6	-9.0	-17.706 µg/L	-17.706 ppb	21:58:39
2	Pb 220.353†	96.0	2.0	0.4801 µg/L	0.4801 ppb	21:58:39

2	S 181.975 Axial†	17.3	-2.2	-9.1795 µg/L	-9.1795 ppb	21:58:39
2	Sb 206.836†	20.9	-2.3	-2.0746 µg/L	-2.0746 ppb	21:58:39
2	Se 196.026†	11.9	-7.8	-10.865 µg/L	-10.865 ppb	21:58:39
2	SiO2†	1472.8	34.8	6.8766 µg/L	6.8766 ppb	21:58:19
2	Si 251.611†	396.0	72.9	5.5446 µg/L	5.5446 ppb	21:58:39
2	Sn 189.927†	5.5	5.0	2.0997 µg/L	2.0997 ppb	21:58:39
2	Ti 334.940†	289.3	105.2	0.2346 µg/L	0.2346 ppb	21:58:19
2	Tl 190.801†	-22.0	1.1	1.4215 µg/L	1.4215 ppb	21:58:39
2	U 409.014†	-13.9	63.6	5.2886 µg/L	5.2886 ppb	21:58:19
2	V 292.402†	-61.5	-14.8	-0.1337 µg/L	-0.1337 ppb	21:58:19
2	Zn 213.857†	550.0	-1.7	-0.0370 µg/L	-0.0370 ppb	21:58:39
3	Sc RADIAL	56372.6	56372.6	99.8 %		21:57:11
3	Al 396.153Radial†	-29.3	-36.7	-25.549 µg/L	-25.549 ppb	21:57:11
3	Ca 317.933Radial†	191.2	-19.7	-16.825 µg/L	-16.825 ppb	21:57:31
3	Fe 238.204 Radial†	16.1	-0.4	-3.3964 µg/L	-3.3964 ppb	21:57:31
3	K 766.490 Radial†	211.8	47.3	30.861 µg/L	30.861 ppb	21:57:11
3	Mg 279.077 IEC†	13.6	0.8	7.2890 µg/L	7.2890 ppb	21:57:31
3	Na 589.592 Radial†	501.0	29.9	9.1712 µg/L	9.1712 ppb	21:57:11
3	Sr 421.552†	52.9	24.2	0.2232 µg/L	0.2232 ppb	21:57:11
3	Sc 361.383	2000712.7	2000712.7	101.91 %		21:58:46
3	Y 371.029	1384703.1	1384703.1	102.36 %		21:58:46
3	Ag 328.068†	-421.1	-11.6	-0.0829 µg/L	-0.0829 ppb	21:58:51
3	As 188.979†	1.5	1.9	3.3848 µg/L	3.3848 ppb	21:59:12
3	B 249.677†	368.1	-22.9	-0.9332 µg/L	-0.9332 ppb	21:59:12
3	Ba 233.527†	-8.4	8.8	0.2121 µg/L	0.2121 ppb	21:59:12
3	Be 313.107†	-2743.0	164.2	0.0974 µg/L	0.0974 ppb	21:58:51
3	Cd 226.502†	-139.1	5.2	0.1301 µg/L	0.1301 ppb	21:59:12
3	Co 228.616†	11.1	9.0	0.4061 µg/L	0.4061 ppb	21:59:12
3	Cr 267.716†	-57.8	-6.4	-0.1274 µg/L	-0.1274 ppb	21:58:51
3	Cu 324.752†	2614.2	21.4	0.1392 µg/L	0.1392 ppb	21:58:51
3	Mn 257.610†	-214.3	45.7	0.1425 µg/L	0.1425 ppb	21:59:12
3	Mo 202.031†	-1.4	4.0	0.3871 µg/L	0.3871 ppb	21:59:12
3	Ni 231.604†	307.7	-10.4	-0.5197 µg/L	-0.5197 ppb	21:59:12
3	P 214.914†	8.3	-7.2	-14.189 µg/L	-14.189 ppb	21:59:12
3	Pb 220.353†	80.5	-12.0	-2.9118 µg/L	-2.9118 ppb	21:59:12
3	S 181.975 Axial†	16.3	-2.9	-12.028 µg/L	-12.028 ppb	21:59:12
3	Sb 206.836†	20.6	-2.3	-2.1004 µg/L	-2.1004 ppb	21:59:12
3	Se 196.026†	16.0	-3.6	-5.0557 µg/L	-5.0557 ppb	21:59:12
3	SiO2†	1465.4	46.3	9.1427 µg/L	9.1427 ppb	21:58:51
3	Si 251.611†	387.9	70.0	5.3210 µg/L	5.3210 ppb	21:59:12
3	Sn 189.927†	6.0	5.5	2.3403 µg/L	2.3403 ppb	21:59:12
3	Ti 334.940†	247.3	67.7	0.1488 µg/L	0.1488 ppb	21:58:51
3	Tl 190.801†	-19.0	3.7	4.8315 µg/L	4.8315 ppb	21:59:12
3	U 409.014†	-77.0	1.6	0.1327 µg/L	0.1327 ppb	21:58:51
3	V 292.402†	6.4	51.0	0.4995 µg/L	0.4995 ppb	21:58:51
3	Zn 213.857†	535.6	-8.9	-0.2068 µg/L	-0.2068 ppb	21:59:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2011116.8	102.44 %	0.708			0.69%
Sc RADIAL	56518.2	100 %	1.1			1.05%
Y 371.029	1391534.0	102.87 %	0.668			0.65%
Ag 328.068†	5.9	0.0452 µg/L	0.17741	0.0452 ppb	0.17741	392.45%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-35.0	-24.355 µg/L	3.3414	-24.355 ppb	3.3414	13.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.7	1.2156 µg/L	1.89611	1.2156 ppb	1.89611	155.98%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-20.5	-0.8357 µg/L	0.09366	-0.8357 ppb	0.09366	11.21%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.6	0.0856 µg/L	0.11658	0.0856 ppb	0.11658	136.21%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	189.5	0.1124 µg/L	0.02848	0.1124 ppb	0.02848	25.34%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-17.0	-14.536 µg/L	5.5217	-14.536 ppb	5.5217	37.99%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.0	0.0981 µg/L	0.12132	0.0981 ppb	0.12132	123.63%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.9	0.1303 µg/L	0.24215	0.1303 ppb	0.24215	185.83%

Cr	QC value within limits	for Co 228.616 Recovery = Not calculated
267.716†	8.5	0.1706 µg/L 0.26030 0.1706 ppb 0.26030 152.57%
Cu	QC value within limits	for Cr 267.716 Recovery = Not calculated
324.752†	-4.9	-0.0312 µg/L 0.15414 -0.0312 ppb 0.15414 494.08%
Fe	QC value within limits	for Cu 324.752 Recovery = Not calculated
238.204 Radial†	0.5	3.8100 µg/L 7.47451 3.8100 ppb 7.47451 196.18%
K	QC value within limits	for Fe 238.204 Radial Recovery = Not calculated
766.490 Radial†	54.3	35.478 µg/L 4.0031 35.478 ppb 4.0031 11.28%
Mg	QC value within limits	for K 766.490 Radial Recovery = Not calculated
279.077 IEC†	-1.2	-10.439 µg/L 18.0534 -10.439 ppb 18.0534 172.95%
Mn	QC value within limits	for Mg 279.077 IEC Recovery = Not calculated
257.610†	50.6	0.1594 µg/L 0.02719 0.1594 ppb 0.02719 17.05%
Mo	QC value within limits	for Mn 257.610 Recovery = Not calculated
202.031†	4.8	0.4696 µg/L 0.07785 0.4696 ppb 0.07785 16.58%
Na	QC value within limits	for Mo 202.031 Recovery = Not calculated
589.592 Radial†	8.4	2.5817 µg/L 10.23739 2.5817 ppb 10.23739 396.54%
Ni	QC value within limits	for Na 589.592 Radial Recovery = Not calculated
231.604†	-8.4	-0.4195 µg/L 0.09366 -0.4195 ppb 0.09366 22.33%
P	QC value within limits	for Ni 231.604 Recovery = Not calculated
214.914†	-6.4	-12.655 µg/L 5.9671 -12.655 ppb 5.9671 47.15%
Pb	QC value within limits	for P 214.914 Recovery = Not calculated
220.353†	-5.8	-1.4013 µg/L 1.72611 -1.4013 ppb 1.72611 123.18%
S	QC value within limits	for Pb 220.353 Recovery = Not calculated
181.975 Axial†	-2.1	-8.6621 µg/L 3.65257 -8.6621 ppb 3.65257 42.17%
Sb	QC value within limits	for S 181.975 Axial Recovery = Not calculated
206.836†	-0.3	-0.2640 µg/L 3.15844 -0.2640 ppb 3.15844 >999.9%
Se	QC value within limits	for Sb 206.836 Recovery = Not calculated
196.026†	-5.6	-7.9035 µg/L 2.90606 -7.9035 ppb 2.90606 36.77%
SiO ₂ †	QC value within limits	for Se 196.026 Recovery = Not calculated
46.1	9.0923 µg/L	2.19093 9.0923 ppb 2.19093 24.10%
Si	QC value within limits	for SiO ₂ Recovery = Not calculated
251.611†	61.8	4.6987 µg/L 1.27646 4.6987 ppb 1.27646 27.17%
Sn	QC value within limits	for Si 251.611 Recovery = Not calculated
189.927†	5.1	2.1307 µg/L 0.19595 2.1307 ppb 0.19595 9.20%
Sr	QC value within limits	for Sn 189.927 Recovery = Not calculated
421.552†	31.2	0.2877 µg/L 0.13693 0.2877 ppb 0.13693 47.60%
Ti	QC value within limits	for Sr 421.552 Recovery = Not calculated
334.940†	84.3	0.1870 µg/L 0.04366 0.1870 ppb 0.04366 23.35%
Tl	QC value within limits	for Ti 334.940 Recovery = Not calculated
190.801†	0.6	0.7487 µg/L 4.45745 0.7487 ppb 4.45745 595.36%
U	QC value within limits	for Tl 190.801 Recovery = Not calculated
409.014†	19.2	1.5978 µg/L 3.21889 1.5978 ppb 3.21889 201.46%
V	QC value within limits	for U 409.014 Recovery = Not calculated
292.402†	14.7	0.1493 µg/L 0.32188 0.1493 ppb 0.32188 215.60%
Zn	QC value within limits	for V 292.402 Recovery = Not calculated
213.857†	-1.5	-0.0317 µg/L 0.17777 -0.0317 ppb 0.17777 560.49%
All analyte(s)	QC.	for Zn 213.857 Recovery = Not calculated

Sequence No.: 20

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 22:28:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58682.4	58682.4	104 %		22:29:23
1	Al 396.153Radial†	7235.9	6958.9	4830.4 µg/L	4830.4 ppb	22:29:23
1	Ca 317.933Radial†	6077.6	5639.8	4817.4 µg/L	4817.4 ppb	22:29:43
1	Fe 238.204 Radial†	662.2	621.0	4908.0 µg/L	4908.0 ppb	22:29:43
1	K 766.490 Radial†	7780.1	7325.2	4784.2 µg/L	4784.2 ppb	22:29:23
1	Mg 279.077 IEC†	583.1	548.5	4906.8 µg/L	4906.8 ppb	22:29:43
1	Na 589.592 Radial†	33228.8	31518.4	9680.7 µg/L	9680.7 ppb	22:29:23
1	Sr 421.552†	53197.3	51186.2	472.20 µg/L	472.20 ppb	22:29:23
1	Sc 361.383	2035190.2	2035190.2	103.67 %		22:30:47
1	Y 371.029	1401651.0	1401651.0	103.61 %		22:30:47
1	Ag 328.068†	68081.1	66071.8	493.02 µg/L	493.02 ppb	22:30:52
1	As 188.979†	298.1	288.0	515.28 µg/L	515.28 ppb	22:31:13
1	B 249.677†	12768.6	11932.3	484.58 µg/L	484.58 ppb	22:30:52
1	Ba 233.527†	21458.8	20716.0	498.23 µg/L	498.23 ppb	22:30:52
1	Be 313.107†	860925.6	833294.1	494.38 µg/L	494.38 ppb	22:30:47
1	Cd 226.502†	20758.8	20165.3	502.89 µg/L	502.89 ppb	22:30:52
1	Co 228.616†	11490.7	11081.9	501.31 µg/L	501.31 ppb	22:30:52
1	Cr 267.716†	25945.3	25076.9	503.99 µg/L	503.99 ppb	22:30:52
1	Cu 324.752†	81109.4	75693.4	494.77 µg/L	494.77 ppb	22:30:52
1	Mn 257.610†	166674.7	161028.4	504.72 µg/L	504.72 ppb	22:30:47
1	Mo 202.031†	5452.5	5264.8	515.74 µg/L	515.74 ppb	22:31:13
1	Ni 231.604†	10771.6	10077.8	501.84 µg/L	501.84 ppb	22:30:52
1	P 214.914†	1361.8	1298.2	2523.1 µg/L	2523.1 ppb	22:31:13
1	Pb 220.353†	2268.4	2097.1	509.99 µg/L	509.99 ppb	22:31:13
1	S 181.975 Axial†	268.9	240.4	997.00 µg/L	997.00 ppb	22:31:13
1	Sb 206.836†	597.4	553.7	510.63 µg/L	510.63 ppb	22:31:13
1	Se 196.026†	391.9	358.7	511.47 µg/L	511.47 ppb	22:31:13
1	SiO2†	29507.1	27070.6	5343.4 µg/L	5343.4 ppb	22:30:52
1	Si 251.611†	34360.3	32832.9	2496.0 µg/L	2496.0 ppb	22:30:52
1	Sn 189.927†	1270.7	1225.3	516.77 µg/L	516.77 ppb	22:31:13
1	Ti 334.940†	231793.7	223410.4	493.92 µg/L	493.92 ppb	22:30:47
1	Tl 190.801†	377.5	386.5	507.97 µg/L	507.97 ppb	22:31:13
1	U 409.014†	6219.6	6076.5	503.89 µg/L	503.89 ppb	22:30:52
1	V 292.402†	52782.3	50957.9	502.84 µg/L	502.84 ppb	22:30:52
1	Zn 213.857†	22807.5	21465.4	500.08 µg/L	500.08 ppb	22:30:52
2	Sc RADIAL	58445.8	58445.8	103 %		22:29:48
2	Al 396.153Radial†	7285.7	7035.2	4883.8 µg/L	4883.8 ppb	22:29:48
2	Ca 317.933Radial†	6104.1	5689.2	4859.6 µg/L	4859.6 ppb	22:30:09
2	Fe 238.204 Radial†	671.9	632.9	5002.2 µg/L	5002.2 ppb	22:30:09
2	K 766.490 Radial†	7782.7	7358.0	4805.7 µg/L	4805.7 ppb	22:29:48
2	Mg 279.077 IEC†	586.2	553.8	4953.4 µg/L	4953.4 ppb	22:30:09
2	Na 589.592 Radial†	33236.1	31654.9	9722.6 µg/L	9722.6 ppb	22:29:48
2	Sr 421.552†	53434.9	51623.1	476.23 µg/L	476.23 ppb	22:29:48
2	Sc 361.383	2040505.4	2040505.4	103.94 %		22:31:20
2	Y 371.029	1405592.5	1405592.5	103.91 %		22:31:20
2	Ag 328.068†	67790.7	65621.3	489.67 µg/L	489.67 ppb	22:31:25
2	As 188.979†	293.5	282.9	506.01 µg/L	506.01 ppb	22:31:46
2	B 249.677†	12709.5	11843.4	480.90 µg/L	480.90 ppb	22:31:25
2	Ba 233.527†	21391.2	20597.0	495.37 µg/L	495.37 ppb	22:31:25
2	Be 313.107†	866523.4	836516.5	496.29 µg/L	496.29 ppb	22:31:20
2	Cd 226.502†	20685.6	20042.8	499.82 µg/L	499.82 ppb	22:31:25
2	Co 228.616†	11439.3	11003.5	497.74 µg/L	497.74 ppb	22:31:25
2	Cr 267.716†	25899.7	24967.8	501.80 µg/L	501.80 ppb	22:31:25
2	Cu 324.752†	80721.9	75116.8	491.02 µg/L	491.02 ppb	22:31:25
2	Mn 257.610†	167447.7	161353.3	505.75 µg/L	505.75 ppb	22:31:20
2	Mo 202.031†	5299.9	5104.2	500.03 µg/L	500.03 ppb	22:31:46
2	Ni 231.604†	10731.8	10012.5	498.59 µg/L	498.59 ppb	22:31:25
2	P 214.914†	1332.5	1266.7	2460.8 µg/L	2460.8 ppb	22:31:46
2	Pb 220.353†	2217.0	2041.9	496.54 µg/L	496.54 ppb	22:31:46

2	S 181.975 Axial†	267.7	238.6	989.64 µg/L	989.64 ppb	22:31:46
2	Sb 206.836†	589.1	544.2	501.70 µg/L	501.70 ppb	22:31:46
2	Se 196.026†	397.6	363.2	517.93 µg/L	517.93 ppb	22:31:46
2	SiO2†	29480.5	26970.9	5323.7 µg/L	5323.7 ppb	22:31:25
2	Si 251.611†	34410.2	32794.6	2493.1 µg/L	2493.1 ppb	22:31:25
2	Sn 189.927†	1238.8	1191.5	502.49 µg/L	502.49 ppb	22:31:46
2	Ti 334.940†	233343.5	224319.0	495.93 µg/L	495.93 ppb	22:31:20
2	Tl 190.801†	367.3	375.8	494.02 µg/L	494.02 ppb	22:31:46
2	U 409.014†	6220.8	6061.9	502.66 µg/L	502.66 ppb	22:31:25
2	V 292.402†	52607.1	50656.7	499.78 µg/L	499.78 ppb	22:31:25
2	Zn 213.857†	22751.7	21354.5	497.50 µg/L	497.50 ppb	22:31:25
3	Sc RADIAL	58365.6	58365.6	103 %		22:30:14
3	Al 396.153Radial†	7315.7	7074.0	4912.7 µg/L	4912.7 ppb	22:30:14
3	Ca 317.933Radial†	6114.6	5707.4	4875.1 µg/L	4875.1 ppb	22:30:35
3	Fe 238.204 Radial†	676.6	638.4	5044.0 µg/L	5044.0 ppb	22:30:35
3	K 766.490 Radial†	7852.7	7436.1	4856.6 µg/L	4856.6 ppb	22:30:14
3	Mg 279.077 IEC†	588.1	556.4	4975.0 µg/L	4975.0 ppb	22:30:35
3	Na 589.592 Radial†	33380.9	31839.2	9779.2 µg/L	9779.2 ppb	22:30:14
3	Sr 421.552†	53545.1	51800.8	477.87 µg/L	477.87 ppb	22:30:14
3	Sc 361.383	2043729.2	2043729.2	104.11 %		22:31:53
3	Y 371.029	1408593.8	1408593.8	104.13 %		22:31:53
3	Ag 328.068†	63043.1	60958.1	454.71 µg/L	454.71 ppb	22:31:59
3	As 188.979†	236.2	227.4	406.78 µg/L	406.78 ppb	22:32:19
3	B 249.677†	11737.4	10890.3	441.92 µg/L	441.92 ppb	22:31:59
3	Ba 233.527†	19144.9	18406.8	442.67 µg/L	442.67 ppb	22:31:59
3	Be 313.107†	787482.0	759277.6	450.47 µg/L	450.47 ppb	22:31:53
3	Cd 226.502†	18429.0	17843.8	444.91 µg/L	444.91 ppb	22:31:59
3	Co 228.616†	10101.0	9700.6	438.75 µg/L	438.75 ppb	22:31:59
3	Cr 267.716†	22032.4	21213.7	426.35 µg/L	426.35 ppb	22:31:59
3	Cu 324.752†	71814.1	66437.9	434.37 µg/L	434.37 ppb	22:31:59
3	Mn 257.610†	153006.9	147227.9	461.52 µg/L	461.52 ppb	22:31:53
3	Mo 202.031†	4291.5	4127.6	404.39 µg/L	404.39 ppb	22:32:19
3	Ni 231.604†	9506.0	8818.7	439.15 µg/L	439.15 ppb	22:31:59
3	P 214.914†	1088.9	1030.6	1997.8 µg/L	1997.8 ppb	22:32:19
3	Pb 220.353†	1879.9	1714.8	416.92 µg/L	416.92 ppb	22:32:19
3	S 181.975 Axial†	233.9	205.7	853.14 µg/L	853.14 ppb	22:32:19
3	Sb 206.836†	487.4	445.7	410.48 µg/L	410.48 ppb	22:32:19
3	Se 196.026†	334.7	302.2	432.42 µg/L	432.42 ppb	22:32:19
3	SiO2†	26915.4	24462.2	4828.5 µg/L	4828.5 ppb	22:31:59
3	Si 251.611†	31276.8	29732.5	2260.3 µg/L	2260.3 ppb	22:31:59
3	Sn 189.927†	992.2	952.7	401.80 µg/L	401.80 ppb	22:32:19
3	Ti 334.940†	210120.3	201657.6	445.80 µg/L	445.80 ppb	22:31:53
3	Tl 190.801†	321.4	331.1	435.55 µg/L	435.55 ppb	22:32:19
3	U 409.014†	5208.6	5080.2	421.09 µg/L	421.09 ppb	22:31:59
3	V 292.402†	46007.3	44237.5	436.24 µg/L	436.24 ppb	22:31:59
3	Zn 213.857†	20128.9	18800.6	437.93 µg/L	437.93 ppb	22:31:59

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2039808.3	103.91 %	0.220			0.21%
Sc RADIAL	58497.9	104 %	0.3			0.28%
Y 371.029	1405279.1	103.88 %	0.257			0.25%
Ag 328.068†	64217.1	479.13 µg/L	21.214	479.13 ppb	21.214	4.43%
QC value within limits for Ag 328.068 Recovery = 95.83%						
Al 396.153Radial†	7022.7	4875.6 µg/L	41.78	4875.6 ppb	41.78	0.86%
QC value within limits for Al 396.153Radial Recovery = 97.51%						
As 188.979†	266.1	476.03 µg/L	60.144	476.03 ppb	60.144	12.63%
QC value within limits for As 188.979 Recovery = 95.21%						
B 249.677†	11555.3	469.13 µg/L	23.641	469.13 ppb	23.641	5.04%
QC value within limits for B 249.677 Recovery = 93.83%						
Ba 233.527†	19906.6	478.76 µg/L	31.281	478.76 ppb	31.281	6.53%
QC value within limits for Ba 233.527 Recovery = 95.75%						
Be 313.107†	809696.0	480.38 µg/L	25.921	480.38 ppb	25.921	5.40%
QC value within limits for Be 313.107 Recovery = 96.08%						
Ca 317.933Radial†	5678.8	4850.7 µg/L	29.85	4850.7 ppb	29.85	0.62%
QC value within limits for Ca 317.933Radial Recovery = 97.01%						
Cd 226.502†	19350.6	482.54 µg/L	32.625	482.54 ppb	32.625	6.76%
QC value within limits for Cd 226.502 Recovery = 96.51%						
Co 228.616†	10595.3	479.27 µg/L	35.131	479.27 ppb	35.131	7.33%

Cr	267.716†	23752.8	477.38 µg/L	44.202	9.26%
QC value within limits for Co 228.616 Recovery = 95.85%					
Cu	324.752†	72416.0	473.39 µg/L	33.839	7.15%
QC value within limits for Cr 267.716 Recovery = 95.48%					
Fe	238.204 Radial†	630.7	4984.7 µg/L	69.64	1.40%
QC value within limits for Cu 324.752 Recovery = 94.68%					
K	766.490 Radial†	7373.1	4815.5 µg/L	37.19	0.77%
QC value within limits for Fe 238.204 Radial Recovery = 99.69%					
Mg	279.077 IEC†	552.9	4945.1 µg/L	34.85	0.70%
QC value within limits for K 766.490 Radial Recovery = 96.31%					
Mn	257.610†	156536.5	490.66 µg/L	25.244	5.14%
QC value within limits for Mg 279.077 IEC Recovery = 98.90%					
Mo	202.031†	4832.2	473.39 µg/L	60.270	12.73%
QC value within limits for Mn 257.610 Recovery = 98.13%					
Na	589.592 Radial†	31670.8	9727.5 µg/L	49.45	0.51%
QC value within limits for Mo 202.031 Recovery = 94.68%					
Ni	231.604†	9636.3	479.86 µg/L	35.292	7.35%
QC value within limits for Na 589.592 Radial Recovery = 97.27%					
P	214.914†	1198.5	2327.3 µg/L	286.98	12.33%
QC value within limits for Ni 231.604 Recovery = 95.97%					
Pb	220.353†	1951.3	474.48 µg/L	50.304	10.60%
QC value within limits for P 214.914 Recovery = 93.09%					
S	181.975 Axial†	228.3	946.59 µg/L	81.017	8.56%
QC value within limits for Pb 220.353 Recovery = 94.90%					
Sb	206.836†	514.5	474.27 µg/L	55.421	11.69%
QC value within limits for S 181.975 Axial Recovery = 94.66%					
Se	196.026†	341.4	487.28 µg/L	47.618	9.77%
QC value within limits for Sb 206.836 Recovery = 94.85%					
SiO2†		26167.9	5165.2 µg/L	291.74	5.65%
QC value within limits for Se 196.026 Recovery = 97.46%					
Si	251.611†	31786.7	2416.5 µg/L	135.25	5.60%
QC value within limits for SiO2 Recovery = 96.59%					
Sn	189.927†	1123.2	473.68 µg/L	62.666	13.23%
QC value within limits for Si 251.611 Recovery = 96.66%					
Sr	421.552†	51536.7	475.43 µg/L	2.918	0.61%
QC value within limits for Sn 189.927 Recovery = 94.74%					
Ti	334.940†	216462.3	478.55 µg/L	28.383	5.93%
QC value within limits for Sr 421.552 Recovery = 95.09%					
Tl	190.801†	364.5	479.18 µg/L	38.424	8.02%
QC value within limits for Ti 334.940 Recovery = 95.71%					
U	409.014†	5739.5	475.88 µg/L	47.453	9.97%
QC value within limits for Tl 190.801 Recovery = 95.84%					
V	292.402†	48617.4	479.62 µg/L	37.602	7.84%
QC value within limits for U 409.014 Recovery = 95.18%					
Zn	213.857†	20540.2	478.50 µg/L	35.162	7.35%
QC value within limits for V 292.402 Recovery = 95.92%					
QC value within limits for Zn 213.857 Recovery = 95.70%					

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 22:32:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc RADIAL	57585.6	57585.6	102 %			22:33:01
1	Al 396.153Radial†	5.3	-2.2	-1.5487 µg/L		-1.5487 ppb	22:33:01
1	Ca 317.933Radial†	199.5	-15.5	-13.282 µg/L		-13.282 ppb	22:33:21
1	Fe 238.204 Radial†	20.4	3.4	26.948 µg/L		26.948 ppb	22:33:21
1	K 766.490 Radial†	158.3	-9.7	-6.3145 µg/L		-6.3145 ppb	22:33:01
1	Mg 279.077 IEC†	8.9	-4.1	-36.991 µg/L		-36.991 ppb	22:33:21
1	Na 589.592 Radial†	494.2	12.6	3.8754 µg/L		3.8754 ppb	22:33:01
1	Sr 421.552†	59.2	29.3	0.2704 µg/L		0.2704 ppb	22:33:01
1	Sc 361.383	2051484.5	2051484.5	104.50 %			22:34:23
1	Y 371.029	1418561.0	1418561.0	104.86 %			22:34:23
1	Ag 328.068†	-445.9	-25.1	-0.1823 µg/L		-0.1823 ppb	22:34:29
1	As 188.979†	-1.0	-0.5	-0.8315 µg/L		-0.8315 ppb	22:34:50
1	B 249.677†	342.4	-56.5	-2.3170 µg/L		-2.3170 ppb	22:34:50
1	Ba 233.527†	-1.6	15.5	0.3732 µg/L		0.3732 ppb	22:34:50
1	Be 313.107†	-2684.5	286.8	0.1700 µg/L		0.1700 ppb	22:34:29
1	Cd 226.502†	-134.7	12.8	0.3141 µg/L		0.3141 ppb	22:34:50
1	Co 228.616†	5.1	3.0	0.1333 µg/L		0.1333 ppb	22:34:50
1	Cr 267.716†	-65.0	-11.8	-0.2372 µg/L		-0.2372 ppb	22:34:29
1	Cu 324.752†	2592.8	-62.6	-0.4051 µg/L		-0.4051 ppb	22:34:29
1	Mn 257.610†	-124.4	137.0	0.4341 µg/L		0.4341 ppb	22:34:50
1	Mo 202.031†	5.4	10.5	1.0332 µg/L		1.0332 ppb	22:34:50
1	Ni 231.604†	295.9	-29.2	-1.4535 µg/L		-1.4535 ppb	22:34:50
1	P 214.914†	14.2	-1.7	-3.4035 µg/L		-3.4035 ppb	22:34:50
1	Pb 220.353†	72.1	-21.9	-5.3315 µg/L		-5.3315 ppb	22:34:50
1	S 181.975 Axial†	15.1	-4.5	-18.600 µg/L		-18.600 ppb	22:34:50
1	Sb 206.836†	20.6	-2.8	-2.5618 µg/L		-2.5618 ppb	22:34:50
1	Se 196.026†	11.2	-8.6	-11.983 µg/L		-11.983 ppb	22:34:50
1	SiO2†	1533.6	76.0	14.992 µg/L		14.992 ppb	22:34:29
1	Si 251.611†	415.1	86.5	6.5795 µg/L		6.5795 ppb	22:34:50
1	Sn 189.927†	6.3	5.6	2.3743 µg/L		2.3743 ppb	22:34:50
1	Ti 334.940†	459.3	264.5	0.5877 µg/L		0.5877 ppb	22:34:29
1	Tl 190.801†	-16.4	6.7	8.6669 µg/L		8.6669 ppb	22:34:50
1	U 409.014†	-23.7	54.4	4.5141 µg/L		4.5141 ppb	22:34:29
1	V 292.402†	-14.3	31.1	0.3185 µg/L		0.3185 ppb	22:34:29
1	Zn 213.857†	548.1	-9.9	-0.2254 µg/L		-0.2254 ppb	22:34:50
2	Sc RADIAL	57789.7	57789.7	102 %			22:33:27
2	Al 396.153Radial†	21.4	13.5	9.3709 µg/L		9.3709 ppb	22:33:27
2	Ca 317.933Radial†	195.9	-19.7	-16.863 µg/L		-16.863 ppb	22:33:47
2	Fe 238.204 Radial†	20.7	3.6	28.742 µg/L		28.742 ppb	22:33:47
2	K 766.490 Radial†	226.2	56.1	36.646 µg/L		36.646 ppb	22:33:27
2	Mg 279.077 IEC†	16.1	2.9	26.324 µg/L		26.324 ppb	22:33:47
2	Na 589.592 Radial†	490.2	7.0	2.1478 µg/L		2.1478 ppb	22:33:27
2	Sr 421.552†	22.7	-6.6	-0.0609 µg/L		-0.0609 ppb	22:33:27
2	Sc 361.383	2059030.4	2059030.4	104.89 %			22:34:56
2	Y 371.029	1423097.5	1423097.5	105.20 %			22:34:56
2	Ag 328.068†	-410.0	10.7	0.0820 µg/L		0.0820 ppb	22:35:01
2	As 188.979†	0.0	0.5	0.8834 µg/L		0.8834 ppb	22:35:22
2	B 249.677†	341.5	-58.6	-2.4029 µg/L		-2.4029 ppb	22:35:22
2	Ba 233.527†	-2.3	14.9	0.3573 µg/L		0.3573 ppb	22:35:22
2	Be 313.107†	-2672.8	307.4	0.1821 µg/L		0.1821 ppb	22:35:01
2	Cd 226.502†	-134.9	13.0	0.3213 µg/L		0.3213 ppb	22:35:22
2	Co 228.616†	2.8	0.8	0.0344 µg/L		0.0344 ppb	22:35:22
2	Cr 267.716†	-81.2	-27.0	-0.5422 µg/L		-0.5422 ppb	22:35:01
2	Cu 324.752†	2590.0	-74.3	-0.4813 µg/L		-0.4813 ppb	22:35:01
2	Mn 257.610†	-125.4	136.4	0.4300 µg/L		0.4300 ppb	22:35:22
2	Mo 202.031†	10.9	15.7	1.5422 µg/L		1.5422 ppb	22:35:22
2	Ni 231.604†	311.0	-15.8	-0.7893 µg/L		-0.7893 ppb	22:35:22
2	P 214.914†	11.5	-4.4	-8.6739 µg/L		-8.6739 ppb	22:35:22
2	Pb 220.353†	84.7	-10.2	-2.4785 µg/L		-2.4785 ppb	22:35:22

2	S 181.975 Axial†	13.6	-5.9	-24.609 µg/L	-24.609 ppb	22:35:22
2	Sb 206.836†	20.6	-2.9	-2.6273 µg/L	-2.6273 ppb	22:35:22
2	Se 196.026†	13.7	-6.2	-8.6858 µg/L	-8.6858 ppb	22:35:22
2	SiO2†	1497.0	35.7	7.0424 µg/L	7.0424 ppb	22:35:01
2	Si 251.611†	415.0	85.0	6.4614 µg/L	6.4614 ppb	22:35:22
2	Sn 189.927†	-0.4	-0.8	-0.3270 µg/L	-0.3270 ppb	22:35:22
2	Ti 334.940†	561.8	360.6	0.7953 µg/L	0.7953 ppb	22:35:01
2	Tl 190.801†	-23.2	0.3	0.4055 µg/L	0.4055 ppb	22:35:22
2	U 409.014†	-36.1	42.7	3.5443 µg/L	3.5443 ppb	22:35:01
2	V 292.402†	-37.1	9.3	0.1087 µg/L	0.1087 ppb	22:35:01
2	Zn 213.857†	547.0	-12.9	-0.3007 µg/L	-0.3007 ppb	22:35:22
3	Sc RADIAL	58397.7	58397.7	103 %		22:33:53
3	Al 396.153Radial†	22.9	14.8	10.265 µg/L	10.265 ppb	22:33:53
3	Ca 317.933Radial†	200.0	-17.8	-15.186 µg/L	-15.186 ppb	22:34:13
3	Fe 238.204 Radial†	19.3	2.1	16.862 µg/L	16.862 ppb	22:34:13
3	K 766.490 Radial†	136.3	-33.1	-21.647 µg/L	-21.647 ppb	22:33:53
3	Mg 279.077 IEC†	14.6	1.3	11.823 µg/L	11.823 ppb	22:34:13
3	Na 589.592 Radial†	421.2	-64.8	-19.889 µg/L	-19.889 ppb	22:33:53
3	Sr 421.552†	64.0	33.2	0.3059 µg/L	0.3059 ppb	22:33:53
3	Sc 361.383	2079286.4	2079286.4	105.92 %		22:35:28
3	Y 371.029	1436370.2	1436370.2	106.18 %		22:35:28
3	Ag 328.068†	-401.1	23.0	0.1715 µg/L	0.1715 ppb	22:35:33
3	As 188.979†	-1.6	-1.1	-1.9606 µg/L	-1.9606 ppb	22:35:54
3	B 249.677†	336.5	-66.4	-2.7154 µg/L	-2.7154 ppb	22:35:54
3	Ba 233.527†	1.7	18.7	0.4487 µg/L	0.4487 ppb	22:35:54
3	Be 313.107†	-2775.1	235.6	0.1396 µg/L	0.1396 ppb	22:35:33
3	Cd 226.502†	-139.5	10.0	0.2455 µg/L	0.2455 ppb	22:35:54
3	Co 228.616†	10.9	8.4	0.3796 µg/L	0.3796 ppb	22:35:54
3	Cr 267.716†	-70.2	-15.9	-0.3195 µg/L	-0.3195 ppb	22:35:33
3	Cu 324.752†	2569.1	-118.2	-0.7690 µg/L	-0.7690 ppb	22:35:33
3	Mn 257.610†	-151.1	113.3	0.3567 µg/L	0.3567 ppb	22:35:54
3	Mo 202.031†	3.0	8.2	0.8026 µg/L	0.8026 ppb	22:35:54
3	Ni 231.604†	308.0	-21.5	-1.0742 µg/L	-1.0742 ppb	22:35:54
3	P 214.914†	13.2	-2.9	-5.5667 µg/L	-5.5667 ppb	22:35:54
3	Pb 220.353†	82.0	-13.5	-3.2847 µg/L	-3.2847 ppb	22:35:54
3	S 181.975 Axial†	14.9	-4.9	-20.286 µg/L	-20.286 ppb	22:35:54
3	Sb 206.836†	22.1	-1.6	-1.4644 µg/L	-1.4644 ppb	22:35:54
3	Se 196.026†	20.9	0.5	0.6738 µg/L	0.6738 ppb	22:35:54
3	SiO2†	1489.3	14.6	2.8738 µg/L	2.8738 ppb	22:35:33
3	Si 251.611†	397.3	64.5	4.9030 µg/L	4.9030 ppb	22:35:54
3	Sn 189.927†	6.3	5.5	2.3325 µg/L	2.3325 ppb	22:35:54
3	Ti 334.940†	437.9	238.4	0.5262 µg/L	0.5262 ppb	22:35:33
3	Tl 190.801†	-21.4	2.1	2.7949 µg/L	2.7949 ppb	22:35:54
3	U 409.014†	-23.5	54.9	4.5578 µg/L	4.5578 ppb	22:35:33
3	V 292.402†	-40.4	6.6	0.0767 µg/L	0.0767 ppb	22:35:33
3	Zn 213.857†	544.4	-20.4	-0.4742 µg/L	-0.4742 ppb	22:35:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2063267.1	105.10 %	0.732			0.70%
Sc RADIAL	57924.4	103 %	0.7			0.73%
Y 371.029	1426009.6	105.42 %	0.684			0.65%
Ag 328.068†	2.9	0.0237 µg/L	0.18398	0.0237 ppb	0.18398	775.03%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	8.7	6.0290 µg/L	6.57768	6.0290 ppb	6.57768	109.10%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.4	-0.6362 µg/L	1.43200	-0.6362 ppb	1.43200	225.07%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-60.5	-2.4784 µg/L	0.20968	-2.4784 ppb	0.20968	8.46%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	16.4	0.3931 µg/L	0.04879	0.3931 ppb	0.04879	12.41%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	276.6	0.1639 µg/L	0.02189	0.1639 ppb	0.02189	13.35%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-17.7	-15.110 µg/L	1.7919	-15.110 ppb	1.7919	11.86%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	11.9	0.2936 µg/L	0.04185	0.2936 ppb	0.04185	14.25%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.0	0.1824 µg/L	0.17774	0.1824 ppb	0.17774	97.43%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-18.2	-0.3663 µg/L	0.15776	-0.3663 ppb	0.15776	43.07%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-85.1	-0.5518 µg/L	0.19193	-0.5518 ppb	0.19193	34.78%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.1	24.184 µg/L	6.4042	24.184 ppb	6.4042	26.48%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	4.4	2.8948 µg/L	30.21809	2.8948 ppb	30.21809	>999.9%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.0	0.3851 µg/L	33.17092	0.3851 ppb	33.17092	>999.9%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	128.9	0.4069 µg/L	0.04360	0.4069 ppb	0.04360	10.71%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	11.5	1.1260 µg/L	0.37846	1.1260 ppb	0.37846	33.61%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-15.0	-4.6218 µg/L	13.24967	-4.6218 ppb	13.24967	286.68%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-22.2	-1.1057 µg/L	0.33322	-1.1057 ppb	0.33322	30.14%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-3.0	-5.8814 µg/L	2.64922	-5.8814 ppb	2.64922	45.04%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-15.2	-3.6982 µg/L	1.47080	-3.6982 ppb	1.47080	39.77%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-5.1	-21.165 µg/L	3.0996	-21.165 ppb	3.0996	14.64%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-2.4	-2.2178 µg/L	0.65333	-2.2178 ppb	0.65333	29.46%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-4.8	-6.6652 µg/L	6.56608	-6.6652 ppb	6.56608	98.51%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	42.1	8.3028 µg/L	6.15672	8.3028 ppb	6.15672	74.15%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	78.7	5.9813 µg/L	0.93570	5.9813 ppb	0.93570	15.64%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	3.5	1.4599 µg/L	1.54769	1.4599 ppb	1.54769	106.01%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	18.6	0.1718 µg/L	0.20227	0.1718 ppb	0.20227	117.76%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	287.8	0.6364 µg/L	0.14099	0.6364 ppb	0.14099	22.15%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	3.0	3.9558 µg/L	4.25132	3.9558 ppb	4.25132	107.47%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	50.6	4.2054 µg/L	0.57295	4.2054 ppb	0.57295	13.62%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	15.7	0.1680 µg/L	0.13134	0.1680 ppb	0.13134	78.20%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-14.4	-0.3334 µg/L	0.12760	-0.3334 ppb	0.12760	38.27%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 23:05:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57547.7	57547.7	102 %		23:06:14
1	Al 396.153Radial†	7371.7	7229.5	5018.7 µg/L	5018.7 ppb	23:06:14
1	Ca 317.933Radial†	6105.6	5782.7	4939.5 µg/L	4939.5 ppb	23:06:34
1	Fe 238.204 Radial†	677.8	648.8	5128.1 µg/L	5128.1 ppb	23:06:34
1	K 766.490 Radial†	7884.7	7575.6	4947.8 µg/L	4947.8 ppb	23:06:14
1	Mg 279.077 IEC†	592.4	568.8	5087.4 µg/L	5087.4 ppb	23:06:34
1	Na 589.592 Radial†	33515.4	32430.5	9960.8 µg/L	9960.8 ppb	23:06:14
1	Sr 421.552†	53729.8	52718.8	486.34 µg/L	486.34 ppb	23:06:14
1	Sc 361.383	2017392.3	2017392.3	102.76 %		23:07:38
1	Y 371.029	1390584.4	1390584.4	102.80 %		23:07:38
1	Ag 328.068†	68163.9	66731.8	497.94 µg/L	497.94 ppb	23:07:43
1	As 188.979†	293.3	285.9	511.44 µg/L	511.44 ppb	23:08:04
1	B 249.677†	12721.2	11994.8	487.02 µg/L	487.02 ppb	23:07:43
1	Ba 233.527†	21407.2	20848.3	501.41 µg/L	501.41 ppb	23:07:43
1	Be 313.107†	853098.2	833003.6	494.20 µg/L	494.20 ppb	23:07:38
1	Cd 226.502†	20695.3	20280.2	505.74 µg/L	505.74 ppb	23:07:43
1	Co 228.616†	11453.9	11143.8	504.11 µg/L	504.11 ppb	23:07:43
1	Cr 267.716†	25823.0	25178.7	506.03 µg/L	506.03 ppb	23:07:43
1	Cu 324.752†	81137.5	76410.9	499.48 µg/L	499.48 ppb	23:07:43
1	Mn 257.610†	165189.1	161001.2	504.66 µg/L	504.66 ppb	23:07:38
1	Mo 202.031†	5400.3	5260.4	515.32 µg/L	515.32 ppb	23:08:04
1	Ni 231.604†	10765.7	10163.7	506.12 µg/L	506.12 ppb	23:07:43
1	P 214.914†	1337.7	1286.4	2499.1 µg/L	2499.1 ppb	23:08:04
1	Pb 220.353†	2230.8	2079.9	505.79 µg/L	505.79 ppb	23:08:04
1	S 181.975 Axial†	266.5	240.4	997.09 µg/L	997.09 ppb	23:08:04
1	Sb 206.836†	602.9	564.2	520.17 µg/L	520.17 ppb	23:08:04
1	Se 196.026†	387.5	357.8	510.54 µg/L	510.54 ppb	23:08:04
1	SiO2†	29659.8	27470.3	5422.3 µg/L	5422.3 ppb	23:07:43
1	Si 251.611†	34569.1	33328.5	2533.7 µg/L	2533.7 ppb	23:07:43
1	Sn 189.927†	1265.3	1230.9	519.12 µg/L	519.12 ppb	23:08:04
1	Ti 334.940†	230288.9	223918.6	495.03 µg/L	495.03 ppb	23:07:38
1	Tl 190.801†	382.1	394.2	517.92 µg/L	517.92 ppb	23:08:04
1	U 409.014†	6115.9	6028.5	499.86 µg/L	499.86 ppb	23:07:43
1	V 292.402†	52555.8	51186.7	505.09 µg/L	505.09 ppb	23:07:43
1	Zn 213.857†	22705.6	21560.3	502.26 µg/L	502.26 ppb	23:07:43
2	Sc RADIAL	58133.5	58133.5	103 %		23:06:40
2	Al 396.153Radial†	7400.2	7184.4	4987.5 µg/L	4987.5 ppb	23:06:40
2	Ca 317.933Radial†	6079.1	5696.6	4865.9 µg/L	4865.9 ppb	23:07:00
2	Fe 238.204 Radial†	666.8	631.5	4990.8 µg/L	4990.8 ppb	23:07:00
2	K 766.490 Radial†	7854.7	7468.4	4877.7 µg/L	4877.7 ppb	23:06:40
2	Mg 279.077 IEC†	586.6	557.3	4984.4 µg/L	4984.4 ppb	23:07:00
2	Na 589.592 Radial†	33547.1	32129.7	9868.4 µg/L	9868.4 ppb	23:06:40
2	Sr 421.552†	53696.2	52154.6	481.13 µg/L	481.13 ppb	23:06:40
2	Sc 361.383	2020250.9	2020250.9	102.91 %		23:08:11
2	Y 371.029	1392254.8	1392254.8	102.92 %		23:08:11
2	Ag 328.068†	67963.7	66443.4	495.79 µg/L	495.79 ppb	23:08:17
2	As 188.979†	286.3	278.7	498.54 µg/L	498.54 ppb	23:08:37
2	B 249.677†	12735.8	11991.5	486.95 µg/L	486.95 ppb	23:08:17
2	Ba 233.527†	21372.1	20784.7	499.88 µg/L	499.88 ppb	23:08:17
2	Be 313.107†	852994.2	831727.9	493.45 µg/L	493.45 ppb	23:08:11
2	Cd 226.502†	20623.3	20181.8	503.29 µg/L	503.29 ppb	23:08:17
2	Co 228.616†	11402.9	11078.5	501.14 µg/L	501.14 ppb	23:08:17
2	Cr 267.716†	25758.8	25080.8	504.07 µg/L	504.07 ppb	23:08:17
2	Cu 324.752†	80891.5	76060.2	497.17 µg/L	497.17 ppb	23:08:17
2	Mn 257.610†	165915.6	161479.7	506.14 µg/L	506.14 ppb	23:08:11
2	Mo 202.031†	5271.3	5127.6	502.32 µg/L	502.32 ppb	23:08:37
2	Ni 231.604†	10727.4	10111.7	503.53 µg/L	503.53 ppb	23:08:17
2	P 214.914†	1325.0	1272.2	2471.2 µg/L	2471.2 ppb	23:08:37
2	Pb 220.353†	2215.0	2061.4	501.27 µg/L	501.27 ppb	23:08:37

2	S 181.975 Axial†	262.8	236.5	980.60 µg/L	980.60 ppb	23:08:37
2	Sb 206.836†	582.8	543.8	501.33 µg/L	501.33 ppb	23:08:37
2	Se 196.026†	386.4	356.2	508.06 µg/L	508.06 ppb	23:08:37
2	SiO2†	29491.0	27265.4	5381.8 µg/L	5381.8 ppb	23:08:17
2	Si 251.611†	34394.7	33111.4	2517.2 µg/L	2517.2 ppb	23:08:17
2	Sn 189.927†	1226.1	1191.1	502.33 µg/L	502.33 ppb	23:08:37
2	Ti 334.940†	230974.1	224267.3	495.81 µg/L	495.81 ppb	23:08:11
2	Tl 190.801†	376.6	388.4	510.38 µg/L	510.38 ppb	23:08:37
2	U 409.014†	6158.6	6061.5	502.63 µg/L	502.63 ppb	23:08:17
2	V 292.402†	52563.5	51121.8	504.34 µg/L	504.34 ppb	23:08:17
2	Zn 213.857†	22699.7	21523.3	501.42 µg/L	501.42 ppb	23:08:17
3	Sc RADIAL	58082.9	58082.9	103 %		23:07:06
3	Al 396.153Radial†	7360.7	7152.2	4967.1 µg/L	4967.1 ppb	23:07:06
3	Ca 317.933Radial†	6119.1	5740.6	4903.5 µg/L	4903.5 ppb	23:07:26
3	Fe 238.204 Radial†	671.6	636.7	5030.6 µg/L	5030.6 ppb	23:07:26
3	K 766.490 Radial†	7857.6	7477.9	4883.9 µg/L	4883.9 ppb	23:07:06
3	Mg 279.077 IEC†	592.2	563.2	5035.7 µg/L	5035.7 ppb	23:07:26
3	Na 589.592 Radial†	33558.5	32169.2	9880.5 µg/L	9880.5 ppb	23:07:06
3	Sr 421.552†	53798.8	52299.8	482.47 µg/L	482.47 ppb	23:07:06
3	Sc 361.383	2030492.5	2030492.5	103.43 %		23:08:44
3	Y 371.029	1399481.5	1399481.5	103.45 %		23:08:44
3	Ag 328.068†	61967.1	60312.6	449.89 µg/L	449.89 ppb	23:08:50
3	As 188.979†	236.7	229.3	410.26 µg/L	410.26 ppb	23:09:10
3	B 249.677†	11514.3	10748.1	436.11 µg/L	436.11 ppb	23:08:50
3	Ba 233.527†	18722.2	18118.1	435.73 µg/L	435.73 ppb	23:08:50
3	Be 313.107†	776418.3	753512.1	447.04 µg/L	447.04 ppb	23:08:44
3	Cd 226.502†	17928.8	17475.6	435.72 µg/L	435.72 ppb	23:08:50
3	Co 228.616†	9860.5	9531.4	431.09 µg/L	431.09 ppb	23:08:50
3	Cr 267.716†	21552.8	20888.1	419.81 µg/L	419.81 ppb	23:08:50
3	Cu 324.752†	70553.7	65668.9	429.35 µg/L	429.35 ppb	23:08:50
3	Mn 257.610†	151097.3	146339.8	458.73 µg/L	458.73 ppb	23:08:44
3	Mo 202.031†	4274.6	4138.1	405.42 µg/L	405.42 ppb	23:09:10
3	Ni 231.604†	9262.5	8642.8	430.39 µg/L	430.39 ppb	23:08:50
3	P 214.914†	1088.9	1037.4	2012.0 µg/L	2012.0 ppb	23:09:10
3	Pb 220.353†	1862.8	1710.1	415.78 µg/L	415.78 ppb	23:09:10
3	S 181.975 Axial†	230.4	203.8	845.05 µg/L	845.05 ppb	23:09:10
3	Sb 206.836†	487.9	449.2	413.81 µg/L	413.81 ppb	23:09:10
3	Se 196.026†	331.1	300.8	430.27 µg/L	430.27 ppb	23:09:10
3	SiO2†	26594.8	24320.8	4800.6 µg/L	4800.6 ppb	23:08:50
3	Si 251.611†	30776.4	29444.6	2238.4 µg/L	2238.4 ppb	23:08:50
3	Sn 189.927†	980.5	947.6	399.66 µg/L	399.66 ppb	23:09:10
3	Ti 334.940†	208127.5	201046.7	444.44 µg/L	444.44 ppb	23:08:44
3	Tl 190.801†	323.3	335.0	440.57 µg/L	440.57 ppb	23:09:10
3	U 409.014†	5266.7	5169.0	428.47 µg/L	428.47 ppb	23:08:50
3	V 292.402†	44963.5	43516.4	429.21 µg/L	429.21 ppb	23:08:50
3	Zn 213.857†	19740.8	18551.4	432.13 µg/L	432.13 ppb	23:08:50

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2022711.9	103.04 %	0.351			0.34%
Sc RADIAL	57921.3	103 %	0.6			0.56%
Y 371.029	1394106.9	103.06 %	0.350			0.34%
Ag 328.068†	64495.9	481.20 µg/L	27.143	481.20 ppb	27.143	5.64%
QC value within limits for Ag 328.068 Recovery = 96.24%						
Al 396.153Radial†	7188.7	4991.1 µg/L	25.95	4991.1 ppb	25.95	0.52%
QC value within limits for Al 396.153Radial Recovery = 99.82%						
As 188.979†	264.6	473.41 µg/L	55.075	473.41 ppb	55.075	11.63%
QC value within limits for As 188.979 Recovery = 94.68%						
B 249.677†	11578.1	470.03 µg/L	29.369	470.03 ppb	29.369	6.25%
QC value within limits for B 249.677 Recovery = 94.01%						
Ba 233.527†	19917.0	479.01 µg/L	37.487	479.01 ppb	37.487	7.83%
QC value within limits for Ba 233.527 Recovery = 95.80%						
Be 313.107†	806081.2	478.23 µg/L	27.011	478.23 ppb	27.011	5.65%
QC value within limits for Be 313.107 Recovery = 95.65%						
Ca 317.933Radial†	5740.0	4903.0 µg/L	36.79	4903.0 ppb	36.79	0.75%
QC value within limits for Ca 317.933Radial Recovery = 98.06%						
Cd 226.502†	19312.5	481.58 µg/L	39.737	481.58 ppb	39.737	8.25%
QC value within limits for Cd 226.502 Recovery = 96.32%						
Co 228.616†	10584.5	478.78 µg/L	41.325	478.78 ppb	41.325	8.63%

Cr	QC value within limits for Co 228.616	Recovery = 95.76%			
267.716†	23715.8	476.64 µg/L	49.224	476.64 ppb	49.224 10.33%
Cu	QC value within limits for Cr 267.716	Recovery = 95.33%			
324.752†	72713.4	475.34 µg/L	39.841	475.34 ppb	39.841 8.38%
Fe	QC value within limits for Cu 324.752	Recovery = 95.07%			
238.204 Radial†	639.0	5049.9 µg/L	70.60	5049.9 ppb	70.60 1.40%
K	QC value within limits for Fe 238.204 Radial	Recovery = 101.00%			
766.490 Radial†	7507.3	4903.1 µg/L	38.76	4903.1 ppb	38.76 0.79%
Mg	QC value within limits for K 766.490 Radial	Recovery = 98.06%			
279.077 IEC†	563.1	5035.8 µg/L	51.50	5035.8 ppb	51.50 1.02%
Mn	QC value within limits for Mg 279.077 IEC	Recovery = 100.72%			
257.610†	156273.5	489.84 µg/L	26.952	489.84 ppb	26.952 5.50%
Mo	QC value within limits for Mn 257.610	Recovery = 97.97%			
202.031†	4842.0	474.35 µg/L	60.048	474.35 ppb	60.048 12.66%
Na	QC value within limits for Mo 202.031	Recovery = 94.87%			
589.592 Radial†	32243.1	9903.3 µg/L	50.20	9903.3 ppb	50.20 0.51%
Ni	QC value within limits for Na 589.592 Radial	Recovery = 99.03%			
231.604†	9639.4	480.01 µg/L	42.993	480.01 ppb	42.993 8.96%
P	QC value within limits for Ni 231.604	Recovery = 96.00%			
214.914†	1198.7	2327.4 µg/L	273.57	2327.4 ppb	273.57 11.75%
Pb	QC value within limits for P 214.914	Recovery = 93.10%			
220.353†	1950.4	474.28 µg/L	50.715	474.28 ppb	50.715 10.69%
S	QC value within limits for Pb 220.353	Recovery = 94.86%			
181.975 Axial†	226.9	940.92 µg/L	83.427	940.92 ppb	83.427 8.87%
Sb	QC value within limits for S 181.975 Axial	Recovery = 94.09%			
206.836†	519.1	478.43 µg/L	56.755	478.43 ppb	56.755 11.86%
Se	QC value within limits for Sb 206.836	Recovery = 95.69%			
196.026†	338.2	482.96 µg/L	45.644	482.96 ppb	45.644 9.45%
SiO2†	QC value within limits for Se 196.026	Recovery = 96.59%			
	26352.2	5201.6 µg/L	347.84	5201.6 ppb	347.84 6.69%
Si	QC value within limits for SiO2	Recovery = 97.27%			
251.611†	31961.5	2429.8 µg/L	165.91	2429.8 ppb	165.91 6.83%
Sn	QC value within limits for Si 251.611	Recovery = 97.19%			
189.927†	1123.2	473.71 µg/L	64.673	473.71 ppb	64.673 13.65%
Sr	QC value within limits for Sn 189.927	Recovery = 94.74%			
421.552†	52391.1	483.32 µg/L	2.703	483.32 ppb	2.703 0.56%
Ti	QC value within limits for Sr 421.552	Recovery = 96.66%			
334.940†	216410.9	478.43 µg/L	29.438	478.43 ppb	29.438 6.15%
Tl	QC value within limits for Ti 334.940	Recovery = 95.69%			
190.801†	372.5	489.62 µg/L	42.649	489.62 ppb	42.649 8.71%
U	QC value within limits for Tl 190.801	Recovery = 97.92%			
409.014†	5753.0	476.99 µg/L	42.039	476.99 ppb	42.039 8.81%
V	QC value within limits for U 409.014	Recovery = 95.40%			
292.402†	48608.3	479.54 µg/L	43.595	479.54 ppb	43.595 9.09%
Zn	QC value within limits for V 292.402	Recovery = 95.91%			
213.857†	20545.0	478.60 µg/L	40.255	478.60 ppb	40.255 8.41%
	QC value within limits for Zn 213.857	Recovery = 95.72%			

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 23:09:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57057.7	57057.7	101 %		23:09:52
1	Al 396.153Radial†	16.4	8.9	6.1575 µg/L	6.1575 ppb	23:09:52
1	Ca 317.933Radial†	206.6	-6.7	-5.7540 µg/L	-5.7540 ppb	23:10:13
1	Fe 238.204 Radial†	21.4	4.6	36.351 µg/L	36.351 ppb	23:10:13
1	K 766.490 Radial†	188.9	22.0	14.383 µg/L	14.383 ppb	23:09:52
1	Mg 279.077 IEC†	12.9	-0.0	-0.3283 µg/L	-0.3283 ppb	23:10:13
1	Na 589.592 Radial†	447.3	-29.3	-8.9850 µg/L	-8.9850 ppb	23:09:52
1	Sr 421.552†	72.3	42.8	0.3950 µg/L	0.3950 ppb	23:09:52
1	Sc 361.383	2009889.0	2009889.0	102.38 %		23:11:15
1	Y 371.029	1389446.2	1389446.2	102.71 %		23:11:15
1	Ag 328.068†	-351.8	58.0	0.4309 µg/L	0.4309 ppb	23:11:20
1	As 188.979†	-0.6	-0.1	-0.1425 µg/L	-0.1425 ppb	23:11:41
1	B 249.677†	354.2	-38.1	-1.5742 µg/L	-1.5742 ppb	23:11:41
1	Ba 233.527†	3.5	20.5	0.4911 µg/L	0.4911 ppb	23:11:41
1	Be 313.107†	-2657.6	259.9	0.1538 µg/L	0.1538 ppb	23:11:20
1	Cd 226.502†	-137.1	7.8	0.1907 µg/L	0.1907 ppb	23:11:41
1	Co 228.616†	3.7	1.7	0.0748 µg/L	0.0748 ppb	23:11:41
1	Cr 267.716†	-72.7	-20.6	-0.4139 µg/L	-0.4139 ppb	23:11:20
1	Cu 324.752†	2570.7	-32.8	-0.2093 µg/L	-0.2093 ppb	23:11:20
1	Mn 257.610†	-93.2	165.0	0.5214 µg/L	0.5214 ppb	23:11:41
1	Mo 202.031†	3.5	8.8	0.8615 µg/L	0.8615 ppb	23:11:41
1	Ni 231.604†	315.5	-4.1	-0.2065 µg/L	-0.2065 ppb	23:11:41
1	P 214.914†	6.9	-8.6	-17.030 µg/L	-17.030 ppb	23:11:41
1	Pb 220.353†	80.2	-12.6	-3.0691 µg/L	-3.0691 ppb	23:11:41
1	S 181.975 Axial†	13.9	-5.3	-22.180 µg/L	-22.180 ppb	23:11:41
1	Sb 206.836†	21.7	-1.3	-1.1333 µg/L	-1.1333 ppb	23:11:41
1	Se 196.026†	18.3	-1.4	-1.9095 µg/L	-1.9095 ppb	23:11:41
1	SiO2†	1515.1	88.3	17.432 µg/L	17.432 ppb	23:11:20
1	Si 251.611†	427.0	106.4	8.0899 µg/L	8.0899 ppb	23:11:41
1	Sn 189.927†	4.7	4.2	1.7607 µg/L	1.7607 ppb	23:11:41
1	Ti 334.940†	771.1	578.1	1.2789 µg/L	1.2789 ppb	23:11:20
1	Tl 190.801†	-21.8	1.1	1.4577 µg/L	1.4577 ppb	23:11:41
1	U 409.014†	-16.0	61.5	5.1011 µg/L	5.1011 ppb	23:11:20
1	V 292.402†	-58.9	-12.8	-0.1096 µg/L	-0.1096 ppb	23:11:20
1	Zn 213.857†	542.3	-4.8	-0.1123 µg/L	-0.1123 ppb	23:11:41
2	Sc RADIAL	57071.4	57071.4	101 %		23:10:18
2	Al 396.153Radial†	8.3	0.9	0.5821 µg/L	0.5821 ppb	23:10:18
2	Ca 317.933Radial†	214.5	1.1	0.8983 µg/L	0.8983 ppb	23:10:39
2	Fe 238.204 Radial†	18.1	1.4	10.777 µg/L	10.777 ppb	23:10:39
2	K 766.490 Radial†	267.4	99.8	65.151 µg/L	65.151 ppb	23:10:18
2	Mg 279.077 IEC†	10.1	-2.8	-24.932 µg/L	-24.932 ppb	23:10:39
2	Na 589.592 Radial†	432.3	-44.2	-13.583 µg/L	-13.583 ppb	23:10:18
2	Sr 421.552†	50.5	21.2	0.1956 µg/L	0.1956 ppb	23:10:18
2	Sc 361.383	2020781.7	2020781.7	102.94 %		23:11:47
2	Y 371.029	1396749.0	1396749.0	103.25 %		23:11:47
2	Ag 328.068†	-396.9	16.1	0.1175 µg/L	0.1175 ppb	23:11:52
2	As 188.979†	0.7	1.2	2.0940 µg/L	2.0940 ppb	23:12:13
2	B 249.677†	344.3	-49.7	-2.0296 µg/L	-2.0296 ppb	23:12:13
2	Ba 233.527†	10.9	27.7	0.6639 µg/L	0.6639 ppb	23:12:13
2	Be 313.107†	-2676.0	256.0	0.1515 µg/L	0.1515 ppb	23:11:52
2	Cd 226.502†	-146.1	-0.3	-0.0086 µg/L	-0.0086 ppb	23:12:13
2	Co 228.616†	4.5	2.5	0.1093 µg/L	0.1093 ppb	23:12:13
2	Cr 267.716†	-64.9	-12.7	-0.2549 µg/L	-0.2549 ppb	23:11:52
2	Cu 324.752†	2583.3	-34.1	-0.2211 µg/L	-0.2211 ppb	23:11:52
2	Mn 257.610†	33.5	288.6	0.9061 µg/L	0.9061 ppb	23:12:13
2	Mo 202.031†	-0.1	5.2	0.5097 µg/L	0.5097 ppb	23:12:13
2	Ni 231.604†	310.4	-10.8	-0.5376 µg/L	-0.5376 ppb	23:12:13
2	P 214.914†	14.3	-1.5	-2.8930 µg/L	-2.8930 ppb	23:12:13
2	Pb 220.353†	90.6	-3.0	-0.7206 µg/L	-0.7206 ppb	23:12:13

2	S 181.975 Axial†	16.0	-3.4	-13.920 µg/L	-13.920 ppb	23:12:13
2	Sb 206.836†	23.1	-0.0	-0.0297 µg/L	-0.0297 ppb	23:12:13
2	Se 196.026†	15.7	-4.0	-5.6316 µg/L	-5.6316 ppb	23:12:13
2	SiO2†	1556.9	120.9	23.873 µg/L	23.873 ppb	23:11:52
2	Si 251.611†	460.7	136.9	10.406 µg/L	10.406 ppb	23:12:13
2	Sn 189.927†	-0.9	-1.2	-0.5120 µg/L	-0.5120 ppb	23:12:13
2	Ti 334.940†	740.4	544.2	1.2058 µg/L	1.2058 ppb	23:11:52
2	Tl 190.801†	-24.4	-1.3	-1.6505 µg/L	-1.6505 ppb	23:12:13
2	U 409.014†	-55.3	23.4	1.9414 µg/L	1.9414 ppb	23:11:52
2	V 292.402†	-83.3	-36.2	-0.3461 µg/L	-0.3461 ppb	23:11:52
2	Zn 213.857†	542.3	-7.6	-0.1746 µg/L	-0.1746 ppb	23:12:13
3	Sc RADIAL	57024.4	57024.4	101 %		23:10:44
3	Al 396.153Radial†	28.2	20.6	14.312 µg/L	14.312 ppb	23:10:44
3	Ca 317.933Radial†	203.6	-9.6	-8.1744 µg/L	-8.1744 ppb	23:11:04
3	Fe 238.204 Radial†	19.9	3.1	24.715 µg/L	24.715 ppb	23:11:04
3	K 766.490 Radial†	255.2	87.8	57.354 µg/L	57.354 ppb	23:10:44
3	Mg 279.077 IEC†	13.0	0.1	0.7509 µg/L	0.7509 ppb	23:11:04
3	Na 589.592 Radial†	480.3	3.7	1.1222 µg/L	1.1222 ppb	23:10:44
3	Sr 421.552†	41.1	11.9	0.1098 µg/L	0.1098 ppb	23:10:44
3	Sc 361.383	2015035.0	2015035.0	102.64 %		23:12:19
3	Y 371.029	1393345.2	1393345.2	103.00 %		23:12:19
3	Ag 328.068†	-399.3	12.6	0.0933 µg/L	0.0933 ppb	23:12:25
3	As 188.979†	1.9	2.3	4.1656 µg/L	4.1656 ppb	23:12:45
3	B 249.677†	334.7	-58.0	-2.3782 µg/L	-2.3782 ppb	23:12:45
3	Ba 233.527†	-4.7	12.5	0.2988 µg/L	0.2988 ppb	23:12:45
3	Be 313.107†	-2569.3	352.6	0.2090 µg/L	0.2090 ppb	23:12:25
3	Cd 226.502†	-138.5	6.8	0.1657 µg/L	0.1657 ppb	23:12:45
3	Co 228.616†	7.6	5.5	0.2480 µg/L	0.2480 ppb	23:12:45
3	Cr 267.716†	-72.8	-20.5	-0.4127 µg/L	-0.4127 ppb	23:12:25
3	Cu 324.752†	2608.3	-2.6	-0.0135 µg/L	-0.0135 ppb	23:12:25
3	Mn 257.610†	-109.2	149.6	0.4717 µg/L	0.4717 ppb	23:12:45
3	Mo 202.031†	8.3	13.4	1.3150 µg/L	1.3150 ppb	23:12:45
3	Ni 231.604†	307.9	-12.4	-0.6185 µg/L	-0.6185 ppb	23:12:45
3	P 214.914†	9.6	-6.0	-11.945 µg/L	-11.945 ppb	23:12:45
3	Pb 220.353†	89.3	-3.9	-0.9624 µg/L	-0.9624 ppb	23:12:45
3	S 181.975 Axial†	17.3	-2.1	-8.6936 µg/L	-8.6936 ppb	23:12:45
3	Sb 206.836†	27.2	4.0	3.6685 µg/L	3.6685 ppb	23:12:45
3	Se 196.026†	14.5	-5.2	-7.2537 µg/L	-7.2537 ppb	23:12:45
3	SiO2†	1511.8	81.3	16.045 µg/L	16.045 ppb	23:12:25
3	Si 251.611†	407.9	86.8	6.5981 µg/L	6.5981 ppb	23:12:45
3	Sn 189.927†	1.5	1.1	0.4522 µg/L	0.4522 ppb	23:12:45
3	Ti 334.940†	528.4	339.7	0.7514 µg/L	0.7514 ppb	23:12:25
3	Tl 190.801†	-23.3	-0.4	-0.4507 µg/L	-0.4507 ppb	23:12:45
3	U 409.014†	10.8	87.6	7.2739 µg/L	7.2739 ppb	23:12:25
3	V 292.402†	-68.0	-21.5	-0.1901 µg/L	-0.1901 ppb	23:12:25
3	Zn 213.857†	544.0	-4.4	-0.1013 µg/L	-0.1013 ppb	23:12:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2015235.2	102.65 %	0.278			0.27%
Sc RADIAL	57051.2	101 %	0.0			0.04%
Y 371.029	1393180.1	102.99 %	0.270			0.26%
Ag 328.068†	28.9	0.2139 µg/L	0.18832	0.2139 ppb	0.18832	88.05%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	10.1	7.0174 µg/L	6.90546	7.0174 ppb	6.90546	98.41%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.1	2.0390 µg/L	2.15458	2.0390 ppb	2.15458	105.67%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-48.6	-1.9940 µg/L	0.40322	-1.9940 ppb	0.40322	20.22%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	20.2	0.4846 µg/L	0.18261	0.4846 ppb	0.18261	37.68%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	289.5	0.1714 µg/L	0.03254	0.1714 ppb	0.03254	18.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-5.1	-4.3434 µg/L	4.69799	-4.3434 ppb	4.69799	108.16%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.8	0.1159 µg/L	0.10856	0.1159 ppb	0.10856	93.64%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	3.2	0.1440 µg/L	0.09170	0.1440 ppb	0.09170	63.66%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-17.9	-0.3605 µg/L	0.09147	-0.3605 ppb	0.09147	25.37%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-23.2	-0.1480 µg/L	0.11660	-0.1480 ppb	0.11660	78.79%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	3.0	23.948 µg/L	12.8041	23.948 ppb	12.8041	53.47%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	69.9	45.629 µg/L	27.3393	45.629 ppb	27.3393	59.92%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.9	-8.1699 µg/L	14.52675	-8.1699 ppb	14.52675	177.81%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	201.0	0.6331 µg/L	0.23777	0.6331 ppb	0.23777	37.56%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	9.1	0.8954 µg/L	0.40369	0.8954 ppb	0.40369	45.08%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-23.3	-7.1485 µg/L	7.52241	-7.1485 ppb	7.52241	105.23%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-9.1	-0.4542 µg/L	0.21833	-0.4542 ppb	0.21833	48.07%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-5.4	-10.623 µg/L	7.1608	-10.623 ppb	7.1608	67.41%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-6.5	-1.5841 µg/L	1.29178	-1.5841 ppb	1.29178	81.55%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-3.6	-14.931 µg/L	6.7999	-14.931 ppb	6.7999	45.54%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	0.9	0.8352 µg/L	2.51500	0.8352 ppb	2.51500	301.14%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.6	-4.9316 µg/L	2.73998	-4.9316 ppb	2.73998	55.56%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	96.8	19.116 µg/L	4.1770	19.116 ppb	4.1770	21.85%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	110.0	8.3647 µg/L	1.91884	8.3647 ppb	1.91884	22.94%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	1.4	0.5669 µg/L	1.14067	0.5669 ppb	1.14067	201.20%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	25.3	0.2335 µg/L	0.14633	0.2335 ppb	0.14633	62.68%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	487.4	1.0787 µg/L	0.28581	1.0787 ppb	0.28581	26.50%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.2	-0.2145 µg/L	1.56752	-0.2145 ppb	1.56752	730.70%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	57.5	4.7722 µg/L	2.68141	4.7722 ppb	2.68141	56.19%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-23.5	-0.2153 µg/L	0.12024	-0.2153 ppb	0.12024	55.85%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-5.6	-0.1294 µg/L	0.03957	-0.1294 ppb	0.03957	30.58%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 39

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/19/2010 23:38:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58933.2	58933.2	104 %		23:38:44
1	Al 396.153Radial†	7172.7	6868.7	4768.0 µg/L	4768.0 ppb	23:38:44
1	Ca 317.933Radial†	6050.3	5588.8	4773.8 µg/L	4773.8 ppb	23:39:05
1	Fe 238.204 Radial†	660.6	616.7	4874.3 µg/L	4874.3 ppb	23:39:05
1	K 766.490 Radial†	7705.1	7221.5	4716.5 µg/L	4716.5 ppb	23:38:44
1	Mg 279.077 IEC†	575.7	539.0	4821.5 µg/L	4821.5 ppb	23:39:05
1	Na 589.592 Radial†	32864.9	31033.3	9531.7 µg/L	9531.7 ppb	23:38:44
1	Sr 421.552†	52837.3	50623.1	467.01 µg/L	467.01 ppb	23:38:44
1	Sc 361.383	2065679.1	2065679.1	105.22 %		23:40:08
1	Y 371.029	1422719.1	1422719.1	105.17 %		23:40:08
1	Ag 328.068†	67697.4	64737.9	483.06 µg/L	483.06 ppb	23:40:14
1	As 188.979†	294.5	280.3	501.52 µg/L	501.52 ppb	23:40:34
1	B 249.677†	12750.6	11733.4	476.47 µg/L	476.47 ppb	23:40:14
1	Ba 233.527†	21308.0	20267.1	487.43 µg/L	487.43 ppb	23:40:14
1	Be 313.107†	854737.7	815156.4	483.62 µg/L	483.62 ppb	23:40:08
1	Cd 226.502†	20617.6	19735.6	492.16 µg/L	492.16 ppb	23:40:14
1	Co 228.616†	11380.5	10813.6	489.17 µg/L	489.17 ppb	23:40:14
1	Cr 267.716†	25607.5	24386.5	490.11 µg/L	490.11 ppb	23:40:14
1	Cu 324.752†	80271.0	73741.8	482.03 µg/L	482.03 ppb	23:40:14
1	Mn 257.610†	165524.3	157562.1	493.86 µg/L	493.86 ppb	23:40:08
1	Mo 202.031†	5363.7	5102.7	499.88 µg/L	499.88 ppb	23:40:34
1	Ni 231.604†	10686.1	9843.2	490.16 µg/L	490.16 ppb	23:40:14
1	P 214.914†	1327.8	1246.5	2422.0 µg/L	2422.0 ppb	23:40:34
1	Pb 220.353†	2236.8	2034.8	494.83 µg/L	494.83 ppb	23:40:34
1	S 181.975 Axial†	262.8	230.9	957.37 µg/L	957.37 ppb	23:40:34
1	Sb 206.836†	589.0	537.3	495.44 µg/L	495.44 ppb	23:40:34
1	Se 196.026†	400.2	361.0	514.73 µg/L	514.73 ppb	23:40:34
1	SiO2†	29290.4	26444.6	5219.8 µg/L	5219.8 ppb	23:40:14
1	Si 251.611†	34183.1	32175.3	2446.0 µg/L	2446.0 ppb	23:40:14
1	Sn 189.927†	1265.3	1202.1	506.97 µg/L	506.97 ppb	23:40:34
1	Ti 334.940†	230200.3	218596.0	483.28 µg/L	483.28 ppb	23:40:08
1	Tl 190.801†	374.1	377.9	496.67 µg/L	496.67 ppb	23:40:34
1	U 409.014†	6143.3	5915.4	490.51 µg/L	490.51 ppb	23:40:14
1	V 292.402†	52287.8	49736.5	490.76 µg/L	490.76 ppb	23:40:14
1	Zn 213.857†	22608.6	20951.7	488.11 µg/L	488.11 ppb	23:40:14
2	Sc RADIAL	58655.2	58655.2	104 %		23:39:10
2	Al 396.153Radial†	7191.3	6919.2	4803.2 µg/L	4803.2 ppb	23:39:10
2	Ca 317.933Radial†	6069.1	5634.4	4812.8 µg/L	4812.8 ppb	23:39:31
2	Fe 238.204 Radial†	666.1	625.0	4940.0 µg/L	4940.0 ppb	23:39:31
2	K 766.490 Radial†	7748.2	7298.0	4766.4 µg/L	4766.4 ppb	23:39:10
2	Mg 279.077 IEC†	586.1	551.7	4934.9 µg/L	4934.9 ppb	23:39:31
2	Na 589.592 Radial†	32986.9	31300.2	9613.6 µg/L	9613.6 ppb	23:39:10
2	Sr 421.552†	52917.2	50940.1	469.93 µg/L	469.93 ppb	23:39:10
2	Sc 361.383	2055118.2	2055118.2	104.69 %		23:40:41
2	Y 371.029	1414341.2	1414341.2	104.55 %		23:40:41
2	Ag 328.068†	67915.5	65276.8	487.08 µg/L	487.08 ppb	23:40:47
2	As 188.979†	287.6	275.2	492.28 µg/L	492.28 ppb	23:41:07
2	B 249.677†	12834.8	11876.1	482.26 µg/L	482.26 ppb	23:40:47
2	Ba 233.527†	21308.2	20371.4	489.94 µg/L	489.94 ppb	23:40:47
2	Be 313.107†	849714.5	814532.3	483.24 µg/L	483.24 ppb	23:40:41
2	Cd 226.502†	20625.5	19843.8	494.86 µg/L	494.86 ppb	23:40:47
2	Co 228.616†	11438.4	10924.5	494.18 µg/L	494.18 ppb	23:40:47
2	Cr 267.716†	25732.1	24630.5	495.02 µg/L	495.02 ppb	23:40:47
2	Cu 324.752†	80507.6	74359.9	486.07 µg/L	486.07 ppb	23:40:47
2	Mn 257.610†	164393.1	157290.0	493.02 µg/L	493.02 ppb	23:40:41
2	Mo 202.031†	5257.3	5027.3	492.49 µg/L	492.49 ppb	23:41:07
2	Ni 231.604†	10714.5	9922.5	494.11 µg/L	494.11 ppb	23:40:47
2	P 214.914†	1313.8	1239.6	2407.7 µg/L	2407.7 ppb	23:41:07
2	Pb 220.353†	2207.0	2017.3	490.55 µg/L	490.55 ppb	23:41:07

2	S 181.975 Axial†	267.9	237.0	982.86 µg/L	982.86 ppb	23:41:07
2	Sb 206.836†	582.2	533.6	491.91 µg/L	491.91 ppb	23:41:07
2	Se 196.026†	397.8	360.7	514.34 µg/L	514.34 ppb	23:41:07
2	SiO2†	29503.7	26791.4	5288.3 µg/L	5288.3 ppb	23:40:47
2	Si 251.611†	34392.7	32542.5	2473.9 µg/L	2473.9 ppb	23:40:47
2	Sn 189.927†	1234.4	1178.7	497.12 µg/L	497.12 ppb	23:41:07
2	Ti 334.940†	228997.4	218571.2	483.22 µg/L	483.22 ppb	23:40:41
2	Tl 190.801†	370.8	376.5	494.87 µg/L	494.87 ppb	23:41:07
2	U 409.014†	6076.5	5881.5	487.69 µg/L	487.69 ppb	23:40:47
2	V 292.402†	52388.9	50088.4	494.15 µg/L	494.15 ppb	23:40:47
2	Zn 213.857†	22671.2	21121.9	492.07 µg/L	492.07 ppb	23:40:47
3	Sc RADIAL	58551.8	58551.8	104 %		23:39:36
3	Al 396.153Radial†	7184.9	6925.2	4809.2 µg/L	4809.2 ppb	23:39:36
3	Ca 317.933Radial†	6057.4	5633.4	4811.9 µg/L	4811.9 ppb	23:39:56
3	Fe 238.204 Radial†	667.5	627.4	4957.8 µg/L	4957.8 ppb	23:39:56
3	K 766.490 Radial†	7791.0	7352.4	4802.0 µg/L	4802.0 ppb	23:39:36
3	Mg 279.077 IEC†	578.1	545.0	4873.1 µg/L	4873.1 ppb	23:39:56
3	Na 589.592 Radial†	32965.6	31335.8	9624.6 µg/L	9624.6 ppb	23:39:36
3	Sr 421.552†	53009.1	51118.7	471.58 µg/L	471.58 ppb	23:39:36
3	Sc 361.383	2030006.9	2030006.9	103.41 %		23:41:15
3	Y 371.029	1398396.5	1398396.5	103.37 %		23:41:15
3	Ag 328.068†	62848.2	61179.0	456.33 µg/L	456.33 ppb	23:41:20
3	As 188.979†	242.8	235.2	420.85 µg/L	420.85 ppb	23:41:41
3	B 249.677†	11717.7	10947.4	444.28 µg/L	444.28 ppb	23:41:20
3	Ba 233.527†	19024.3	18414.6	442.86 µg/L	442.86 ppb	23:41:20
3	Be 313.107†	777937.3	755160.5	448.02 µg/L	448.02 ppb	23:41:15
3	Cd 226.502†	18249.9	17790.3	443.59 µg/L	443.59 ppb	23:41:20
3	Co 228.616†	9984.8	9653.8	436.64 µg/L	436.64 ppb	23:41:20
3	Cr 267.716†	21785.9	21118.4	424.44 µg/L	424.44 ppb	23:41:20
3	Cu 324.752†	71113.2	66226.3	432.98 µg/L	432.98 ppb	23:41:20
3	Mn 257.610†	151288.3	146559.5	459.42 µg/L	459.42 ppb	23:41:15
3	Mo 202.031†	4272.3	4136.8	405.29 µg/L	405.29 ppb	23:41:41
3	Ni 231.604†	9405.6	8783.4	437.39 µg/L	437.39 ppb	23:41:20
3	P 214.914†	1080.9	1030.0	1996.9 µg/L	1996.9 ppb	23:41:41
3	Pb 220.353†	1868.0	1715.5	417.08 µg/L	417.08 ppb	23:41:41
3	S 181.975 Axial†	230.6	204.1	846.44 µg/L	846.44 ppb	23:41:41
3	Sb 206.836†	482.8	444.4	409.38 µg/L	409.38 ppb	23:41:41
3	Se 196.026†	339.5	309.0	441.86 µg/L	441.86 ppb	23:41:41
3	SiO2†	26761.7	24488.4	4833.7 µg/L	4833.7 ppb	23:41:20
3	Si 251.611†	31061.3	29727.3	2259.9 µg/L	2259.9 ppb	23:41:20
3	Sn 189.927†	989.8	956.8	403.51 µg/L	403.51 ppb	23:41:41
3	Ti 334.940†	208298.2	201259.9	444.92 µg/L	444.92 ppb	23:41:15
3	Tl 190.801†	325.8	337.5	443.78 µg/L	443.78 ppb	23:41:41
3	U 409.014†	5294.0	5196.7	430.78 µg/L	430.78 ppb	23:41:20
3	V 292.402†	45485.4	44031.4	434.23 µg/L	434.23 ppb	23:41:20
3	Zn 213.857†	19944.3	18752.8	436.83 µg/L	436.83 ppb	23:41:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2050268.1	104.44 %	0.933			0.89%
Sc RADIAL	58713.4	104 %	0.3			0.34%
Y 371.029	1411818.9	104.37 %	0.913			0.88%
Ag 328.068†	63731.2	475.49 µg/L	16.711	475.49 ppb	16.711	3.51%
QC value within limits for Ag 328.068 Recovery = 95.10%						
Al 396.153Radial†	6904.4	4793.5 µg/L	22.30	4793.5 ppb	22.30	0.47%
QC value within limits for Al 396.153Radial Recovery = 95.87%						
As 188.979†	263.6	471.55 µg/L	44.146	471.55 ppb	44.146	9.36%
QC value within limits for As 188.979 Recovery = 94.31%						
B 249.677†	11519.0	467.67 µg/L	20.459	467.67 ppb	20.459	4.37%
QC value within limits for B 249.677 Recovery = 93.53%						
Ba 233.527†	19684.4	473.41 µg/L	26.489	473.41 ppb	26.489	5.60%
QC value within limits for Ba 233.527 Recovery = 94.68%						
Be 313.107†	794949.7	471.63 µg/L	20.444	471.63 ppb	20.444	4.33%
QC value within limits for Be 313.107 Recovery = 94.33%						
Ca 317.933Radial†	5618.9	4799.5 µg/L	22.25	4799.5 ppb	22.25	0.46%
QC value within limits for Ca 317.933Radial Recovery = 95.99%						
Cd 226.502†	19123.2	476.87 µg/L	28.857	476.87 ppb	28.857	6.05%
QC value within limits for Cd 226.502 Recovery = 95.37%						
Co 228.616†	10464.0	473.33 µg/L	31.873	473.33 ppb	31.873	6.73%

QC value within limits for Co 228.616 Recovery = 94.67%						
Cr 267.716†	23378.5	469.86 µg/L	39.409	469.86 ppb	39.409	8.39%
QC value within limits for Cr 267.716 Recovery = 93.97%						
Cu 324.752†	71442.7	467.02 µg/L	29.553	467.02 ppb	29.553	6.33%
QC value within limits for Cu 324.752 Recovery = 93.40%						
Fe 238.204 Radial†	623.1	4924.0 µg/L	44.00	4924.0 ppb	44.00	0.89%
QC value within limits for Fe 238.204 Radial Recovery = 98.48%						
K 766.490 Radial†	7290.6	4761.6 µg/L	42.97	4761.6 ppb	42.97	0.90%
QC value within limits for K 766.490 Radial Recovery = 95.23%						
Mg 279.077 IEC†	545.2	4876.5 µg/L	56.74	4876.5 ppb	56.74	1.16%
QC value within limits for Mg 279.077 IEC Recovery = 97.53%						
Mn 257.610†	153803.9	482.10 µg/L	19.647	482.10 ppb	19.647	4.08%
QC value within limits for Mn 257.610 Recovery = 96.42%						
Mo 202.031†	4755.6	465.89 µg/L	52.605	465.89 ppb	52.605	11.29%
QC value within limits for Mo 202.031 Recovery = 93.18%						
Na 589.592 Radial†	31223.1	9590.0 µg/L	50.77	9590.0 ppb	50.77	0.53%
QC value within limits for Na 589.592 Radial Recovery = 95.90%						
Ni 231.604†	9516.4	473.89 µg/L	31.667	473.89 ppb	31.667	6.68%
QC value within limits for Ni 231.604 Recovery = 94.78%						
P 214.914†	1172.0	2275.5 µg/L	241.44	2275.5 ppb	241.44	10.61%
QC value within limits for P 214.914 Recovery = 91.02%						
Pb 220.353†	1922.5	467.49 µg/L	43.705	467.49 ppb	43.705	9.35%
QC value within limits for Pb 220.353 Recovery = 93.50%						
S 181.975 Axial†	224.0	928.89 µg/L	72.531	928.89 ppb	72.531	7.81%
QC value within limits for S 181.975 Axial Recovery = 92.89%						
Sb 206.836†	505.1	465.58 µg/L	48.696	465.58 ppb	48.696	10.46%
QC value within limits for Sb 206.836 Recovery = 93.12%						
Se 196.026†	343.6	490.31 µg/L	41.963	490.31 ppb	41.963	8.56%
QC value within limits for Se 196.026 Recovery = 98.06%						
SiO2†	25908.1	5113.9 µg/L	245.09	5113.9 ppb	245.09	4.79%
QC value within limits for SiO2 Recovery = 95.63%						
Si 251.611†	31481.7	2393.3 µg/L	116.35	2393.3 ppb	116.35	4.86%
QC value within limits for Si 251.611 Recovery = 95.73%						
Sn 189.927†	1112.5	469.20 µg/L	57.103	469.20 ppb	57.103	12.17%
QC value within limits for Sn 189.927 Recovery = 93.84%						
Sr 421.552†	50894.0	469.50 µg/L	2.316	469.50 ppb	2.316	0.49%
QC value within limits for Sr 421.552 Recovery = 93.90%						
Ti 334.940†	212809.0	470.47 µg/L	22.126	470.47 ppb	22.126	4.70%
QC value within limits for Ti 334.940 Recovery = 94.09%						
Tl 190.801†	364.0	478.44 µg/L	30.031	478.44 ppb	30.031	6.28%
QC value within limits for Tl 190.801 Recovery = 95.69%						
U 409.014†	5664.5	469.66 µg/L	33.698	469.66 ppb	33.698	7.17%
QC value within limits for U 409.014 Recovery = 93.93%						
V 292.402†	47952.1	473.05 µg/L	33.659	473.05 ppb	33.659	7.12%
QC value within limits for V 292.402 Recovery = 94.61%						
Zn 213.857†	20275.5	472.34 µg/L	30.816	472.34 ppb	30.816	6.52%
QC value within limits for Zn 213.857 Recovery = 94.47%						
All analyte(s) passed QC.						

Sequence No.: 40

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/19/2010 23:41:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57547.6	57547.6	102 %		23:42:23
1	Al 396.153Radial†	-1.4	-8.7	-6.0778 µg/L	-6.0778 ppb	23:42:23
1	Ca 317.933Radial†	191.7	-23.1	-19.737 µg/L	-19.737 ppb	23:42:44
1	Fe 238.204 Radial†	21.1	4.1	32.654 µg/L	32.654 ppb	23:42:44
1	K 766.490 Radial†	165.3	-2.7	-1.7690 µg/L	-1.7690 ppb	23:42:23
1	Mg 279.077 IEC†	11.7	-1.3	-11.537 µg/L	-11.537 ppb	23:42:44
1	Na 589.592 Radial†	440.0	-40.2	-12.347 µg/L	-12.347 ppb	23:42:23
1	Sr 421.552†	45.4	15.8	0.1455 µg/L	0.1455 ppb	23:42:23
1	Sc 361.383	2025376.1	2025376.1	103.17 %		23:43:46
1	Y 371.029	1400619.9	1400619.9	103.54 %		23:43:46
1	Ag 328.068†	-387.9	25.6	0.1905 µg/L	0.1905 ppb	23:43:52
1	As 188.979†	3.0	3.4	6.1195 µg/L	6.1195 ppb	23:44:12
1	B 249.677†	384.0	-11.9	-0.5018 µg/L	-0.5018 ppb	23:44:12
1	Ba 233.527†	-6.8	10.5	0.2521 µg/L	0.2521 ppb	23:44:12
1	Be 313.107†	-2612.9	323.1	0.1915 µg/L	0.1915 ppb	23:43:52
1	Cd 226.502†	-141.9	4.1	0.0989 µg/L	0.0989 ppb	23:44:12
1	Co 228.616†	3.8	1.7	0.0784 µg/L	0.0784 ppb	23:44:12
1	Cr 267.716†	-41.3	10.3	0.2069 µg/L	0.2069 ppb	23:43:52
1	Cu 324.752†	2636.8	12.0	0.0831 µg/L	0.0831 ppb	23:43:52
1	Mn 257.610†	-183.1	78.6	0.2509 µg/L	0.2509 ppb	23:44:12
1	Mo 202.031†	1.9	7.2	0.7037 µg/L	0.7037 ppb	23:44:12
1	Ni 231.604†	312.1	-9.8	-0.4894 µg/L	-0.4894 ppb	23:44:12
1	P 214.914†	15.4	-0.4	-0.8055 µg/L	-0.8055 ppb	23:44:12
1	Pb 220.353†	81.0	-12.4	-3.0222 µg/L	-3.0222 ppb	23:44:12
1	S 181.975 Axial†	19.0	-0.6	-2.3481 µg/L	-2.3481 ppb	23:44:12
1	Sb 206.836†	24.9	1.6	1.5059 µg/L	1.5059 ppb	23:44:12
1	Se 196.026†	12.4	-7.3	-10.123 µg/L	-10.123 ppb	23:44:12
1	SiO2†	1526.4	87.9	17.344 µg/L	17.344 ppb	23:43:52
1	Si 251.611†	435.0	111.0	8.4402 µg/L	8.4402 ppb	23:44:12
1	Sn 189.927†	-0.2	-0.5	-0.2289 µg/L	-0.2289 ppb	23:44:12
1	Ti 334.940†	503.8	313.2	0.6936 µg/L	0.6936 ppb	23:43:52
1	Tl 190.801†	-22.9	0.2	0.2896 µg/L	0.2896 ppb	23:44:12
1	U 409.014†	-102.1	-21.9	-1.8209 µg/L	-1.8209 ppb	23:43:52
1	V 292.402†	-63.4	-16.7	-0.1546 µg/L	-0.1546 ppb	23:43:52
1	Zn 213.857†	538.6	-12.3	-0.2886 µg/L	-0.2886 ppb	23:44:12
2	Sc RADIAL	57798.1	57798.1	102 %		23:42:49
2	Al 396.153Radial†	5.4	-2.1	-1.4497 µg/L	-1.4497 ppb	23:42:49
2	Ca 317.933Radial†	194.8	-20.8	-17.777 µg/L	-17.777 ppb	23:43:10
2	Fe 238.204 Radial†	20.3	3.3	25.779 µg/L	25.779 ppb	23:43:10
2	K 766.490 Radial†	162.9	-5.7	-3.7508 µg/L	-3.7508 ppb	23:42:49
2	Mg 279.077 IEC†	8.4	-4.6	-41.335 µg/L	-41.335 ppb	23:43:10
2	Na 589.592 Radial†	457.2	-25.3	-7.7599 µg/L	-7.7599 ppb	23:42:49
2	Sr 421.552†	36.3	6.7	0.0620 µg/L	0.0620 ppb	23:42:49
2	Sc 361.383	2035896.6	2035896.6	103.71 %		23:44:18
2	Y 371.029	1407783.4	1407783.4	104.07 %		23:44:18
2	Ag 328.068†	-402.1	13.9	0.1050 µg/L	0.1050 ppb	23:44:24
2	As 188.979†	-1.1	-0.6	-1.0482 µg/L	-1.0482 ppb	23:44:44
2	B 249.677†	374.8	-22.8	-0.9407 µg/L	-0.9407 ppb	23:44:44
2	Ba 233.527†	-9.4	8.0	0.1913 µg/L	0.1913 ppb	23:44:44
2	Be 313.107†	-2792.0	163.5	0.0968 µg/L	0.0968 ppb	23:44:24
2	Cd 226.502†	-137.1	9.5	0.2331 µg/L	0.2331 ppb	23:44:44
2	Co 228.616†	1.5	-0.5	-0.0215 µg/L	-0.0215 ppb	23:44:44
2	Cr 267.716†	-40.1	11.7	0.2356 µg/L	0.2356 ppb	23:44:24
2	Cu 324.752†	2541.9	-92.7	-0.6013 µg/L	-0.6013 ppb	23:44:24
2	Mn 257.610†	-190.3	72.5	0.2320 µg/L	0.2320 ppb	23:44:44
2	Mo 202.031†	5.7	10.8	1.0589 µg/L	1.0589 ppb	23:44:44
2	Ni 231.604†	305.7	-17.6	-0.8764 µg/L	-0.8764 ppb	23:44:44
2	P 214.914†	12.5	-3.3	-6.5291 µg/L	-6.5291 ppb	23:44:44
2	Pb 220.353†	85.8	-8.2	-1.9875 µg/L	-1.9875 ppb	23:44:44

2	S 181.975 Axial†	16.3	-3.2	-13.230 µg/L	-13.230 ppb	23:44:44
2	Sb 206.836†	26.4	3.0	2.7276 µg/L	2.7276 ppb	23:44:44
2	Se 196.026†	20.4	0.4	0.6560 µg/L	0.6560 ppb	23:44:44
2	SiO2†	1530.3	84.0	16.587 µg/L	16.587 ppb	23:44:24
2	Si 251.611†	449.2	122.5	9.3160 µg/L	9.3160 ppb	23:44:44
2	Sn 189.927†	-1.2	-1.5	-0.6475 µg/L	-0.6475 ppb	23:44:44
2	Ti 334.940†	469.3	277.5	0.6169 µg/L	0.6169 ppb	23:44:24
2	Tl 190.801†	-24.4	-1.2	-1.5053 µg/L	-1.5053 ppb	23:44:44
2	U 409.014†	-67.9	11.6	0.9594 µg/L	0.9594 ppb	23:44:24
2	V 292.402†	-41.5	4.7	0.0586 µg/L	0.0586 ppb	23:44:24
2	Zn 213.857†	546.7	-7.3	-0.1650 µg/L	-0.1650 ppb	23:44:44
3	Sc RADIAL	57486.1	57486.1	102 %		23:43:15
3	Al 396.153Radial†	2.0	-5.4	-3.7529 µg/L	-3.7529 ppb	23:43:15
3	Ca 317.933Radial†	200.6	-14.1	-12.036 µg/L	-12.036 ppb	23:43:35
3	Fe 238.204 Radial†	17.7	0.8	6.3556 µg/L	6.3556 ppb	23:43:35
3	K 766.490 Radial†	216.4	47.7	31.167 µg/L	31.167 ppb	23:43:15
3	Mg 279.077 IEC†	6.5	-6.4	-57.568 µg/L	-57.568 ppb	23:43:35
3	Na 589.592 Radial†	420.3	-59.2	-18.174 µg/L	-18.174 ppb	23:43:15
3	Sr 421.552†	30.1	0.8	0.0074 µg/L	0.0074 ppb	23:43:15
3	Sc 361.383	1964292.0	1964292.0	100.06 %		23:44:51
3	Y 371.029	1357553.0	1357553.0	100.35 %		23:44:51
3	Ag 328.068†	-383.4	18.4	0.1374 µg/L	0.1374 ppb	23:44:56
3	As 188.979†	-5.4	-5.0	-8.9160 µg/L	-8.9160 ppb	23:45:17
3	B 249.677†	373.9	-10.5	-0.4295 µg/L	-0.4295 ppb	23:45:17
3	Ba 233.527†	-7.1	10.0	0.2394 µg/L	0.2394 ppb	23:45:17
3	Be 313.107†	-2709.5	147.8	0.0874 µg/L	0.0874 ppb	23:44:56
3	Cd 226.502†	-142.4	-0.7	-0.0174 µg/L	-0.0174 ppb	23:45:17
3	Co 228.616†	-3.1	-5.1	-0.2307 µg/L	-0.2307 ppb	23:45:17
3	Cr 267.716†	-49.1	1.3	0.0253 µg/L	0.0253 ppb	23:44:56
3	Cu 324.752†	2593.7	48.4	0.3169 µg/L	0.3169 ppb	23:44:56
3	Mn 257.610†	-207.6	48.5	0.1551 µg/L	0.1551 ppb	23:45:17
3	Mo 202.031†	1.3	6.7	0.6547 µg/L	0.6547 ppb	23:45:17
3	Ni 231.604†	309.4	-3.1	-0.1565 µg/L	-0.1565 ppb	23:45:17
3	P 214.914†	5.6	-9.8	-19.330 µg/L	-19.330 ppb	23:45:17
3	Pb 220.353†	81.6	-9.4	-2.2754 µg/L	-2.2754 ppb	23:45:17
3	S 181.975 Axial†	12.5	-6.4	-26.518 µg/L	-26.518 ppb	23:45:17
3	Sb 206.836†	22.0	-0.5	-0.4249 µg/L	-0.4249 ppb	23:45:17
3	Se 196.026†	18.6	-0.7	-0.9267 µg/L	-0.9267 ppb	23:45:17
3	SiO2†	1531.7	139.2	27.479 µg/L	27.479 ppb	23:44:56
3	Si 251.611†	452.1	141.2	10.737 µg/L	10.737 ppb	23:45:17
3	Sn 189.927†	7.1	6.7	2.8200 µg/L	2.8200 ppb	23:45:17
3	Ti 334.940†	532.4	357.1	0.7943 µg/L	0.7943 ppb	23:44:56
3	Tl 190.801†	-22.2	0.2	0.2118 µg/L	0.2118 ppb	23:45:17
3	U 409.014†	-79.2	-2.0	-0.1697 µg/L	-0.1697 ppb	23:44:56
3	V 292.402†	-34.8	10.0	0.1029 µg/L	0.1029 ppb	23:44:56
3	Zn 213.857†	540.4	5.7	0.1371 µg/L	0.1371 ppb	23:45:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008521.6	102.31 %	1.969			1.92%
Sc RADIAL	57610.6	102 %	0.3			0.29%
Y 371.029	1388652.1	102.65 %	2.008			1.96%
Ag 328.068†	19.3	0.1443 µg/L	0.04319	0.1443 ppb	0.04319	29.93%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-5.4	-3.7601 µg/L	2.31405	-3.7601 ppb	2.31405	61.54%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.7	-1.2816 µg/L	7.52046	-1.2816 ppb	7.52046	586.80%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-15.0	-0.6240 µg/L	0.27664	-0.6240 ppb	0.27664	44.33%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.5	0.2276 µg/L	0.03206	0.2276 ppb	0.03206	14.09%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	211.5	0.1252 µg/L	0.05757	0.1252 ppb	0.05757	45.96%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-19.3	-16.516 µg/L	4.0022	-16.516 ppb	4.0022	24.23%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.3	0.1049 µg/L	0.12539	0.1049 ppb	0.12539	119.56%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.3	-0.0580 µg/L	0.15776	-0.0580 ppb	0.15776	272.20%

QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	7.8	0.1559 µg/L	0.11402	0.1559 ppb	0.11402	73.11%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 324.752†	-10.7	-0.0671 µg/L	0.47717	-0.0671 ppb	0.47717	711.16%			
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe 238.204 Radial†	2.7	21.596 µg/L	13.6390	21.596 ppb	13.6390	63.15%			
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K 766.490 Radial†	13.1	8.5489 µg/L	19.61253	8.5489 ppb	19.61253	229.41%			
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg 279.077 IEC†	-4.1	-36.813 µg/L	23.3462	-36.813 ppb	23.3462	63.42%			
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn 257.610†	66.5	0.2127 µg/L	0.05073	0.2127 ppb	0.05073	23.85%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	8.2	0.8058 µg/L	0.22057	0.8058 ppb	0.22057	27.37%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na 589.592 Radial†	-41.5	-12.761 µg/L	5.2196	-12.761 ppb	5.2196	40.90%			
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni 231.604†	-10.2	-0.5074 µg/L	0.36031	-0.5074 ppb	0.36031	71.01%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
P 214.914†	-4.5	-8.8883 µg/L	9.48496	-8.8883 ppb	9.48496	106.71%			
QC value within limits for P 214.914 Recovery = Not calculated									
Pb 220.353†	-10.0	-2.4284 µg/L	0.53406	-2.4284 ppb	0.53406	21.99%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
S 181.975 Axial†	-3.4	-14.032 µg/L	12.1051	-14.032 ppb	12.1051	86.27%			
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb 206.836†	1.4	1.2695 µg/L	1.58945	1.2695 ppb	1.58945	125.20%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-2.5	-3.4645 µg/L	5.82027	-3.4645 ppb	5.82027	168.00%			
QC value within limits for Se 196.026 Recovery = Not calculated									
SiO2†	103.7	20.470 µg/L	6.0817	20.470 ppb	6.0817	29.71%			
QC value within limits for SiO2 Recovery = Not calculated									
Si 251.611†	124.9	9.4978 µg/L	1.15926	9.4978 ppb	1.15926	12.21%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	1.6	0.6479 µg/L	1.89274	0.6479 ppb	1.89274	292.15%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr 421.552†	7.8	0.0716 µg/L	0.06954	0.0716 ppb	0.06954	97.07%			
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti 334.940†	315.9	0.7016 µg/L	0.08900	0.7016 ppb	0.08900	12.69%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	-0.3	-0.3347 µg/L	1.01457	-0.3347 ppb	1.01457	303.15%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
U 409.014†	-4.1	-0.3437 µg/L	1.39832	-0.3437 ppb	1.39832	406.81%			
QC value within limits for U 409.014 Recovery = Not calculated									
V 292.402†	-0.7	0.0023 µg/L	0.13766	0.0023 ppb	0.13766	>999.9%			
QC value within limits for V 292.402 Recovery = Not calculated									
Zn 213.857†	-4.6	-0.1055 µg/L	0.21899	-0.1055 ppb	0.21899	207.61%			
QC value within limits for Zn 213.857 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 48
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/20/2010 00:11:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58495.3	58495.3	104 %		00:11:57
1	Al 396.153Radial†	7275.8	7019.8	4872.8 µg/L	4872.8 ppb	00:11:57
1	Ca 317.933Radial†	6094.1	5674.5	4847.1 µg/L	4847.1 ppb	00:12:17
1	Fe 238.204 Radial†	674.0	634.4	5014.2 µg/L	5014.2 ppb	00:12:17
1	K 766.490 Radial†	7834.8	7402.0	4834.4 µg/L	4834.4 ppb	00:11:57
1	Mg 279.077 IEC†	587.5	554.6	4960.6 µg/L	4960.6 ppb	00:12:17
1	Na 589.592 Radial†	33367.7	31754.9	9753.3 µg/L	9753.3 ppb	00:11:57
1	Sr 421.552†	53573.5	51713.3	477.06 µg/L	477.06 ppb	00:11:57
1	Sc 361.383	2020504.2	2020504.2	102.92 %		00:13:20
1	Y 371.029	1392503.8	1392503.8	102.94 %		00:13:20
1	Ag 328.068†	67829.9	66305.1	494.76 µg/L	494.76 ppb	00:13:26
1	As 188.979†	291.8	283.9	507.92 µg/L	507.92 ppb	00:13:46
1	B 249.677†	12705.1	11960.1	485.66 µg/L	485.66 ppb	00:13:26
1	Ba 233.527†	21334.1	20745.3	498.93 µg/L	498.93 ppb	00:13:26
1	Be 313.107†	855250.3	833816.1	494.69 µg/L	494.69 ppb	00:13:20
1	Cd 226.502†	20577.0	20134.3	502.11 µg/L	502.11 ppb	00:13:26
1	Co 228.616†	11416.8	11090.6	501.70 µg/L	501.70 ppb	00:13:26
1	Cr 267.716†	25735.9	25055.4	503.56 µg/L	503.56 ppb	00:13:26
1	Cu 324.752†	80726.9	75890.5	496.07 µg/L	496.07 ppb	00:13:26
1	Mn 257.610†	165547.7	161102.0	504.96 µg/L	504.96 ppb	00:13:20
1	Mo 202.031†	5395.3	5247.4	514.05 µg/L	514.05 ppb	00:13:46
1	Ni 231.604†	10712.3	10095.7	502.74 µg/L	502.74 ppb	00:13:26
1	P 214.914†	1349.5	1295.8	2518.2 µg/L	2518.2 ppb	00:13:46
1	Pb 220.353†	2240.4	2085.9	507.24 µg/L	507.24 ppb	00:13:46
1	S 181.975 Axial†	268.4	241.8	1002.8 µg/L	1002.8 ppb	00:13:46
1	Sb 206.836†	592.4	553.1	510.01 µg/L	510.01 ppb	00:13:46
1	Se 196.026†	394.8	364.3	519.55 µg/L	519.55 ppb	00:13:46
1	SiO2†	29413.1	27186.2	5366.2 µg/L	5366.2 ppb	00:13:26
1	Si 251.611†	34213.2	32930.9	2503.5 µg/L	2503.5 ppb	00:13:26
1	Sn 189.927†	1263.6	1227.4	517.63 µg/L	517.63 ppb	00:13:46
1	Ti 334.940†	230295.2	223579.5	494.29 µg/L	494.29 ppb	00:13:20
1	Tl 190.801†	373.5	385.3	506.39 µg/L	506.39 ppb	00:13:46
1	U 409.014†	6182.0	6083.5	504.45 µg/L	504.45 ppb	00:13:26
1	V 292.402†	52430.3	50986.0	503.11 µg/L	503.11 ppb	00:13:26
1	Zn 213.857†	22695.0	21516.0	501.26 µg/L	501.26 ppb	00:13:26
2	Sc RADIAL	58164.1	58164.1	103 %		00:12:22
2	Al 396.153Radial†	7244.5	7029.4	4879.7 µg/L	4879.7 ppb	00:12:22
2	Ca 317.933Radial†	6067.7	5682.4	4853.7 µg/L	4853.7 ppb	00:12:43
2	Fe 238.204 Radial†	667.4	631.7	4992.7 µg/L	4992.7 ppb	00:12:43
2	K 766.490 Radial†	7786.9	7398.6	4832.1 µg/L	4832.1 ppb	00:12:22
2	Mg 279.077 IEC†	580.9	551.4	4931.8 µg/L	4931.8 ppb	00:12:43
2	Na 589.592 Radial†	33199.0	31774.5	9759.3 µg/L	9759.3 ppb	00:12:22
2	Sr 421.552†	53351.0	51791.8	477.79 µg/L	477.79 ppb	00:12:22
2	Sc 361.383	2017307.7	2017307.7	102.76 %		00:13:54
2	Y 371.029	1389972.7	1389972.7	102.75 %		00:13:54
2	Ag 328.068†	67617.4	66202.7	493.99 µg/L	493.99 ppb	00:13:59
2	As 188.979†	286.9	279.6	500.24 µg/L	500.24 ppb	00:14:20
2	B 249.677†	12631.0	11907.6	483.52 µg/L	483.52 ppb	00:13:59
2	Ba 233.527†	21192.2	20640.0	496.40 µg/L	496.40 ppb	00:13:59
2	Be 313.107†	854328.0	834235.2	494.93 µg/L	494.93 ppb	00:13:54
2	Cd 226.502†	20477.0	20068.6	500.47 µg/L	500.47 ppb	00:13:59
2	Co 228.616†	11357.5	11050.5	499.87 µg/L	499.87 ppb	00:13:59
2	Cr 267.716†	25604.8	24967.4	501.79 µg/L	501.79 ppb	00:13:59
2	Cu 324.752†	80320.9	75619.6	494.30 µg/L	494.30 ppb	00:13:59
2	Mn 257.610†	165128.0	160948.4	504.48 µg/L	504.48 ppb	00:13:54
2	Mo 202.031†	5230.2	5095.1	499.13 µg/L	499.13 ppb	00:14:20
2	Ni 231.604†	10662.1	10063.4	501.12 µg/L	501.12 ppb	00:13:59
2	P 214.914†	1301.8	1251.5	2430.4 µg/L	2430.4 ppb	00:14:20
2	Pb 220.353†	2192.9	2043.0	496.80 µg/L	496.80 ppb	00:14:20

2	S 181.975 Axial†	268.0	241.9	1003.0 µg/L	1003.0 ppb	00:14:20
2	Sb 206.836†	578.4	540.3	498.09 µg/L	498.09 ppb	00:14:20
2	Se 196.026†	399.2	369.2	526.33 µg/L	526.33 ppb	00:14:20
2	SiO2†	29319.7	27140.6	5357.2 µg/L	5357.2 ppb	00:13:59
2	Si 251.611†	34159.9	32931.7	2503.5 µg/L	2503.5 ppb	00:13:59
2	Sn 189.927†	1221.8	1188.6	501.28 µg/L	501.28 ppb	00:14:20
2	Ti 334.940†	230062.0	223707.1	494.58 µg/L	494.58 ppb	00:13:54
2	Tl 190.801†	373.6	386.0	507.26 µg/L	507.26 ppb	00:14:20
2	U 409.014†	6125.2	6037.8	500.65 µg/L	500.65 ppb	00:13:59
2	V 292.402†	52229.4	50871.2	501.86 µg/L	501.86 ppb	00:13:59
2	Zn 213.857†	22546.9	21406.9	498.71 µg/L	498.71 ppb	00:13:59
3	Sc RADIAL	58068.4	58068.4	103 %		00:12:48
3	Al 396.153Radial†	7248.7	7045.1	4892.5 µg/L	4892.5 ppb	00:12:48
3	Ca 317.933Radial†	6088.4	5712.2	4879.3 µg/L	4879.3 ppb	00:13:09
3	Fe 238.204 Radial†	668.4	633.7	5007.6 µg/L	5007.6 ppb	00:13:09
3	K 766.490 Radial†	7806.9	7430.5	4853.0 µg/L	4853.0 ppb	00:12:48
3	Mg 279.077 IEC†	584.4	555.8	4969.8 µg/L	4969.8 ppb	00:13:09
3	Na 589.592 Radial†	33245.1	31872.5	9789.4 µg/L	9789.4 ppb	00:12:48
3	Sr 421.552†	53412.1	51936.7	479.12 µg/L	479.12 ppb	00:12:48
3	Sc 361.383	2011218.9	2011218.9	102.45 %		00:14:27
3	Y 371.029	1385879.0	1385879.0	102.45 %		00:14:27
3	Ag 328.068†	62228.2	61141.6	456.06 µg/L	456.06 ppb	00:14:32
3	As 188.979†	237.7	232.5	415.86 µg/L	415.86 ppb	00:14:53
3	B 249.677†	11569.4	10908.5	442.67 µg/L	442.67 ppb	00:14:32
3	Ba 233.527†	18816.1	18383.2	442.10 µg/L	442.10 ppb	00:14:32
3	Be 313.107†	768494.1	752971.0	446.72 µg/L	446.72 ppb	00:14:27
3	Cd 226.502†	18036.8	17747.1	442.50 µg/L	442.50 ppb	00:14:32
3	Co 228.616†	9906.3	9667.5	437.26 µg/L	437.26 ppb	00:14:32
3	Cr 267.716†	21624.7	21157.9	425.23 µg/L	425.23 ppb	00:14:32
3	Cu 324.752†	70588.2	66356.3	433.84 µg/L	433.84 ppb	00:14:32
3	Mn 257.610†	149342.5	146027.0	457.75 µg/L	457.75 ppb	00:14:27
3	Mo 202.031†	4263.9	4167.3	408.28 µg/L	408.28 ppb	00:14:53
3	Ni 231.604†	9345.6	8809.8	438.71 µg/L	438.71 ppb	00:14:32
3	P 214.914†	1086.2	1044.9	2026.3 µg/L	2026.3 ppb	00:14:53
3	Pb 220.353†	1863.8	1728.2	420.19 µg/L	420.19 ppb	00:14:53
3	S 181.975 Axial†	229.4	205.0	850.21 µg/L	850.21 ppb	00:14:53
3	Sb 206.836†	484.1	450.0	414.58 µg/L	414.58 ppb	00:14:53
3	Se 196.026†	338.7	311.3	445.02 µg/L	445.02 ppb	00:14:53
3	SiO2†	26542.8	24516.4	4839.2 µg/L	4839.2 ppb	00:14:32
3	Si 251.611†	30699.8	29655.0	2254.4 µg/L	2254.4 ppb	00:14:32
3	Sn 189.927†	978.7	954.9	402.73 µg/L	402.73 ppb	00:14:53
3	Ti 334.940†	205585.5	200493.8	443.22 µg/L	443.22 ppb	00:14:27
3	Tl 190.801†	326.8	341.4	448.83 µg/L	448.83 ppb	00:14:53
3	U 409.014†	5206.1	5158.7	427.62 µg/L	427.62 ppb	00:14:32
3	V 292.402†	45148.9	44113.9	435.06 µg/L	435.06 ppb	00:14:32
3	Zn 213.857†	19811.4	18803.2	438.00 µg/L	438.00 ppb	00:14:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2016343.6	102.71 %	0.240			0.23%
Sc RADIAL	58242.6	103 %	0.4			0.38%
Y 371.029	1389451.8	102.71 %	0.247			0.24%
Ag 328.068†	64549.8	481.60 µg/L	22.120	481.60 ppb	22.120	4.59%
QC value within limits for Ag 328.068 Recovery = 96.32%						
Al 396.153Radial†	7031.4	4881.7 µg/L	10.03	4881.7 ppb	10.03	0.21%
QC value within limits for Al 396.153Radial Recovery = 97.63%						
As 188.979†	265.3	474.68 µg/L	51.082	474.68 ppb	51.082	10.76%
QC value within limits for As 188.979 Recovery = 94.94%						
B 249.677†	11592.1	470.62 µg/L	24.223	470.62 ppb	24.223	5.15%
QC value within limits for B 249.677 Recovery = 94.12%						
Ba 233.527†	19922.8	479.15 µg/L	32.105	479.15 ppb	32.105	6.70%
QC value within limits for Ba 233.527 Recovery = 95.83%						
Be 313.107†	807007.4	478.78 µg/L	27.763	478.78 ppb	27.763	5.80%
QC value within limits for Be 313.107 Recovery = 95.76%						
Ca 317.933Radial†	5689.7	4860.0 µg/L	17.00	4860.0 ppb	17.00	0.35%
QC value within limits for Ca 317.933Radial Recovery = 97.20%						
Cd 226.502†	19316.7	481.69 µg/L	33.948	481.69 ppb	33.948	7.05%
QC value within limits for Cd 226.502 Recovery = 96.34%						
Co 228.616†	10602.9	479.61 µg/L	36.687	479.61 ppb	36.687	7.65%

QC value within limits for Co 228.616 Recovery = 95.92%							
Cr 267.716†	23726.9	476.86 µg/L	44.718	476.86 ppb	44.718	9.38%	
QC value within limits for Cr 267.716 Recovery = 95.37%							
Cu 324.752†	72622.1	474.73 µg/L	35.431	474.73 ppb	35.431	7.46%	
QC value within limits for Cu 324.752 Recovery = 94.95%							
Fe 238.204 Radial†	633.3	5004.8 µg/L	11.00	5004.8 ppb	11.00	0.22%	
QC value within limits for Fe 238.204 Radial Recovery = 100.10%							
K 766.490 Radial†	7410.4	4839.8 µg/L	11.44	4839.8 ppb	11.44	0.24%	
QC value within limits for K 766.490 Radial Recovery = 96.80%							
Mg 279.077 IEC†	553.9	4954.1 µg/L	19.83	4954.1 ppb	19.83	0.40%	
QC value within limits for Mg 279.077 IEC Recovery = 99.08%							
Mn 257.610†	156025.8	489.06 µg/L	27.118	489.06 ppb	27.118	5.54%	
QC value within limits for Mn 257.610 Recovery = 97.81%							
Mo 202.031†	4836.6	473.82 µg/L	57.249	473.82 ppb	57.249	12.08%	
QC value within limits for Mo 202.031 Recovery = 94.76%							
Na 589.592 Radial†	31800.6	9767.3 µg/L	19.36	9767.3 ppb	19.36	0.20%	
QC value within limits for Na 589.592 Radial Recovery = 97.67%							
Ni 231.604†	9656.3	480.86 µg/L	36.510	480.86 ppb	36.510	7.59%	
QC value within limits for Ni 231.604 Recovery = 96.17%							
P 214.914†	1197.4	2325.0 µg/L	262.35	2325.0 ppb	262.35	11.28%	
QC value within limits for P 214.914 Recovery = 93.00%							
Pb 220.353†	1952.4	474.75 µg/L	47.533	474.75 ppb	47.533	10.01%	
QC value within limits for Pb 220.353 Recovery = 94.95%							
S 181.975 Axial†	229.6	952.01 µg/L	88.159	952.01 ppb	88.159	9.26%	
QC value within limits for S 181.975 Axial Recovery = 95.20%							
Sb 206.836†	514.5	474.22 µg/L	51.996	474.22 ppb	51.996	10.96%	
QC value within limits for Sb 206.836 Recovery = 94.84%							
Se 196.026†	348.2	496.97 µg/L	45.117	496.97 ppb	45.117	9.08%	
QC value within limits for Se 196.026 Recovery = 99.39%							
SiO2†	26281.1	5187.5 µg/L	301.68	5187.5 ppb	301.68	5.82%	
QC value within limits for SiO2 Recovery = 97.01%							
Si 251.611†	31839.2	2420.5 µg/L	143.80	2420.5 ppb	143.80	5.94%	
QC value within limits for Si 251.611 Recovery = 96.82%							
Sn 189.927†	1123.6	473.88 µg/L	62.160	473.88 ppb	62.160	13.12%	
QC value within limits for Sn 189.927 Recovery = 94.78%							
Sr 421.552†	51813.9	477.99 µg/L	1.046	477.99 ppb	1.046	0.22%	
QC value within limits for Sr 421.552 Recovery = 95.60%							
Ti 334.940†	215926.8	477.36 µg/L	29.568	477.36 ppb	29.568	6.19%	
QC value within limits for Ti 334.940 Recovery = 95.47%							
Tl 190.801†	370.9	487.50 µg/L	33.487	487.50 ppb	33.487	6.87%	
QC value within limits for Tl 190.801 Recovery = 97.50%							
U 409.014†	5760.0	477.57 µg/L	43.307	477.57 ppb	43.307	9.07%	
QC value within limits for U 409.014 Recovery = 95.51%							
V 292.402†	48657.0	480.01 µg/L	38.933	480.01 ppb	38.933	8.11%	
QC value within limits for V 292.402 Recovery = 96.00%							
Zn 213.857†	20575.4	479.32 µg/L	35.812	479.32 ppb	35.812	7.47%	
QC value within limits for Zn 213.857 Recovery = 95.86%							

All analyte(s) passed QC.

Sequence No.: 49

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 00:15:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57056.3	57056.3	101 %		00:15:35
1	Al 396.153Radial†	-5.7	-13.0	-9.0953 µg/L	-9.0953 ppb	00:15:35
1	Ca 317.933Radial†	199.5	-13.7	-11.700 µg/L	-11.700 ppb	00:15:56
1	Fe 238.204 Radial†	14.5	-2.2	-17.610 µg/L	-17.610 ppb	00:15:56
1	K 766.490 Radial†	191.3	24.5	15.994 µg/L	15.994 ppb	00:15:35
1	Mg 279.077 IEC†	9.0	-4.0	-35.339 µg/L	-35.339 ppb	00:15:56
1	Na 589.592 Radial†	412.2	-64.1	-19.680 µg/L	-19.680 ppb	00:15:35
1	Sr 421.552†	75.5	46.0	0.4243 µg/L	0.4243 ppb	00:15:35
1	Sc 361.383	2008840.8	2008840.8	102.33 %		00:16:58
1	Y 371.029	1388623.1	1388623.1	102.65 %		00:16:58
1	Ag 328.068†	-495.1	-82.3	-0.6122 µg/L	-0.6122 ppb	00:17:03
1	As 188.979†	1.4	1.8	3.2409 µg/L	3.2409 ppb	00:17:24
1	B 249.677†	357.5	-34.8	-1.4084 µg/L	-1.4084 ppb	00:17:24
1	Ba 233.527†	-3.8	13.4	0.3201 µg/L	0.3201 ppb	00:17:24
1	Be 313.107†	-2686.9	229.9	0.1363 µg/L	0.1363 ppb	00:17:03
1	Cd 226.502†	-151.5	-6.3	-0.1567 µg/L	-0.1567 ppb	00:17:24
1	Co 228.616†	6.7	4.7	0.2106 µg/L	0.2106 ppb	00:17:24
1	Cr 267.716†	-69.9	-17.9	-0.3598 µg/L	-0.3598 ppb	00:17:03
1	Cu 324.752†	2549.4	-52.3	-0.3440 µg/L	-0.3440 ppb	00:17:03
1	Mn 257.610†	-144.8	114.5	0.3577 µg/L	0.3577 ppb	00:17:24
1	Mo 202.031†	5.0	10.2	0.9987 µg/L	0.9987 ppb	00:17:24
1	Ni 231.604†	311.5	-7.9	-0.3967 µg/L	-0.3967 ppb	00:17:24
1	P 214.914†	18.1	2.3	4.6226 µg/L	4.6226 ppb	00:17:24
1	Pb 220.353†	83.5	-9.3	-2.2681 µg/L	-2.2681 ppb	00:17:24
1	S 181.975 Axial†	18.6	-0.8	-3.3405 µg/L	-3.3405 ppb	00:17:24
1	Sb 206.836†	18.3	-4.6	-4.2360 µg/L	-4.2360 ppb	00:17:24
1	Se 196.026†	16.5	-3.2	-4.5054 µg/L	-4.5054 ppb	00:17:24
1	SiO2†	1509.7	83.8	16.538 µg/L	16.538 ppb	00:17:03
1	Si 251.611†	412.2	92.2	7.0101 µg/L	7.0101 ppb	00:17:24
1	Sn 189.927†	-2.7	-3.0	-1.2771 µg/L	-1.2771 ppb	00:17:24
1	Ti 334.940†	427.2	242.5	0.5390 µg/L	0.5390 ppb	00:17:03
1	Tl 190.801†	-23.5	-0.6	-0.7502 µg/L	-0.7502 ppb	00:17:24
1	U 409.014†	-41.7	36.3	3.0222 µg/L	3.0222 ppb	00:17:03
1	V 292.402†	-73.7	-27.3	-0.2578 µg/L	-0.2578 ppb	00:17:03
1	Zn 213.857†	537.9	-8.8	-0.2008 µg/L	-0.2008 ppb	00:17:24
2	Sc RADIAL	56628.6	56628.6	100 %		00:16:01
2	Al 396.153Radial†	-23.8	-31.1	-21.684 µg/L	-21.684 ppb	00:16:01
2	Ca 317.933Radial†	190.0	-21.7	-18.526 µg/L	-18.526 ppb	00:16:22
2	Fe 238.204 Radial†	16.6	0.0	0.0975 µg/L	0.0975 ppb	00:16:22
2	K 766.490 Radial†	188.5	23.1	15.080 µg/L	15.080 ppb	00:16:01
2	Mg 279.077 IEC†	14.7	1.8	16.142 µg/L	16.142 ppb	00:16:22
2	Na 589.592 Radial†	445.7	-27.5	-8.4523 µg/L	-8.4523 ppb	00:16:01
2	Sr 421.552†	15.4	-13.4	-0.1235 µg/L	-0.1235 ppb	00:16:01
2	Sc 361.383	1991140.0	1991140.0	101.43 %		00:17:30
2	Y 371.029	1378067.0	1378067.0	101.87 %		00:17:30
2	Ag 328.068†	-374.9	32.0	0.2384 µg/L	0.2384 ppb	00:17:36
2	As 188.979†	-3.9	-3.4	-6.0385 µg/L	-6.0385 ppb	00:17:56
2	B 249.677†	366.4	-22.9	-0.9328 µg/L	-0.9328 ppb	00:17:56
2	Ba 233.527†	-6.8	10.4	0.2489 µg/L	0.2489 ppb	00:17:56
2	Be 313.107†	-2761.1	133.5	0.0790 µg/L	0.0790 ppb	00:17:36
2	Cd 226.502†	-138.2	5.4	0.1343 µg/L	0.1343 ppb	00:17:56
2	Co 228.616†	14.9	12.8	0.5784 µg/L	0.5784 ppb	00:17:56
2	Cr 267.716†	-45.7	5.3	0.1061 µg/L	0.1061 ppb	00:17:36
2	Cu 324.752†	2564.5	-15.4	-0.1003 µg/L	-0.1003 ppb	00:17:36
2	Mn 257.610†	-172.2	86.3	0.2696 µg/L	0.2696 ppb	00:17:56
2	Mo 202.031†	4.0	9.3	0.9125 µg/L	0.9125 ppb	00:17:56
2	Ni 231.604†	306.1	-10.5	-0.5258 µg/L	-0.5258 ppb	00:17:56
2	P 214.914†	17.2	1.7	3.2781 µg/L	3.2781 ppb	00:17:56
2	Pb 220.353†	79.4	-12.7	-3.0846 µg/L	-3.0846 ppb	00:17:56

2	S 181.975 Axial†	22.9	3.7	15.206 µg/L	15.206 ppb	00:17:56
2	Sb 206.836†	25.4	2.6	2.3565 µg/L	2.3565 ppb	00:17:56
2	Se 196.026†	16.1	-3.4	-4.8007 µg/L	-4.8007 ppb	00:17:56
2	SiO2†	1536.5	123.4	24.348 µg/L	24.348 ppb	00:17:36
2	Si 251.611†	406.5	90.2	6.8569 µg/L	6.8569 ppb	00:17:56
2	Sn 189.927†	-2.0	-2.3	-0.9755 µg/L	-0.9755 ppb	00:17:56
2	Ti 334.940†	398.9	218.2	0.4812 µg/L	0.4812 ppb	00:17:36
2	Tl 190.801†	-17.7	5.0	6.4456 µg/L	6.4456 ppb	00:17:56
2	U 409.014†	-11.0	66.2	5.5016 µg/L	5.5016 ppb	00:17:36
2	V 292.402†	-26.4	18.7	0.1952 µg/L	0.1952 ppb	00:17:36
2	Zn 213.857†	540.6	-1.4	-0.0317 µg/L	-0.0317 ppb	00:17:56
3	Sc RADIAL	56386.6	56386.6	99.8 %		00:16:27
3	Al 396.153Radial†	-18.3	-25.7	-17.898 µg/L	-17.898 ppb	00:16:27
3	Ca 317.933Radial†	197.1	-13.7	-11.741 µg/L	-11.741 ppb	00:16:48
3	Fe 238.204 Radial†	19.4	2.9	22.756 µg/L	22.756 ppb	00:16:48
3	K 766.490 Radial†	199.6	35.1	22.894 µg/L	22.894 ppb	00:16:27
3	Mg 279.077 IEC†	15.6	2.8	24.950 µg/L	24.950 ppb	00:16:48
3	Na 589.592 Radial†	462.1	-9.2	-2.8236 µg/L	-2.8236 ppb	00:16:27
3	Sr 421.552†	51.7	23.0	0.2125 µg/L	0.2125 ppb	00:16:27
3	Sc 361.383	1995333.6	1995333.6	101.64 %		00:18:02
3	Y 371.029	1380514.8	1380514.8	102.05 %		00:18:02
3	Ag 328.068†	-373.2	34.4	0.2561 µg/L	0.2561 ppb	00:18:08
3	As 188.979†	-0.3	0.2	0.3744 µg/L	0.3744 ppb	00:18:28
3	B 249.677†	338.5	-51.1	-2.0934 µg/L	-2.0934 ppb	00:18:28
3	Ba 233.527†	-17.0	0.3	0.0083 µg/L	0.0083 ppb	00:18:28
3	Be 313.107†	-2731.8	168.0	0.0995 µg/L	0.0995 ppb	00:18:08
3	Cd 226.502†	-130.2	13.6	0.3366 µg/L	0.3366 ppb	00:18:28
3	Co 228.616†	7.4	5.3	0.2410 µg/L	0.2410 ppb	00:18:28
3	Cr 267.716†	-49.5	1.6	0.0327 µg/L	0.0327 ppb	00:18:08
3	Cu 324.752†	2599.8	14.1	0.0952 µg/L	0.0952 ppb	00:18:08
3	Mn 257.610†	-188.3	70.8	0.2236 µg/L	0.2236 ppb	00:18:28
3	Mo 202.031†	4.4	9.6	0.9457 µg/L	0.9457 ppb	00:18:28
3	Ni 231.604†	301.9	-15.3	-0.7614 µg/L	-0.7614 ppb	00:18:28
3	P 214.914†	17.4	1.7	3.4379 µg/L	3.4379 ppb	00:18:28
3	Pb 220.353†	92.5	0.1	0.0084 µg/L	0.0084 ppb	00:18:28
3	S 181.975 Axial†	14.4	-4.7	-19.657 µg/L	-19.657 ppb	00:18:28
3	Sb 206.836†	16.6	-6.2	-5.6848 µg/L	-5.6848 ppb	00:18:28
3	Se 196.026†	17.0	-2.6	-3.6602 µg/L	-3.6602 ppb	00:18:28
3	SiO2†	1524.8	108.6	21.436 µg/L	21.436 ppb	00:18:08
3	Si 251.611†	420.8	103.3	7.8556 µg/L	7.8556 ppb	00:18:28
3	Sn 189.927†	3.5	3.0	1.2790 µg/L	1.2790 ppb	00:18:28
3	Ti 334.940†	371.5	190.5	0.4192 µg/L	0.4192 ppb	00:18:08
3	Tl 190.801†	-23.3	-0.5	-0.6374 µg/L	-0.6374 ppb	00:18:28
3	U 409.014†	4.2	81.2	6.7421 µg/L	6.7421 ppb	00:18:08
3	V 292.402†	-47.4	-1.9	-0.0016 µg/L	-0.0016 ppb	00:18:08
3	Zn 213.857†	527.4	-15.5	-0.3632 µg/L	-0.3632 ppb	00:18:28

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1998438.2	101.80 %		0.471				0.46%
Sc RADIAL	56690.5	100 %		0.6				0.60%
Y 371.029	1382401.7	102.19 %		0.408				0.40%
Ag 328.068†	-5.3	-0.0392 µg/L		0.49630	-0.0392 ppb		0.49630	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-23.3	-16.226 µg/L		6.4588	-16.226 ppb		6.4588	39.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.5	-0.8077 µg/L		4.75129	-0.8077 ppb		4.75129	588.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-36.2	-1.4782 µg/L		0.58347	-1.4782 ppb		0.58347	39.47%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.0	0.1924 µg/L		0.16342	0.1924 ppb		0.16342	84.92%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	177.1	0.1049 µg/L		0.02898	0.1049 ppb		0.02898	27.62%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-16.4	-13.989 µg/L		3.9293	-13.989 ppb		3.9293	28.09%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.2	0.1047 µg/L		0.24795	0.1047 ppb		0.24795	236.74%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	7.6	0.3433 µg/L		0.20414	0.3433 ppb		0.20414	59.46%

Cr	267.716†	-3.7	-0.0736 µg/L	0.25050	-0.0736 ppb	0.25050	340.13%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-17.9	-0.1164 µg/L	0.22003	-0.1164 ppb	0.22003	189.10%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.2	1.7476 µg/L	20.23351	1.7476 ppb	20.23351	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	27.5	17.989 µg/L	4.2723	17.989 ppb	4.2723	23.75%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	0.2	1.9176 µg/L	32.56432	1.9176 ppb	32.56432	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	90.5	0.2836 µg/L	0.06812	0.2836 ppb	0.06812	24.02%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	9.7	0.9523 µg/L	0.04345	0.9523 ppb	0.04345	4.56%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-33.6	-10.319 µg/L	8.5817	-10.319 ppb	8.5817	83.17%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-11.3	-0.5613 µg/L	0.18493	-0.5613 ppb	0.18493	32.95%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	1.9	3.7795 µg/L	0.73449	3.7795 ppb	0.73449	19.43%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-7.3	-1.7814 µg/L	1.60289	-1.7814 ppb	1.60289	89.98%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-0.6	-2.5970 µg/L	17.44338	-2.5970 ppb	17.44338	671.68%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-2.8	-2.5214 µg/L	4.28609	-2.5214 ppb	4.28609	169.99%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-3.1	-4.3221 µg/L	0.59194	-4.3221 ppb	0.59194	13.70%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		105.2	20.774 µg/L	3.9468	20.774 ppb	3.9468	19.00%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	95.2	7.2409 µg/L	0.53785	7.2409 ppb	0.53785	7.43%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-0.8	-0.3245 µg/L	1.39688	-0.3245 ppb	1.39688	430.43%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	18.5	0.1711 µg/L	0.27628	0.1711 ppb	0.27628	161.48%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	217.1	0.4798 µg/L	0.05992	0.4798 ppb	0.05992	12.49%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.3	1.6860 µg/L	4.12231	1.6860 ppb	4.12231	244.50%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	61.2	5.0886 µg/L	1.89405	5.0886 ppb	1.89405	37.22%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-3.5	-0.0214 µg/L	0.22712	-0.0214 ppb	0.22712	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-8.6	-0.1986 µg/L	0.16575	-0.1986 ppb	0.16575	83.47%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 58

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 00:47:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57680.8	57680.8	102 %		00:48:39
1	Al 396.153Radial†	7133.8	6979.9	4845.1 µg/L	4845.1 ppb	00:48:39
1	Ca 317.933Radial†	5914.0	5581.2	4767.4 µg/L	4767.4 ppb	00:48:59
1	Fe 238.204 Radial†	654.8	624.7	4937.8 µg/L	4937.8 ppb	00:48:59
1	K 766.490 Radial†	7645.5	7323.4	4783.0 µg/L	4783.0 ppb	00:48:39
1	Mg 279.077 IEC†	575.8	551.2	4930.2 µg/L	4930.2 ppb	00:48:59
1	Na 589.592 Radial†	32886.8	31738.9	9748.4 µg/L	9748.4 ppb	00:48:39
1	Sr 421.552†	52443.7	51337.3	473.59 µg/L	473.59 ppb	00:48:39
1	Sc 361.383	1998798.8	1998798.8	101.82 %		00:50:03
1	Y 371.029	1378207.5	1378207.5	101.88 %		00:50:03
1	Ag 328.068†	66637.6	65849.7	491.34 µg/L	491.34 ppb	00:50:09
1	As 188.979†	282.6	278.0	497.33 µg/L	497.33 ppb	00:50:29
1	B 249.677†	12419.9	11814.0	479.73 µg/L	479.73 ppb	00:50:09
1	Ba 233.527†	20853.3	20498.1	492.99 µg/L	492.99 ppb	00:50:09
1	Be 313.107†	838271.9	826164.3	490.15 µg/L	490.15 ppb	00:50:03
1	Cd 226.502†	20064.0	19847.5	494.95 µg/L	494.95 ppb	00:50:09
1	Co 228.616†	11129.1	10928.5	494.36 µg/L	494.36 ppb	00:50:09
1	Cr 267.716†	25151.7	24753.2	497.48 µg/L	497.48 ppb	00:50:09
1	Cu 324.752†	79271.1	75312.4	492.29 µg/L	492.29 ppb	00:50:09
1	Mn 257.610†	162448.2	159804.4	500.89 µg/L	500.89 ppb	00:50:03
1	Mo 202.031†	5294.5	5205.3	509.92 µg/L	509.92 ppb	00:50:29
1	Ni 231.604†	10454.5	9955.6	495.75 µg/L	495.75 ppb	00:50:09
1	P 214.914†	1305.3	1266.6	2460.9 µg/L	2460.9 ppb	00:50:29
1	Pb 220.353†	2196.1	2066.0	502.42 µg/L	502.42 ppb	00:50:29
1	S 181.975 Axial†	267.3	243.6	1010.3 µg/L	1010.3 ppb	00:50:29
1	Sb 206.836†	581.4	548.5	505.86 µg/L	505.86 ppb	00:50:29
1	Se 196.026†	385.1	358.9	511.83 µg/L	511.83 ppb	00:50:29
1	SiO2†	28708.0	26803.9	5290.7 µg/L	5290.7 ppb	00:50:09
1	Si 251.611†	33429.9	32522.5	2472.4 µg/L	2472.4 ppb	00:50:09
1	Sn 189.927†	1243.8	1221.2	515.04 µg/L	515.04 ppb	00:50:29
1	Ti 334.940†	226045.2	221835.2	490.44 µg/L	490.44 ppb	00:50:03
1	Tl 190.801†	368.0	383.9	504.49 µg/L	504.49 ppb	00:50:29
1	U 409.014†	6013.1	5982.8	496.10 µg/L	496.10 ppb	00:50:09
1	V 292.402†	51239.9	50370.0	497.04 µg/L	497.04 ppb	00:50:09
1	Zn 213.857†	22107.9	21178.9	493.39 µg/L	493.39 ppb	00:50:09
2	Sc RADIAL	57446.6	57446.6	102 %		00:49:05
2	Al 396.153Radial†	7123.3	6998.0	4858.0 µg/L	4858.0 ppb	00:49:05
2	Ca 317.933Radial†	5925.8	5616.4	4797.4 µg/L	4797.4 ppb	00:49:25
2	Fe 238.204 Radial†	661.1	633.6	5007.9 µg/L	5007.9 ppb	00:49:25
2	K 766.490 Radial†	7669.9	7377.9	4818.6 µg/L	4818.6 ppb	00:49:05
2	Mg 279.077 IEC†	576.8	554.4	4959.0 µg/L	4959.0 ppb	00:49:25
2	Na 589.592 Radial†	32906.4	31889.5	9794.6 µg/L	9794.6 ppb	00:49:05
2	Sr 421.552†	52430.7	51534.0	475.41 µg/L	475.41 ppb	00:49:05
2	Sc 361.383	2011817.0	2011817.0	102.48 %		00:50:36
2	Y 371.029	1386935.5	1386935.5	102.53 %		00:50:36
2	Ag 328.068†	66849.6	65633.1	489.73 µg/L	489.73 ppb	00:50:42
2	As 188.979†	282.7	276.3	494.28 µg/L	494.28 ppb	00:51:02
2	B 249.677†	12474.1	11788.0	478.63 µg/L	478.63 ppb	00:50:42
2	Ba 233.527†	20922.4	20433.0	491.42 µg/L	491.42 ppb	00:50:42
2	Be 313.107†	842885.5	825338.6	489.66 µg/L	489.66 ppb	00:50:36
2	Cd 226.502†	20129.6	19784.0	493.36 µg/L	493.36 ppb	00:50:42
2	Co 228.616†	11190.9	10918.1	493.88 µg/L	493.88 ppb	00:50:42
2	Cr 267.716†	25222.6	24662.5	495.66 µg/L	495.66 ppb	00:50:42
2	Cu 324.752†	79511.5	75043.1	490.54 µg/L	490.54 ppb	00:50:42
2	Mn 257.610†	163207.5	159513.0	499.98 µg/L	499.98 ppb	00:50:36
2	Mo 202.031†	5169.2	5049.4	494.66 µg/L	494.66 ppb	00:51:02
2	Ni 231.604†	10507.6	9940.9	495.03 µg/L	495.03 ppb	00:50:42
2	P 214.914†	1281.4	1235.1	2398.2 µg/L	2398.2 ppb	00:51:02
2	Pb 220.353†	2169.3	2025.8	492.61 µg/L	492.61 ppb	00:51:02

2	S 181.975 Axial†	262.8	237.5	984.82 µg/L	984.82 ppb	00:51:02
2	Sb 206.836†	574.2	537.8	495.81 µg/L	495.81 ppb	00:51:02
2	Se 196.026†	380.5	352.0	502.22 µg/L	502.22 ppb	00:51:02
2	SiO2†	28844.1	26754.4	5281.0 µg/L	5281.0 ppb	00:50:42
2	Si 251.611†	33597.6	32473.7	2468.7 µg/L	2468.7 ppb	00:50:42
2	Sn 189.927†	1203.8	1174.3	495.24 µg/L	495.24 ppb	00:51:02
2	Ti 334.940†	227246.5	221570.9	489.85 µg/L	489.85 ppb	00:50:36
2	Tl 190.801†	367.9	381.4	501.31 µg/L	501.31 ppb	00:51:02
2	U 409.014†	6070.9	6001.1	497.61 µg/L	497.61 ppb	00:50:42
2	V 292.402†	51518.3	50316.0	496.40 µg/L	496.40 ppb	00:50:42
2	Zn 213.857†	22203.3	21131.5	492.28 µg/L	492.28 ppb	00:50:42
3	Sc RADIAL	57389.7	57389.7	102 %		00:49:31
3	Al 396.153Radial†	7091.9	6974.1	4843.3 µg/L	4843.3 ppb	00:49:31
3	Ca 317.933Radial†	5913.0	5609.6	4791.6 µg/L	4791.6 ppb	00:49:51
3	Fe 238.204 Radial†	660.4	633.5	5005.4 µg/L	5005.4 ppb	00:49:51
3	K 766.490 Radial†	7625.7	7341.9	4795.1 µg/L	4795.1 ppb	00:49:31
3	Mg 279.077 IEC†	577.2	555.4	4965.8 µg/L	4965.8 ppb	00:49:51
3	Na 589.592 Radial†	32787.2	31804.2	9768.4 µg/L	9768.4 ppb	00:49:31
3	Sr 421.552†	52453.5	51607.5	476.09 µg/L	476.09 ppb	00:49:31
3	Sc 361.383	2005009.8	2005009.8	102.13 %		00:51:09
3	Y 371.029	1382509.8	1382509.8	102.20 %		00:51:09
3	Ag 328.068†	61434.7	60552.8	451.66 µg/L	451.66 ppb	00:51:15
3	As 188.979†	236.3	231.8	414.69 µg/L	414.69 ppb	00:51:35
3	B 249.677†	11353.7	10732.4	435.49 µg/L	435.49 ppb	00:51:15
3	Ba 233.527†	18464.6	18095.9	435.19 µg/L	435.19 ppb	00:51:15
3	Be 313.107†	758877.8	745878.5	442.52 µg/L	442.52 ppb	00:51:09
3	Cd 226.502†	17660.6	17433.4	434.67 µg/L	434.67 ppb	00:51:15
3	Co 228.616†	9736.6	9531.2	431.09 µg/L	431.09 ppb	00:51:15
3	Cr 267.716†	21236.0	20842.7	418.90 µg/L	418.90 ppb	00:51:15
3	Cu 324.752†	69572.6	65575.3	428.74 µg/L	428.74 ppb	00:51:15
3	Mn 257.610†	147391.1	144567.7	453.18 µg/L	453.18 ppb	00:51:09
3	Mo 202.031†	4191.8	4109.6	402.63 µg/L	402.63 ppb	00:51:35
3	Ni 231.604†	9146.6	8643.2	430.41 µg/L	430.41 ppb	00:51:15
3	P 214.914†	1064.5	1026.9	1991.2 µg/L	1991.2 ppb	00:51:35
3	Pb 220.353†	1834.2	1705.0	414.53 µg/L	414.53 ppb	00:51:35
3	S 181.975 Axial†	225.9	202.2	838.51 µg/L	838.51 ppb	00:51:35
3	Sb 206.836†	475.8	443.4	408.45 µg/L	408.45 ppb	00:51:35
3	Se 196.026†	322.7	296.7	424.53 µg/L	424.53 ppb	00:51:35
3	SiO2†	26010.4	24075.4	4752.2 µg/L	4752.2 ppb	00:51:15
3	Si 251.611†	30176.9	29235.7	2222.6 µg/L	2222.6 ppb	00:51:15
3	Sn 189.927†	963.9	943.4	397.88 µg/L	397.88 ppb	00:51:35
3	Ti 334.940†	203236.7	198815.5	439.51 µg/L	439.51 ppb	00:51:09
3	Tl 190.801†	315.2	331.0	435.27 µg/L	435.27 ppb	00:51:35
3	U 409.014†	5104.0	5074.4	420.62 µg/L	420.62 ppb	00:51:15
3	V 292.402†	44361.2	43479.1	428.81 µg/L	428.81 ppb	00:51:15
3	Zn 213.857†	19393.6	18454.0	429.85 µg/L	429.85 ppb	00:51:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2005208.6	102.14 %	0.332			0.32%
Sc RADIAL	57505.7	102 %	0.3			0.27%
Y 371.029	1382550.9	102.20 %	0.323			0.32%
Ag 328.068†	64011.9	477.58 µg/L	22.458	477.58 ppb	22.458	4.70%
QC value within limits for Ag 328.068 Recovery = 95.52%						
Al 396.153Radial†	6984.0	4848.8 µg/L	8.02	4848.8 ppb	8.02	0.17%
QC value within limits for Al 396.153Radial Recovery = 96.98%						
As 188.979†	262.0	468.77 µg/L	46.859	468.77 ppb	46.859	10.00%
QC value within limits for As 188.979 Recovery = 93.75%						
B 249.677†	11444.8	464.62 µg/L	25.234	464.62 ppb	25.234	5.43%
QC value within limits for B 249.677 Recovery = 92.92%						
Ba 233.527†	19675.7	473.20 µg/L	32.924	473.20 ppb	32.924	6.96%
QC value within limits for Ba 233.527 Recovery = 94.64%						
Be 313.107†	799127.1	474.11 µg/L	27.359	474.11 ppb	27.359	5.77%
QC value within limits for Be 313.107 Recovery = 94.82%						
Ca 317.933Radial†	5602.4	4785.5 µg/L	15.94	4785.5 ppb	15.94	0.33%
QC value within limits for Ca 317.933Radial Recovery = 95.71%						
Cd 226.502†	19021.6	474.33 µg/L	34.355	474.33 ppb	34.355	7.24%
QC value within limits for Cd 226.502 Recovery = 94.87%						
Co 228.616†	10459.3	473.11 µg/L	36.391	473.11 ppb	36.391	7.69%

Cr	267.716†	23419.4	470.68 µg/L	44.854	470.68 ppb	44.854	9.53%
Cu	324.752†	71976.9	470.52 µg/L	36.196	470.52 ppb	36.196	7.69%
Fe	238.204 Radial†	630.6	4983.7 µg/L	39.75	4983.7 ppb	39.75	0.80%
K	766.490 Radial†	7347.8	4798.9 µg/L	18.10	4798.9 ppb	18.10	0.38%
Mg	279.077 IEC†	553.6	4951.7 µg/L	18.91	4951.7 ppb	18.91	0.38%
Mn	257.610†	154628.4	484.69 µg/L	27.286	484.69 ppb	27.286	5.63%
Mo	202.031†	4788.1	469.07 µg/L	58.045	469.07 ppb	58.045	12.37%
Na	589.592 Radial†	31810.9	9770.5 µg/L	23.19	9770.5 ppb	23.19	0.24%
Ni	231.604†	9513.2	473.73 µg/L	37.519	473.73 ppb	37.519	7.92%
P	214.914†	1176.2	2283.4 µg/L	255.03	2283.4 ppb	255.03	11.17%
Pb	220.353†	1932.3	469.85 µg/L	48.159	469.85 ppb	48.159	10.25%
S	181.975 Axial†	227.8	944.55 µg/L	92.712	944.55 ppb	92.712	9.82%
Sb	206.836†	509.9	470.04 µg/L	53.574	470.04 ppb	53.574	11.40%
Se	196.026†	335.8	479.53 µg/L	47.869	479.53 ppb	47.869	9.98%
SiO2†		25877.9	5108.0 µg/L	308.17	5108.0 ppb	308.17	6.03%
Si	251.611†	31410.7	2387.9 µg/L	143.20	2387.9 ppb	143.20	6.00%
Sn	189.927†	1113.0	469.39 µg/L	62.710	469.39 ppb	62.710	13.36%
Sr	421.552†	51492.9	475.03 µg/L	1.289	475.03 ppb	1.289	0.27%
Ti	334.940†	214073.8	473.26 µg/L	29.235	473.26 ppb	29.235	6.18%
Tl	190.801†	365.4	480.35 µg/L	39.078	480.35 ppb	39.078	8.14%
U	409.014†	5686.1	471.44 µg/L	44.023	471.44 ppb	44.023	9.34%
V	292.402†	48055.1	474.09 µg/L	39.211	474.09 ppb	39.211	8.27%
Zn	213.857†	20254.8	471.84 µg/L	36.370	471.84 ppb	36.370	7.71%

QC value within limits for Co 228.616 Recovery = 94.62%

QC value within limits for Cr 267.716 Recovery = 94.14%

QC value within limits for Cu 324.752 Recovery = 94.10%

QC value within limits for Fe 238.204 Radial Recovery = 99.67%

QC value within limits for K 766.490 Radial Recovery = 95.98%

QC value within limits for Mg 279.077 IEC Recovery = 99.03%

QC value within limits for Mn 257.610 Recovery = 96.94%

QC value within limits for Mo 202.031 Recovery = 93.81%

QC value within limits for Na 589.592 Radial Recovery = 97.70%

QC value within limits for Ni 231.604 Recovery = 94.75%

QC value within limits for P 214.914 Recovery = 91.34%

QC value within limits for Pb 220.353 Recovery = 93.97%

QC value within limits for S 181.975 Axial Recovery = 94.45%

QC value within limits for Sb 206.836 Recovery = 94.01%

QC value within limits for Se 196.026 Recovery = 95.91%

QC value within limits for SiO2 Recovery = 95.52%

QC value within limits for Si 251.611 Recovery = 95.52%

QC value within limits for Sn 189.927 Recovery = 93.88%

QC value within limits for Sr 421.552 Recovery = 95.01%

QC value within limits for Ti 334.940 Recovery = 94.65%

QC value within limits for Tl 190.801 Recovery = 96.07%

QC value within limits for U 409.014 Recovery = 94.29%

QC value within limits for V 292.402 Recovery = 94.82%

QC value within limits for Zn 213.857 Recovery = 94.37%

All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 00:51:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56488.2	56488.2	100.0 %		00:52:18
1	Al 396.153Radial†	-18.6	-26.0	-18.107 µg/L	-18.107 ppb	00:52:18
1	Ca 317.933Radial†	192.4	-18.9	-16.133 µg/L	-16.133 ppb	00:52:38
1	Fe 238.204 Radial†	16.4	-0.2	-1.6233 µg/L	-1.6233 ppb	00:52:38
1	K 766.490 Radial†	221.8	56.9	37.153 µg/L	37.153 ppb	00:52:18
1	Mg 279.077 IEC†	8.8	-4.0	-35.707 µg/L	-35.707 ppb	00:52:38
1	Na 589.592 Radial†	433.2	-39.0	-11.968 µg/L	-11.968 ppb	00:52:18
1	Sr 421.552†	40.3	11.5	0.1064 µg/L	0.1064 ppb	00:52:18
1	Sc 361.383	2011763.6	2011763.6	102.48 %		00:53:40
1	Y 371.029	1389612.5	1389612.5	102.72 %		00:53:40
1	Ag 328.068†	-405.0	6.4	0.0485 µg/L	0.0485 ppb	00:53:46
1	As 188.979†	-2.6	-2.1	-3.6986 µg/L	-3.6986 ppb	00:54:07
1	B 249.677†	338.6	-53.8	-2.1896 µg/L	-2.1896 ppb	00:54:07
1	Ba 233.527†	-17.8	-0.3	-0.0074 µg/L	-0.0074 ppb	00:54:07
1	Be 313.107†	-2736.0	185.9	0.1102 µg/L	0.1102 ppb	00:53:46
1	Cd 226.502†	-129.0	15.8	0.3934 µg/L	0.3934 ppb	00:54:07
1	Co 228.616†	3.6	1.6	0.0719 µg/L	0.0719 ppb	00:54:07
1	Cr 267.716†	-27.0	24.0	0.4825 µg/L	0.4825 ppb	00:53:46
1	Cu 324.752†	2575.9	-30.1	-0.1968 µg/L	-0.1968 ppb	00:53:46
1	Mn 257.610†	-211.1	50.0	0.1578 µg/L	0.1578 ppb	00:54:07
1	Mo 202.031†	3.9	9.1	0.8918 µg/L	0.8918 ppb	00:54:07
1	Ni 231.604†	299.2	-20.4	-1.0177 µg/L	-1.0177 ppb	00:54:07
1	P 214.914†	16.5	0.8	1.5471 µg/L	1.5471 ppb	00:54:07
1	Pb 220.353†	89.4	-3.7	-0.9118 µg/L	-0.9118 ppb	00:54:07
1	S 181.975 Axial†	16.3	-3.0	-12.644 µg/L	-12.644 ppb	00:54:07
1	Sb 206.836†	16.5	-6.4	-5.8254 µg/L	-5.8254 ppb	00:54:07
1	Se 196.026†	19.5	-0.3	-0.4212 µg/L	-0.4212 ppb	00:54:07
1	SiO2†	1433.8	7.5	1.4845 µg/L	1.4845 ppb	00:53:46
1	Si 251.611†	372.9	53.3	4.0520 µg/L	4.0520 ppb	00:54:07
1	Sn 189.927†	5.9	5.4	2.2728 µg/L	2.2728 ppb	00:54:07
1	Ti 334.940†	341.2	157.9	0.3518 µg/L	0.3518 ppb	00:53:46
1	Tl 190.801†	-19.9	3.0	3.8843 µg/L	3.8843 ppb	00:54:07
1	U 409.014†	-22.2	55.4	4.6027 µg/L	4.6027 ppb	00:53:46
1	V 292.402†	-31.2	14.3	0.1517 µg/L	0.1517 ppb	00:53:46
1	Zn 213.857†	529.8	-17.4	-0.4012 µg/L	-0.4012 ppb	00:54:07
2	Sc RADIAL	56775.7	56775.7	100 %		00:52:44
2	Al 396.153Radial†	-27.8	-35.0	-24.366 µg/L	-24.366 ppb	00:52:44
2	Ca 317.933Radial†	192.4	-19.9	-16.957 µg/L	-16.957 ppb	00:53:04
2	Fe 238.204 Radial†	16.1	-0.6	-4.4224 µg/L	-4.4224 ppb	00:53:04
2	K 766.490 Radial†	175.7	9.8	6.4327 µg/L	6.4327 ppb	00:52:44
2	Mg 279.077 IEC†	7.4	-5.5	-48.709 µg/L	-48.709 ppb	00:53:04
2	Na 589.592 Radial†	453.4	-21.0	-6.4575 µg/L	-6.4575 ppb	00:52:44
2	Sr 421.552†	44.2	15.2	0.1399 µg/L	0.1399 ppb	00:52:44
2	Sc 361.383	2015962.5	2015962.5	102.69 %		00:54:13
2	Y 371.029	1393418.5	1393418.5	103.01 %		00:54:13
2	Ag 328.068†	-401.2	10.9	0.0831 µg/L	0.0831 ppb	00:54:18
2	As 188.979†	0.0	0.5	0.8602 µg/L	0.8602 ppb	00:54:39
2	B 249.677†	354.8	-38.6	-1.5728 µg/L	-1.5728 ppb	00:54:39
2	Ba 233.527†	-18.1	-0.5	-0.0119 µg/L	-0.0119 ppb	00:54:39
2	Be 313.107†	-2690.3	235.9	0.1399 µg/L	0.1399 ppb	00:54:18
2	Cd 226.502†	-130.3	14.8	0.3705 µg/L	0.3705 ppb	00:54:39
2	Co 228.616†	-6.6	-8.4	-0.3796 µg/L	-0.3796 ppb	00:54:39
2	Cr 267.716†	-46.8	4.9	0.0977 µg/L	0.0977 ppb	00:54:18
2	Cu 324.752†	2528.8	-81.2	-0.5308 µg/L	-0.5308 ppb	00:54:18
2	Mn 257.610†	-226.2	35.7	0.1133 µg/L	0.1133 ppb	00:54:39
2	Mo 202.031†	4.6	9.8	0.9608 µg/L	0.9608 ppb	00:54:39
2	Ni 231.604†	319.0	-1.7	-0.0830 µg/L	-0.0830 ppb	00:54:39
2	P 214.914†	9.1	-6.5	-12.859 µg/L	-12.859 ppb	00:54:39
2	Pb 220.353†	88.2	-5.0	-1.2233 µg/L	-1.2233 ppb	00:54:39

2	S 181.975 Axial†	16.9	-2.4	-10.103 µg/L	-10.103 ppb	00:54:39
2	Sb 206.836†	17.9	-5.1	-4.6769 µg/L	-4.6769 ppb	00:54:39
2	Se 196.026†	19.1	-0.7	-1.0024 µg/L	-1.0024 ppb	00:54:39
2	SiO2†	1449.7	20.2	3.9814 µg/L	3.9814 ppb	00:54:18
2	Si 251.611†	376.1	55.6	4.2260 µg/L	4.2260 ppb	00:54:39
2	Sn 189.927†	1.7	1.3	0.5477 µg/L	0.5477 ppb	00:54:39
2	Ti 334.940†	343.0	159.0	0.3552 µg/L	0.3552 ppb	00:54:18
2	Tl 190.801†	-24.1	-1.1	-1.4493 µg/L	-1.4493 ppb	00:54:39
2	U 409.014†	10.4	87.2	7.2508 µg/L	7.2508 ppb	00:54:18
2	V 292.402†	-4.1	40.8	0.4119 µg/L	0.4119 ppb	00:54:18
2	Zn 213.857†	527.1	-21.2	-0.4921 µg/L	-0.4921 ppb	00:54:39
3	Sc RADIAL	56920.7	56920.7	101 %		00:53:10
3	Al 396.153Radial†	-15.3	-22.6	-15.701 µg/L	-15.701 ppb	00:53:10
3	Ca 317.933Radial†	197.5	-15.2	-12.988 µg/L	-12.988 ppb	00:53:30
3	Fe 238.204 Radial†	18.8	2.1	16.556 µg/L	16.556 ppb	00:53:30
3	K 766.490 Radial†	185.2	18.8	12.279 µg/L	12.279 ppb	00:53:10
3	Mg 279.077 IEC†	8.5	-4.4	-39.105 µg/L	-39.105 ppb	00:53:30
3	Na 589.592 Radial†	423.4	-52.0	-15.967 µg/L	-15.967 ppb	00:53:10
3	Sr 421.552†	41.9	12.7	0.1176 µg/L	0.1176 ppb	00:53:10
3	Sc 361.383	2014852.2	2014852.2	102.64 %		00:54:45
3	Y 371.029	1393456.2	1393456.2	103.01 %		00:54:45
3	Ag 328.068†	-422.8	-10.3	-0.0785 µg/L	-0.0785 ppb	00:54:50
3	As 188.979†	-1.5	-1.0	-1.7460 µg/L	-1.7460 ppb	00:55:11
3	B 249.677†	333.7	-59.0	-2.4128 µg/L	-2.4128 ppb	00:55:11
3	Ba 233.527†	-13.4	4.0	0.0947 µg/L	0.0947 ppb	00:55:11
3	Be 313.107†	-2699.8	225.2	0.1336 µg/L	0.1336 ppb	00:54:50
3	Cd 226.502†	-145.5	-0.0	-0.0031 µg/L	-0.0031 ppb	00:55:11
3	Co 228.616†	6.4	4.3	0.1940 µg/L	0.1940 ppb	00:55:11
3	Cr 267.716†	-55.0	-3.2	-0.0651 µg/L	-0.0651 ppb	00:54:50
3	Cu 324.752†	2622.6	11.6	0.0778 µg/L	0.0778 ppb	00:54:50
3	Mn 257.610†	-221.2	40.5	0.1307 µg/L	0.1307 ppb	00:55:11
3	Mo 202.031†	-7.2	-1.7	-0.1630 µg/L	-0.1630 ppb	00:55:11
3	Ni 231.604†	311.0	-9.4	-0.4674 µg/L	-0.4674 ppb	00:55:11
3	P 214.914†	6.6	-8.9	-17.650 µg/L	-17.650 ppb	00:55:11
3	Pb 220.353†	81.8	-11.3	-2.7554 µg/L	-2.7554 ppb	00:55:11
3	S 181.975 Axial†	13.5	-5.8	-23.870 µg/L	-23.870 ppb	00:55:11
3	Sb 206.836†	20.6	-2.4	-2.2216 µg/L	-2.2216 ppb	00:55:11
3	Se 196.026†	20.8	1.0	1.4345 µg/L	1.4345 ppb	00:55:11
3	SiO2†	1432.2	3.9	0.7640 µg/L	0.7640 ppb	00:54:50
3	Si 251.611†	389.1	68.5	5.2078 µg/L	5.2078 ppb	00:55:11
3	Sn 189.927†	1.8	1.4	0.5816 µg/L	0.5816 ppb	00:55:11
3	Ti 334.940†	265.2	83.4	0.1873 µg/L	0.1873 ppb	00:54:50
3	Tl 190.801†	-21.9	1.1	1.4257 µg/L	1.4257 ppb	00:55:11
3	U 409.014†	48.0	123.8	10.285 µg/L	10.285 ppb	00:54:50
3	V 292.402†	-96.7	-49.4	-0.4704 µg/L	-0.4704 ppb	00:54:50
3	Zn 213.857†	520.4	-27.3	-0.6376 µg/L	-0.6376 ppb	00:55:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2014192.7	102.60 %	0.111			0.11%
Sc RADIAL	56728.2	100 %	0.4			0.39%
Y 371.029	1392162.4	102.91 %	0.163			0.16%
Ag 328.068†	2.3	0.0177 µg/L	0.08511	0.0177 ppb	0.08511	481.20%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-27.9	-19.391 µg/L	4.4734	-19.391 ppb	4.4734	23.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.9	-1.5281 µg/L	2.28722	-1.5281 ppb	2.28722	149.67%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-50.5	-2.0584 µg/L	0.43510	-2.0584 ppb	0.43510	21.14%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.0	0.0252 µg/L	0.06031	0.0252 ppb	0.06031	239.74%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	215.7	0.1279 µg/L	0.01565	0.1279 ppb	0.01565	12.24%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-18.0	-15.359 µg/L	2.0946	-15.359 ppb	2.0946	13.64%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.2	0.2536 µg/L	0.22259	0.2536 ppb	0.22259	87.77%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.8	-0.0379 µg/L	0.30216	-0.0379 ppb	0.30216	797.93%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	8.5 0.1717 µg/L	0.28121 0.1717 ppb	0.28121 163.77%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-33.3 -0.2166 µg/L	0.30479 -0.2166 ppb	0.30479 140.71%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.4 3.5035 µg/L	11.39025 3.5035 ppb	11.39025 325.11%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	28.5 18.621 µg/L	16.3129 18.621 ppb	16.3129 87.60%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-4.6 -41.174 µg/L	6.7433 -41.174 ppb	6.7433 16.38%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	42.1 0.1339 µg/L	0.02244 0.1339 ppb	0.02244 16.76%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	5.7 0.5632 µg/L	0.62984 0.5632 ppb	0.62984 111.84%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-37.3 -11.464 µg/L	4.7748 -11.464 ppb	4.7748 41.65%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-10.5 -0.5227 µg/L	0.46980 -0.5227 ppb	0.46980 89.88%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-4.9 -9.6539 µg/L	9.99179 -9.6539 ppb	9.99179 103.50%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-6.7 -1.6302 µg/L	0.98682 -1.6302 ppb	0.98682 60.54%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-3.7 -15.539 µg/L	7.3261 -15.539 ppb	7.3261 47.15%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-4.6 -4.2413 µg/L	1.84093 -4.2413 ppb	1.84093 43.40%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-0.0 0.0037 µg/L	1.27280 0.0037 ppb	1.27280 >999.9%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	10.5 2.0766 µg/L	1.68846 2.0766 ppb	1.68846 81.31%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	59.1 4.4953 µg/L	0.62314 4.4953 ppb	0.62314 13.86%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	2.7 1.1340 µg/L	0.98634 1.1340 ppb	0.98634 86.98%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	13.1 0.1213 µg/L	0.01704 0.1213 ppb	0.01704 14.05%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	133.4 0.2981 µg/L	0.09597 0.2981 ppb	0.09597 32.19%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	1.0 1.2869 µg/L	2.66947 1.2869 ppb	2.66947 207.44%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	88.8 7.3795 µg/L	2.84332 7.3795 ppb	2.84332 38.53%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	1.9 0.0311 µg/L	0.45339 0.0311 ppb	0.45339 >999.9%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-22.0 -0.5103 µg/L	0.11927 -0.5103 ppb	0.11927 23.37%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/20/2010 01:35:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57419.3	57419.3	102 %		01:35:43
1	Al 396.153Radial†	7273.3	7148.9	4962.6 µg/L	4962.6 ppb	01:35:43
1	Ca 317.933Radial†	6076.2	5767.2	4926.2 µg/L	4926.2 ppb	01:36:04
1	Fe 238.204 Radial†	668.4	641.0	5066.5 µg/L	5066.5 ppb	01:36:04
1	K 766.490 Radial†	7761.6	7471.8	4879.9 µg/L	4879.9 ppb	01:35:43
1	Mg 279.077 IEC†	582.0	559.9	5007.8 µg/L	5007.8 ppb	01:36:04
1	Na 589.592 Radial†	33078.6	32074.2	9851.4 µg/L	9851.4 ppb	01:35:43
1	Sr 421.552†	53197.6	52313.0	482.60 µg/L	482.60 ppb	01:35:43
1	Sc 361.383	2034231.0	2034231.0	103.62 %		01:37:07
1	Y 371.029	1401078.9	1401078.9	103.57 %		01:37:07
1	Ag 328.068†	68051.1	66073.8	493.05 µg/L	493.05 ppb	01:37:13
1	As 188.979†	299.7	289.7	518.21 µg/L	518.21 ppb	01:37:33
1	B 249.677†	12790.8	11959.5	485.61 µg/L	485.61 ppb	01:37:13
1	Ba 233.527†	21540.3	20804.3	500.35 µg/L	500.35 ppb	01:37:13
1	Be 313.107†	870171.9	842608.7	499.90 µg/L	499.90 ppb	01:37:07
1	Cd 226.502†	20795.1	20209.8	503.98 µg/L	503.98 ppb	01:37:13
1	Co 228.616†	11522.6	11117.9	502.92 µg/L	502.92 ppb	01:37:13
1	Cr 267.716†	26000.3	25141.8	505.29 µg/L	505.29 ppb	01:37:13
1	Cu 324.752†	80889.6	75518.2	493.65 µg/L	493.65 ppb	01:37:13
1	Mn 257.610†	168584.1	162946.9	510.74 µg/L	510.74 ppb	01:37:07
1	Mo 202.031†	5412.4	5228.5	512.20 µg/L	512.20 ppb	01:37:33
1	Ni 231.604†	10820.3	10129.7	504.43 µg/L	504.43 ppb	01:37:13
1	P 214.914†	1337.7	1275.6	2478.4 µg/L	2478.4 ppb	01:37:33
1	Pb 220.353†	2251.8	2082.1	506.35 µg/L	506.35 ppb	01:37:33
1	S 181.975 Axial†	270.9	242.5	1005.8 µg/L	1005.8 ppb	01:37:33
1	Sb 206.836†	601.8	558.3	514.73 µg/L	514.73 ppb	01:37:33
1	Se 196.026†	390.4	357.4	509.98 µg/L	509.98 ppb	01:37:33
1	SiO2†	29586.8	27161.0	5361.2 µg/L	5361.2 ppb	01:37:13
1	Si 251.611†	34523.3	33005.8	2509.2 µg/L	2509.2 ppb	01:37:13
1	Sn 189.927†	1266.8	1222.1	515.41 µg/L	515.41 ppb	01:37:33
1	Ti 334.940†	234198.4	225836.4	499.28 µg/L	499.28 ppb	01:37:07
1	Tl 190.801†	376.7	385.9	507.24 µg/L	507.24 ppb	01:37:33
1	U 409.014†	6139.1	6001.6	497.64 µg/L	497.64 ppb	01:37:13
1	V 292.402†	52802.2	51001.1	503.24 µg/L	503.24 ppb	01:37:13
1	Zn 213.857†	22812.8	21480.9	500.43 µg/L	500.43 ppb	01:37:13
2	Sc RADIAL	57564.5	57564.5	102 %		01:36:09
2	Al 396.153Radial†	7306.8	7163.8	4973.1 µg/L	4973.1 ppb	01:36:09
2	Ca 317.933Radial†	6109.1	5784.4	4940.9 µg/L	4940.9 ppb	01:36:30
2	Fe 238.204 Radial†	668.9	639.9	5057.7 µg/L	5057.7 ppb	01:36:30
2	K 766.490 Radial†	7818.3	7508.2	4903.7 µg/L	4903.7 ppb	01:36:09
2	Mg 279.077 IEC†	583.3	559.6	5005.7 µg/L	5005.7 ppb	01:36:30
2	Na 589.592 Radial†	33360.3	32268.7	9911.1 µg/L	9911.1 ppb	01:36:09
2	Sr 421.552†	53650.5	52625.5	485.48 µg/L	485.48 ppb	01:36:09
2	Sc 361.383	2011414.2	2011414.2	102.46 %		01:37:40
2	Y 371.029	1384320.1	1384320.1	102.33 %		01:37:40
2	Ag 328.068†	68129.8	66895.6	499.17 µg/L	499.17 ppb	01:37:46
2	As 188.979†	297.3	290.6	519.94 µg/L	519.94 ppb	01:38:07
2	B 249.677†	12762.8	12072.3	490.22 µg/L	490.22 ppb	01:37:46
2	Ba 233.527†	21511.3	21011.9	505.34 µg/L	505.34 ppb	01:37:46
2	Be 313.107†	857165.5	839440.6	498.02 µg/L	498.02 ppb	01:37:40
2	Cd 226.502†	20769.1	20412.1	509.04 µg/L	509.04 ppb	01:37:46
2	Co 228.616†	11488.3	11210.5	507.12 µg/L	507.12 ppb	01:37:46
2	Cr 267.716†	25975.8	25402.5	510.53 µg/L	510.53 ppb	01:37:46
2	Cu 324.752†	81008.6	76519.8	500.18 µg/L	500.18 ppb	01:37:46
2	Mn 257.610†	166212.0	162477.3	509.27 µg/L	509.27 ppb	01:37:40
2	Mo 202.031†	5296.2	5174.4	506.90 µg/L	506.90 ppb	01:38:07
2	Ni 231.604†	10788.5	10217.2	508.78 µg/L	508.78 ppb	01:37:46
2	P 214.914†	1313.4	1266.5	2459.7 µg/L	2459.7 ppb	01:38:07
2	Pb 220.353†	2218.7	2074.5	504.46 µg/L	504.46 ppb	01:38:07

2	S 181.975 Axial†	267.5	242.1	1004.0 µg/L	1004.0 ppb	01:38:07
2	Sb 206.836†	586.7	550.1	507.05 µg/L	507.05 ppb	01:38:07
2	Se 196.026†	392.7	363.9	519.07 µg/L	519.07 ppb	01:38:07
2	SiO2†	29613.1	27510.6	5430.2 µg/L	5430.2 ppb	01:37:46
2	Si 251.611†	34507.3	33368.1	2536.7 µg/L	2536.7 ppb	01:37:46
2	Sn 189.927†	1242.9	1212.7	511.45 µg/L	511.45 ppb	01:38:07
2	Ti 334.940†	231607.9	225872.0	499.36 µg/L	499.36 ppb	01:37:40
2	Tl 190.801†	376.6	389.9	512.47 µg/L	512.47 ppb	01:38:07
2	U 409.014†	6139.7	6069.4	503.27 µg/L	503.27 ppb	01:37:46
2	V 292.402†	52801.4	51578.4	508.85 µg/L	508.85 ppb	01:37:46
2	Zn 213.857†	22800.3	21718.5	505.97 µg/L	505.97 ppb	01:37:46
3	Sc RADIAL	57244.6	57244.6	101 %		01:36:35
3	Al 396.153Radial†	7255.4	7153.1	4967.6 µg/L	4967.6 ppb	01:36:35
3	Ca 317.933Radial†	6126.1	5834.7	4983.8 µg/L	4983.8 ppb	01:36:56
3	Fe 238.204 Radial†	671.1	645.7	5102.4 µg/L	5102.4 ppb	01:36:56
3	K 766.490 Radial†	7862.8	7594.9	4960.4 µg/L	4960.4 ppb	01:36:35
3	Mg 279.077 IEC†	592.0	571.5	5109.9 µg/L	5109.9 ppb	01:36:56
3	Na 589.592 Radial†	33278.2	32370.6	9942.4 µg/L	9942.4 ppb	01:36:35
3	Sr 421.552†	53507.0	52778.1	486.89 µg/L	486.89 ppb	01:36:35
3	Sc 361.383	2007877.4	2007877.4	102.28 %		01:38:14
3	Y 371.029	1383889.0	1383889.0	102.30 %		01:38:14
3	Ag 328.068†	63051.4	62047.6	462.82 µg/L	462.82 ppb	01:38:20
3	As 188.979†	242.2	237.3	424.54 µg/L	424.54 ppb	01:38:40
3	B 249.677†	11794.6	11147.5	452.38 µg/L	452.38 ppb	01:38:20
3	Ba 233.527†	19114.6	18705.6	449.86 µg/L	449.86 ppb	01:38:20
3	Be 313.107†	777323.4	762851.8	452.59 µg/L	452.59 ppb	01:38:14
3	Cd 226.502†	18378.3	18110.4	451.56 µg/L	451.56 ppb	01:38:20
3	Co 228.616†	10053.9	9827.9	444.52 µg/L	444.52 ppb	01:38:20
3	Cr 267.716†	21927.7	21489.3	431.89 µg/L	431.89 ppb	01:38:20
3	Cu 324.752†	71363.4	67228.9	439.54 µg/L	439.54 ppb	01:38:20
3	Mn 257.610†	151239.3	148124.0	464.33 µg/L	464.33 ppb	01:38:14
3	Mo 202.031†	4315.7	4224.8	413.91 µg/L	413.91 ppb	01:38:40
3	Ni 231.604†	9486.5	8962.7	446.32 µg/L	446.32 ppb	01:38:20
3	P 214.914†	1092.4	1052.7	2041.2 µg/L	2041.2 ppb	01:38:40
3	Pb 220.353†	1885.6	1752.6	426.13 µg/L	426.13 ppb	01:38:40
3	S 181.975 Axial†	228.9	204.8	849.49 µg/L	849.49 ppb	01:38:40
3	Sb 206.836†	488.5	455.1	419.26 µg/L	419.26 ppb	01:38:40
3	Se 196.026†	335.3	308.5	441.24 µg/L	441.24 ppb	01:38:40
3	SiO2†	26932.2	24940.3	4922.9 µg/L	4922.9 ppb	01:38:20
3	Si 251.611†	31223.7	30217.1	2297.2 µg/L	2297.2 ppb	01:38:20
3	Sn 189.927†	1002.7	980.0	413.30 µg/L	413.30 ppb	01:38:40
3	Ti 334.940†	208100.4	203286.6	449.39 µg/L	449.39 ppb	01:38:14
3	Tl 190.801†	327.4	342.5	450.33 µg/L	450.33 ppb	01:38:40
3	U 409.014†	5238.9	5199.2	430.96 µg/L	430.96 ppb	01:38:20
3	V 292.402†	45692.1	44718.3	441.02 µg/L	441.02 ppb	01:38:20
3	Zn 213.857†	20094.2	19111.9	445.18 µg/L	445.18 ppb	01:38:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2017840.8	102.79 %	0.729			0.71%
Sc RADIAL	57409.5	102 %	0.3			0.28%
Y 371.029	1389762.7	102.74 %	0.725			0.71%
Ag 328.068†	65005.7	485.01 µg/L	19.462	485.01 ppb	19.462	4.01%
QC value within limits for Ag 328.068 Recovery = 97.00%						
Al 396.153Radial†	7155.3	4967.8 µg/L	5.22	4967.8 ppb	5.22	0.11%
QC value within limits for Al 396.153Radial Recovery = 99.36%						
As 188.979†	272.5	487.56 µg/L	54.586	487.56 ppb	54.586	11.20%
QC value within limits for As 188.979 Recovery = 97.51%						
B 249.677†	11726.4	476.07 µg/L	20.645	476.07 ppb	20.645	4.34%
QC value within limits for B 249.677 Recovery = 95.21%						
Ba 233.527†	20174.0	485.18 µg/L	30.696	485.18 ppb	30.696	6.33%
QC value within limits for Ba 233.527 Recovery = 97.04%						
Be 313.107†	814967.0	483.50 µg/L	26.792	483.50 ppb	26.792	5.54%
QC value within limits for Be 313.107 Recovery = 96.70%						
Ca 317.933Radial†	5795.4	4950.3 µg/L	29.95	4950.3 ppb	29.95	0.60%
QC value within limits for Ca 317.933Radial Recovery = 99.01%						
Cd 226.502†	19577.4	488.19 µg/L	31.826	488.19 ppb	31.826	6.52%
QC value within limits for Cd 226.502 Recovery = 97.64%						
Co 228.616†	10718.8	484.85 µg/L	34.993	484.85 ppb	34.993	7.22%

QC value within limits for Co 228.616 Recovery = 96.97%							
Cr 267.716†	24011.2	482.57 µg/L	43.969	482.57 ppb	43.969	9.11%	
QC value within limits for Cr 267.716 Recovery = 96.51%							
Cu 324.752†	73089.0	477.79 µg/L	33.284	477.79 ppb	33.284	6.97%	
QC value within limits for Cu 324.752 Recovery = 95.56%							
Fe 238.204 Radial†	642.2	5075.5 µg/L	23.69	5075.5 ppb	23.69	0.47%	
QC value within limits for Fe 238.204 Radial Recovery = 101.51%							
K 766.490 Radial†	7525.0	4914.7 µg/L	41.31	4914.7 ppb	41.31	0.84%	
QC value within limits for K 766.490 Radial Recovery = 98.29%							
Mg 279.077 IEC†	563.7	5041.1 µg/L	59.58	5041.1 ppb	59.58	1.18%	
QC value within limits for Mg 279.077 IEC Recovery = 100.82%							
Mn 257.610†	157849.4	494.78 µg/L	26.384	494.78 ppb	26.384	5.33%	
QC value within limits for Mn 257.610 Recovery = 98.96%							
Mo 202.031†	4875.9	477.67 µg/L	55.281	477.67 ppb	55.281	11.57%	
QC value within limits for Mo 202.031 Recovery = 95.53%							
Na 589.592 Radial†	32237.8	9901.6 µg/L	46.24	9901.6 ppb	46.24	0.47%	
QC value within limits for Na 589.592 Radial Recovery = 99.02%							
Ni 231.604†	9769.8	486.51 µg/L	34.873	486.51 ppb	34.873	7.17%	
QC value within limits for Ni 231.604 Recovery = 97.30%							
P 214.914†	1198.3	2326.4 µg/L	247.17	2326.4 ppb	247.17	10.62%	
QC value within limits for P 214.914 Recovery = 93.06%							
Pb 220.353†	1969.8	478.98 µg/L	45.779	478.98 ppb	45.779	9.56%	
QC value within limits for Pb 220.353 Recovery = 95.80%							
S 181.975 Axial†	229.8	953.10 µg/L	89.732	953.10 ppb	89.732	9.41%	
QC value within limits for S 181.975 Axial Recovery = 95.31%							
Sb 206.836†	521.2	480.34 µg/L	53.042	480.34 ppb	53.042	11.04%	
QC value within limits for Sb 206.836 Recovery = 96.07%							
Se 196.026†	343.3	490.10 µg/L	42.553	490.10 ppb	42.553	8.68%	
QC value within limits for Se 196.026 Recovery = 98.02%							
SiO2†	26537.3	5238.1 µg/L	275.17	5238.1 ppb	275.17	5.25%	
QC value within limits for SiO2 Recovery = 97.95%							
Si 251.611†	32197.0	2447.7 µg/L	131.08	2447.7 ppb	131.08	5.36%	
QC value within limits for Si 251.611 Recovery = 97.91%							
Sn 189.927†	1138.3	480.05 µg/L	57.847	480.05 ppb	57.847	12.05%	
QC value within limits for Sn 189.927 Recovery = 96.01%							
Sr 421.552†	52572.2	484.99 µg/L	2.187	484.99 ppb	2.187	0.45%	
QC value within limits for Sr 421.552 Recovery = 97.00%							
Ti 334.940†	218331.7	482.68 µg/L	28.828	482.68 ppb	28.828	5.97%	
QC value within limits for Ti 334.940 Recovery = 96.54%							
Tl 190.801†	372.8	490.01 µg/L	34.467	490.01 ppb	34.467	7.03%	
QC value within limits for Tl 190.801 Recovery = 98.00%							
U 409.014†	5756.7	477.29 µg/L	40.220	477.29 ppb	40.220	8.43%	
QC value within limits for U 409.014 Recovery = 95.46%							
V 292.402†	49099.3	484.37 µg/L	37.644	484.37 ppb	37.644	7.77%	
QC value within limits for V 292.402 Recovery = 96.87%							
Zn 213.857†	20770.4	483.86 µg/L	33.610	483.86 ppb	33.610	6.95%	
QC value within limits for Zn 213.857 Recovery = 96.77%							
All analyte(s) passed QC.							

Sequence No.: 11
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/20/2010 01:38:49
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57135.1	57135.1	101 %		01:39:22
1	Al 396.153Radial†	34.8	27.0	18.768 µg/L	18.768 ppb	01:39:22
1	Ca 317.933Radial†	207.1	-6.4	-5.4954 µg/L	-5.4954 ppb	01:39:43
1	Fe 238.204 Radial†	23.1	6.3	49.660 µg/L	49.660 ppb	01:39:43
1	K 766.490 Radial†	205.9	38.7	25.245 µg/L	25.245 ppb	01:39:22
1	Mg 279.077 IEC†	7.2	-5.7	-51.077 µg/L	-51.077 ppb	01:39:43
1	Na 589.592 Radial†	453.8	-23.5	-7.2226 µg/L	-7.2226 ppb	01:39:22
1	Sr 421.552†	70.3	40.7	0.3759 µg/L	0.3759 ppb	01:39:22
1	Sc 361.383	2042257.0	2042257.0	104.03 %		01:40:45
1	Y 371.029	1411266.5	1411266.5	104.33 %		01:40:45
1	Ag 328.068†	-373.7	42.4	0.3160 µg/L	0.3160 ppb	01:40:50
1	As 188.979†	2.2	2.5	4.5612 µg/L	4.5612 ppb	01:41:11
1	B 249.677†	379.7	-19.2	-0.8084 µg/L	-0.8084 ppb	01:41:11
1	Ba 233.527†	13.4	30.0	0.7187 µg/L	0.7187 ppb	01:41:11
1	Be 313.107†	-2631.9	325.8	0.1929 µg/L	0.1929 ppb	01:40:50
1	Cd 226.502†	-140.5	6.6	0.1583 µg/L	0.1583 ppb	01:41:11
1	Co 228.616†	13.2	10.8	0.4861 µg/L	0.4861 ppb	01:41:11
1	Cr 267.716†	-53.6	-1.2	-0.0241 µg/L	-0.0241 ppb	01:40:50
1	Cu 324.752†	2611.5	-33.4	-0.2113 µg/L	-0.2113 ppb	01:40:50
1	Mn 257.610†	14.5	269.9	0.8539 µg/L	0.8539 ppb	01:41:11
1	Mo 202.031†	2.8	8.0	0.7888 µg/L	0.7888 ppb	01:41:11
1	Ni 231.604†	315.0	-9.6	-0.4765 µg/L	-0.4765 ppb	01:41:11
1	P 214.914†	6.3	-9.3	-18.376 µg/L	-18.376 ppb	01:41:11
1	Pb 220.353†	88.8	-5.6	-1.3648 µg/L	-1.3648 ppb	01:41:11
1	S 181.975 Axial†	16.7	-2.9	-11.978 µg/L	-11.978 ppb	01:41:11
1	Sb 206.836†	22.2	-1.1	-1.0285 µg/L	-1.0285 ppb	01:41:11
1	Se 196.026†	21.8	1.7	2.5009 µg/L	2.5009 ppb	01:41:11
1	SiO2†	1521.5	71.0	14.008 µg/L	14.008 ppb	01:40:50
1	Si 251.611†	464.1	135.5	10.301 µg/L	10.301 ppb	01:41:11
1	Sn 189.927†	2.6	2.1	0.8882 µg/L	0.8882 ppb	01:41:11
1	Ti 334.940†	768.8	564.0	1.2516 µg/L	1.2516 ppb	01:40:50
1	Tl 190.801†	-21.5	1.7	2.2435 µg/L	2.2435 ppb	01:41:11
1	U 409.014†	-79.9	0.2	0.0140 µg/L	0.0140 ppb	01:40:50
1	V 292.402†	-69.0	-21.6	-0.1984 µg/L	-0.1984 ppb	01:40:50
1	Zn 213.857†	544.5	-11.0	-0.2547 µg/L	-0.2547 ppb	01:41:11
2	Sc RADIAL	57590.6	57590.6	102 %		01:39:48
2	Al 396.153Radial†	40.9	32.7	22.776 µg/L	22.776 ppb	01:39:48
2	Ca 317.933Radial†	207.8	-7.4	-6.3495 µg/L	-6.3495 ppb	01:40:09
2	Fe 238.204 Radial†	20.9	3.9	30.891 µg/L	30.891 ppb	01:40:09
2	K 766.490 Radial†	147.6	-20.2	-13.199 µg/L	-13.199 ppb	01:39:48
2	Mg 279.077 IEC†	10.5	-2.5	-22.537 µg/L	-22.537 ppb	01:40:09
2	Na 589.592 Radial†	425.0	-55.2	-16.966 µg/L	-16.966 ppb	01:39:48
2	Sr 421.552†	29.7	0.4	0.0032 µg/L	0.0032 ppb	01:39:48
2	Sc 361.383	2039883.2	2039883.2	103.91 %		01:41:17
2	Y 371.029	1409921.3	1409921.3	104.23 %		01:41:17
2	Ag 328.068†	-373.1	42.5	0.3150 µg/L	0.3150 ppb	01:41:22
2	As 188.979†	-3.5	-2.9	-5.1760 µg/L	-5.1760 ppb	01:41:43
2	B 249.677†	359.3	-38.4	-1.5807 µg/L	-1.5807 ppb	01:41:43
2	Ba 233.527†	-1.7	15.4	0.3695 µg/L	0.3695 ppb	01:41:43
2	Be 313.107†	-2593.5	359.8	0.2130 µg/L	0.2130 ppb	01:41:22
2	Cd 226.502†	-142.2	4.9	0.1169 µg/L	0.1169 ppb	01:41:43
2	Co 228.616†	13.6	11.1	0.5020 µg/L	0.5020 ppb	01:41:43
2	Cr 267.716†	-56.9	-4.4	-0.0888 µg/L	-0.0888 ppb	01:41:22
2	Cu 324.752†	2578.4	-62.4	-0.4030 µg/L	-0.4030 ppb	01:41:22
2	Mn 257.610†	-100.9	158.9	0.5026 µg/L	0.5026 ppb	01:41:43
2	Mo 202.031†	-3.5	2.0	0.1992 µg/L	0.1992 ppb	01:41:43
2	Ni 231.604†	312.1	-12.0	-0.5974 µg/L	-0.5974 ppb	01:41:43
2	P 214.914†	8.1	-7.5	-14.853 µg/L	-14.853 ppb	01:41:43
2	Pb 220.353†	89.5	-4.8	-1.1656 µg/L	-1.1656 ppb	01:41:43

2	S 181.975 Axial†	19.3	-0.4	-1.5228 µg/L	-1.5228 ppb	01:41:43
2	Sb 206.836†	15.6	-7.5	-6.8664 µg/L	-6.8664 ppb	01:41:43
2	Se 196.026†	20.8	0.7	1.1221 µg/L	1.1221 ppb	01:41:43
2	SiO2†	1543.7	94.1	18.568 µg/L	18.568 ppb	01:41:22
2	Si 251.611†	427.6	100.9	7.6718 µg/L	7.6718 ppb	01:41:43
2	Sn 189.927†	4.2	3.6	1.5286 µg/L	1.5286 ppb	01:41:43
2	Ti 334.940†	818.7	612.8	1.3574 µg/L	1.3574 ppb	01:41:22
2	Tl 190.801†	-26.6	-3.2	-4.1746 µg/L	-4.1746 ppb	01:41:43
2	U 409.014†	-39.9	38.7	3.2106 µg/L	3.2106 ppb	01:41:22
2	V 292.402†	-78.3	-30.6	-0.2901 µg/L	-0.2901 ppb	01:41:22
2	Zn 213.857†	543.6	-11.2	-0.2603 µg/L	-0.2603 ppb	01:41:43
3	Sc RADIAL	57858.1	57858.1	102 %		01:40:14
3	Al 396.153Radial†	22.7	14.8	10.295 µg/L	10.295 ppb	01:40:14
3	Ca 317.933Radial†	203.2	-12.8	-10.971 µg/L	-10.971 ppb	01:40:34
3	Fe 238.204 Radial†	18.8	1.8	13.850 µg/L	13.850 ppb	01:40:34
3	K 766.490 Radial†	204.6	34.8	22.747 µg/L	22.747 ppb	01:40:14
3	Mg 279.077 IEC†	12.5	-0.6	-5.2130 µg/L	-5.2130 ppb	01:40:34
3	Na 589.592 Radial†	471.2	-12.1	-3.7085 µg/L	-3.7085 ppb	01:40:14
3	Sr 421.552†	56.0	25.9	0.2389 µg/L	0.2389 ppb	01:40:14
3	Sc 361.383	2024319.1	2024319.1	103.12 %		01:41:49
3	Y 371.029	1399185.8	1399185.8	103.43 %		01:41:49
3	Ag 328.068†	-371.4	41.4	0.3087 µg/L	0.3087 ppb	01:41:54
3	As 188.979†	-3.1	-2.5	-4.5057 µg/L	-4.5057 ppb	01:42:15
3	B 249.677†	362.3	-32.8	-1.3442 µg/L	-1.3442 ppb	01:42:15
3	Ba 233.527†	3.3	20.3	0.4872 µg/L	0.4872 ppb	01:42:15
3	Be 313.107†	-2633.5	301.8	0.1788 µg/L	0.1788 ppb	01:41:54
3	Cd 226.502†	-140.5	5.4	0.1335 µg/L	0.1335 ppb	01:42:15
3	Co 228.616†	9.3	7.1	0.3187 µg/L	0.3187 ppb	01:42:15
3	Cr 267.716†	-65.5	-13.1	-0.2632 µg/L	-0.2632 ppb	01:41:54
3	Cu 324.752†	2611.5	-11.2	-0.0709 µg/L	-0.0709 ppb	01:41:54
3	Mn 257.610†	-129.8	130.1	0.4095 µg/L	0.4095 ppb	01:42:15
3	Mo 202.031†	1.2	6.5	0.6372 µg/L	0.6372 ppb	01:42:15
3	Ni 231.604†	315.4	-6.5	-0.3221 µg/L	-0.3221 ppb	01:42:15
3	P 214.914†	8.2	-7.4	-14.525 µg/L	-14.525 ppb	01:42:15
3	Pb 220.353†	92.1	-1.6	-0.3905 µg/L	-0.3905 ppb	01:42:15
3	S 181.975 Axial†	16.0	-3.4	-14.142 µg/L	-14.142 ppb	01:42:15
3	Sb 206.836†	29.1	5.7	5.2807 µg/L	5.2807 ppb	01:42:15
3	Se 196.026†	15.7	-4.1	-5.7582 µg/L	-5.7582 ppb	01:42:15
3	SiO2†	1504.9	67.8	13.386 µg/L	13.386 ppb	01:41:54
3	Si 251.611†	417.2	93.9	7.1408 µg/L	7.1408 ppb	01:42:15
3	Sn 189.927†	6.9	6.3	2.6486 µg/L	2.6486 ppb	01:42:15
3	Ti 334.940†	558.7	366.7	0.8115 µg/L	0.8115 ppb	01:41:54
3	Tl 190.801†	-25.8	-2.7	-3.4593 µg/L	-3.4593 ppb	01:42:15
3	U 409.014†	-73.9	5.4	0.4508 µg/L	0.4508 ppb	01:41:54
3	V 292.402†	-26.6	19.0	0.1913 µg/L	0.1913 ppb	01:41:54
3	Zn 213.857†	538.1	-12.6	-0.2940 µg/L	-0.2940 ppb	01:42:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2035486.5	103.69 %	0.496			0.48%
Sc RADIAL	57527.9	102 %	0.6			0.64%
Y 371.029	1406791.2	103.99 %	0.489			0.47%
Ag 328.068†	42.1	0.3132 µg/L	0.00393	0.3132 ppb	0.00393	1.25%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	24.9	17.280 µg/L	6.3721	17.280 ppb	6.3721	36.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.0	-1.7068 µg/L	5.43858	-1.7068 ppb	5.43858	318.63%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-30.1	-1.2444 µg/L	0.39571	-1.2444 ppb	0.39571	31.80%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	21.9	0.5252 µg/L	0.17766	0.5252 ppb	0.17766	33.83%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	329.1	0.1949 µg/L	0.01720	0.1949 ppb	0.01720	8.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-8.9	-7.6052 µg/L	2.94566	-7.6052 ppb	2.94566	38.73%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.6	0.1362 µg/L	0.02082	0.1362 ppb	0.02082	15.29%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.7	0.4356 µg/L	0.10158	0.4356 ppb	0.10158	23.32%

QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-6.2	-0.1253 µg/L	0.12371	-0.1253 ppb	0.12371	98.69%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	-35.7	-0.2284 µg/L	0.16671	-0.2284 ppb	0.16671	73.00%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	4.0	31.467 µg/L	17.9117	31.467 ppb	17.9117	56.92%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	17.8	11.597 µg/L	21.5107	11.597 ppb	21.5107	185.48%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-2.9	-26.276 µg/L	23.1597	-26.276 ppb	23.1597	88.14%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	186.3	0.5887 µg/L	0.23433	0.5887 ppb	0.23433	39.81%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.5	0.5417 µg/L	0.30616	0.5417 ppb	0.30616	56.52%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-30.3	-9.2991 µg/L	6.86854	-9.2991 ppb	6.86854	73.86%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-9.3	-0.4653 µg/L	0.13799	-0.4653 ppb	0.13799	29.66%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-8.1	-15.918 µg/L	2.1350	-15.918 ppb	2.1350	13.41%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	-4.0	-0.9736 µg/L	0.51474	-0.9736 ppb	0.51474	52.87%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-2.2	-9.2142 µg/L	6.74825	-9.2142 ppb	6.74825	73.24%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-1.0	-0.8714 µg/L	6.07511	-0.8714 ppb	6.07511	697.16%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.6	-0.7117 µg/L	4.42438	-0.7117 ppb	4.42438	621.65%	
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†	77.6	15.321 µg/L	2.8290	15.321 ppb	2.8290	18.47%	
QC value within limits for SiO2 Recovery = Not calculated							
Si 251.611†	110.1	8.3713 µg/L	1.69231	8.3713 ppb	1.69231	20.22%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.0	1.6885 µg/L	0.89104	1.6885 ppb	0.89104	52.77%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	22.3	0.2060 µg/L	0.18848	0.2060 ppb	0.18848	91.49%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	514.5	1.1402 µg/L	0.28950	1.1402 ppb	0.28950	25.39%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.4	-1.7968 µg/L	3.51725	-1.7968 ppb	3.51725	195.75%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	14.8	1.2252 µg/L	1.73329	1.2252 ppb	1.73329	141.47%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-11.1	-0.0991 µg/L	0.25565	-0.0991 ppb	0.25565	258.03%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	-11.6	-0.2697 µg/L	0.02125	-0.2697 ppb	0.02125	7.88%	
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 02:15:30

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58191.5	58191.5	103 %		02:16:09
1	Al 396.153Radial†	7258.5	7039.6	4886.5 µg/L	4886.5 ppb	02:16:09
1	Ca 317.933Radial†	6140.0	5749.8	4911.3 µg/L	4911.3 ppb	02:16:30
1	Fe 238.204 Radial†	671.6	635.5	5022.8 µg/L	5022.8 ppb	02:16:30
1	K 766.490 Radial†	7817.3	7424.5	4849.1 µg/L	4849.1 ppb	02:16:09
1	Mg 279.077 IEC†	585.2	555.3	4967.5 µg/L	4967.5 ppb	02:16:30
1	Na 589.592 Radial†	33349.1	31905.1	9799.4 µg/L	9799.4 ppb	02:16:09
1	Sr 421.552†	53529.5	51940.7	479.16 µg/L	479.16 ppb	02:16:09
1	Sc 361.383	2025495.0	2025495.0	103.18 %		02:17:34
1	Y 371.029	1393522.4	1393522.4	103.01 %		02:17:34
1	Ag 328.068†	68051.7	66357.7	495.15 µg/L	495.15 ppb	02:17:39
1	As 188.979†	294.2	285.6	510.95 µg/L	510.95 ppb	02:18:00
1	B 249.677†	12740.6	11964.1	485.82 µg/L	485.82 ppb	02:17:39
1	Ba 233.527†	21431.5	20788.6	499.97 µg/L	499.97 ppb	02:17:39
1	Be 313.107†	860224.1	836589.2	496.33 µg/L	496.33 ppb	02:17:34
1	Cd 226.502†	20683.9	20188.6	503.46 µg/L	503.46 ppb	02:17:39
1	Co 228.616†	11485.2	11129.6	503.47 µg/L	503.47 ppb	02:17:39
1	Cr 267.716†	25878.1	25131.6	505.09 µg/L	505.09 ppb	02:17:39
1	Cu 324.752†	80890.3	75855.5	495.84 µg/L	495.84 ppb	02:17:39
1	Mn 257.610†	166534.0	161661.6	506.71 µg/L	506.71 ppb	02:17:34
1	Mo 202.031†	5429.0	5267.2	515.99 µg/L	515.99 ppb	02:18:00
1	Ni 231.604†	10805.9	10160.8	505.98 µg/L	505.98 ppb	02:17:39
1	P 214.914†	1357.1	1300.0	2526.6 µg/L	2526.6 ppb	02:18:00
1	Pb 220.353†	2263.0	2102.4	511.26 µg/L	511.26 ppb	02:18:00
1	S 181.975 Axial†	272.8	245.5	1018.0 µg/L	1018.0 ppb	02:18:00
1	Sb 206.836†	595.8	554.9	511.72 µg/L	511.72 ppb	02:18:00
1	Se 196.026†	396.0	364.5	519.78 µg/L	519.78 ppb	02:18:00
1	SiO2†	29444.9	27146.6	5358.4 µg/L	5358.4 ppb	02:17:39
1	Si 251.611†	34240.6	32875.6	2499.3 µg/L	2499.3 ppb	02:17:39
1	Sn 189.927†	1272.4	1232.8	519.94 µg/L	519.94 ppb	02:18:00
1	Ti 334.940†	231319.8	224021.3	495.27 µg/L	495.27 ppb	02:17:34
1	Tl 190.801†	376.6	387.4	509.16 µg/L	509.16 ppb	02:18:00
1	U 409.014†	6214.7	6100.4	505.85 µg/L	505.85 ppb	02:17:39
1	V 292.402†	52685.7	51108.0	504.32 µg/L	504.32 ppb	02:17:39
1	Zn 213.857†	22801.0	21564.4	502.38 µg/L	502.38 ppb	02:17:39
2	Sc RADIAL	57525.9	57525.9	102 %		02:16:35
2	Al 396.153Radial†	7277.8	7140.1	4956.8 µg/L	4956.8 ppb	02:16:35
2	Ca 317.933Radial†	6126.2	5805.2	4958.7 µg/L	4958.7 ppb	02:16:56
2	Fe 238.204 Radial†	672.0	643.4	5085.2 µg/L	5085.2 ppb	02:16:56
2	K 766.490 Radial†	7755.8	7451.9	4867.0 µg/L	4867.0 ppb	02:16:35
2	Mg 279.077 IEC†	585.5	562.2	5028.2 µg/L	5028.2 ppb	02:16:56
2	Na 589.592 Radial†	33351.3	32281.8	9915.1 µg/L	9915.1 ppb	02:16:35
2	Sr 421.552†	53616.1	52627.1	485.49 µg/L	485.49 ppb	02:16:35
2	Sc 361.383	2033969.0	2033969.0	103.61 %		02:18:07
2	Y 371.029	1400420.2	1400420.2	103.52 %		02:18:07
2	Ag 328.068†	67959.2	65993.6	492.44 µg/L	492.44 ppb	02:18:12
2	As 188.979†	284.5	275.1	492.09 µg/L	492.09 ppb	02:18:33
2	B 249.677†	12757.5	11929.0	484.35 µg/L	484.35 ppb	02:18:12
2	Ba 233.527†	21433.3	20703.8	497.93 µg/L	497.93 ppb	02:18:12
2	Be 313.107†	861320.1	834173.5	494.90 µg/L	494.90 ppb	02:18:07
2	Cd 226.502†	20662.3	20084.3	500.85 µg/L	500.85 ppb	02:18:12
2	Co 228.616†	11498.8	11096.3	501.95 µg/L	501.95 ppb	02:18:12
2	Cr 267.716†	25809.5	24960.9	501.66 µg/L	501.66 ppb	02:18:12
2	Cu 324.752†	80678.2	75324.2	492.38 µg/L	492.38 ppb	02:18:12
2	Mn 257.610†	166428.8	160887.6	504.30 µg/L	504.30 ppb	02:18:07
2	Mo 202.031†	5249.7	5072.2	496.89 µg/L	496.89 ppb	02:18:33
2	Ni 231.604†	10769.8	10082.3	502.07 µg/L	502.07 ppb	02:18:12
2	P 214.914†	1313.2	1252.1	2431.7 µg/L	2431.7 ppb	02:18:33
2	Pb 220.353†	2202.4	2034.8	494.79 µg/L	494.79 ppb	02:18:33

2	S 181.975 Axial†	266.6	238.4	988.63 µg/L	988.63 ppb	02:18:33
2	Sb 206.836†	585.1	542.2	499.79 µg/L	499.79 ppb	02:18:33
2	Se 196.026†	381.2	348.6	497.62 µg/L	497.62 ppb	02:18:33
2	SiO2†	29426.7	27010.1	5331.4 µg/L	5331.4 ppb	02:18:12
2	Si 251.611†	34259.9	32755.9	2490.2 µg/L	2490.2 ppb	02:18:12
2	Sn 189.927†	1228.0	1184.9	499.71 µg/L	499.71 ppb	02:18:33
2	Ti 334.940†	231705.0	223459.0	494.02 µg/L	494.02 ppb	02:18:07
2	Tl 190.801†	373.9	383.2	503.72 µg/L	503.72 ppb	02:18:33
2	U 409.014†	6182.0	6043.8	501.14 µg/L	501.14 ppb	02:18:12
2	V 292.402†	52588.6	50801.6	501.18 µg/L	501.18 ppb	02:18:12
2	Zn 213.857†	22745.5	21418.8	498.98 µg/L	498.98 ppb	02:18:12
3	Sc RADIAL	58138.8	58138.8	103 %		02:17:01
3	Al 396.153Radial†	7248.0	7035.8	4886.2 µg/L	4886.2 ppb	02:17:01
3	Ca 317.933Radial†	6114.0	5729.9	4894.4 µg/L	4894.4 ppb	02:17:22
3	Fe 238.204 Radial†	673.1	637.5	5037.6 µg/L	5037.6 ppb	02:17:22
3	K 766.490 Radial†	7762.5	7378.1	4818.8 µg/L	4818.8 ppb	02:17:01
3	Mg 279.077 IEC†	580.3	551.1	4927.8 µg/L	4927.8 ppb	02:17:22
3	Na 589.592 Radial†	33225.8	31814.5	9771.6 µg/L	9771.6 ppb	02:17:01
3	Sr 421.552†	53434.2	51895.1	478.74 µg/L	478.74 ppb	02:17:01
3	Sc 361.383	2035150.5	2035150.5	103.67 %		02:18:40
3	Y 371.029	1400317.4	1400317.4	103.52 %		02:18:40
3	Ag 328.068†	62831.2	61009.0	455.07 µg/L	455.07 ppb	02:18:46
3	As 188.979†	237.9	229.9	411.33 µg/L	411.33 ppb	02:19:06
3	B 249.677†	11656.1	10859.4	440.65 µg/L	440.65 ppb	02:18:46
3	Ba 233.527†	18986.2	18331.2	440.85 µg/L	440.85 ppb	02:18:46
3	Be 313.107†	781601.2	756793.4	448.99 µg/L	448.99 ppb	02:18:40
3	Cd 226.502†	18258.6	17754.0	442.67 µg/L	442.67 ppb	02:18:46
3	Co 228.616†	10012.1	9655.8	436.73 µg/L	436.73 ppb	02:18:46
3	Cr 267.716†	21830.8	21108.5	424.24 µg/L	424.24 ppb	02:18:46
3	Cu 324.752†	71151.5	66089.5	432.10 µg/L	432.10 ppb	02:18:46
3	Mn 257.610†	151802.1	146685.3	459.82 µg/L	459.82 ppb	02:18:40
3	Mo 202.031†	4279.7	4133.6	404.98 µg/L	404.98 ppb	02:19:06
3	Ni 231.604†	9441.2	8794.7	437.96 µg/L	437.96 ppb	02:18:46
3	P 214.914†	1100.1	1045.9	2028.4 µg/L	2028.4 ppb	02:19:06
3	Pb 220.353†	1872.9	1715.6	417.12 µg/L	417.12 ppb	02:19:06
3	S 181.975 Axial†	229.9	202.8	841.16 µg/L	841.16 ppb	02:19:06
3	Sb 206.836†	490.6	450.8	415.21 µg/L	415.21 ppb	02:19:06
3	Se 196.026†	333.9	302.7	433.15 µg/L	433.15 ppb	02:19:06
3	SiO2†	26613.4	24279.9	4792.5 µg/L	4792.5 ppb	02:18:46
3	Si 251.611†	30927.8	29522.5	2244.4 µg/L	2244.4 ppb	02:18:46
3	Sn 189.927†	990.4	955.0	402.76 µg/L	402.76 ppb	02:19:06
3	Ti 334.940†	208593.4	201035.6	444.42 µg/L	444.42 ppb	02:18:40
3	Tl 190.801†	322.5	333.4	438.55 µg/L	438.55 ppb	02:19:06
3	U 409.014†	5231.2	5123.1	424.65 µg/L	424.65 ppb	02:18:46
3	V 292.402†	45492.3	43926.9	433.21 µg/L	433.21 ppb	02:18:46
3	Zn 213.857†	19973.8	18732.5	436.34 µg/L	436.34 ppb	02:18:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2031538.2	103.49 %	0.268			0.26%
Sc RADIAL	57952.1	103 %	0.7			0.64%
Y 371.029	1398086.7	103.35 %	0.292			0.28%
Ag 328.068†	64453.4	480.89 µg/L	22.399	480.89 ppb	22.399	4.66%
QC value within limits for Ag 328.068 Recovery = 96.18%						
Al 396.153Radial†	7071.8	4909.8 µg/L	40.70	4909.8 ppb	40.70	0.83%
QC value within limits for Al 396.153Radial Recovery = 98.20%						
As 188.979†	263.5	471.46 µg/L	52.918	471.46 ppb	52.918	11.22%
QC value within limits for As 188.979 Recovery = 94.29%						
B 249.677†	11584.2	470.27 µg/L	25.661	470.27 ppb	25.661	5.46%
QC value within limits for B 249.677 Recovery = 94.05%						
Ba 233.527†	19941.2	479.59 µg/L	33.559	479.59 ppb	33.559	7.00%
QC value within limits for Ba 233.527 Recovery = 95.92%						
Be 313.107†	809185.4	480.07 µg/L	26.927	480.07 ppb	26.927	5.61%
QC value within limits for Be 313.107 Recovery = 96.01%						
Ca 317.933Radial†	5761.6	4921.5 µg/L	33.35	4921.5 ppb	33.35	0.68%
QC value within limits for Ca 317.933Radial Recovery = 98.43%						
Cd 226.502†	19342.3	482.33 µg/L	34.369	482.33 ppb	34.369	7.13%
QC value within limits for Cd 226.502 Recovery = 96.47%						
Co 228.616†	10627.2	480.71 µg/L	38.101	480.71 ppb	38.101	7.93%

QC value within limits for Co 228.616	Recovery = 96.14%			
Cr 267.716†	23733.6	476.99 µg/L	45.720	9.58%
QC value within limits for Cr 267.716	Recovery = 95.40%			
Cu 324.752†	72423.1	473.44 µg/L	35.846	7.57%
QC value within limits for Cu 324.752	Recovery = 94.69%			
Fe 238.204 Radial†	638.8	5048.5 µg/L	32.63	0.65%
QC value within limits for Fe 238.204 Radial	Recovery = 100.97%			
K 766.490 Radial†	7418.2	4844.9 µg/L	24.37	0.50%
QC value within limits for K 766.490 Radial	Recovery = 96.90%			
Mg 279.077 IEC†	556.2	4974.5 µg/L	50.53	1.02%
QC value within limits for Mg 279.077 IEC	Recovery = 99.49%			
Mn 257.610†	156411.5	490.28 µg/L	26.404	5.39%
QC value within limits for Mn 257.610	Recovery = 98.06%			
Mo 202.031†	4824.3	472.62 µg/L	59.353	12.56%
QC value within limits for Mo 202.031	Recovery = 94.52%			
Na 589.592 Radial†	32000.5	9828.7 µg/L	76.12	0.77%
QC value within limits for Na 589.592 Radial	Recovery = 98.29%			
Ni 231.604†	9679.3	482.00 µg/L	38.193	7.92%
QC value within limits for Ni 231.604	Recovery = 96.40%			
P 214.914†	1199.3	2328.9 µg/L	264.54	11.36%
QC value within limits for P 214.914	Recovery = 93.16%			
Pb 220.353†	1950.9	474.39 µg/L	50.276	10.60%
QC value within limits for Pb 220.353	Recovery = 94.88%			
S 181.975 Axial†	228.9	949.25 µg/L	94.750	9.98%
QC value within limits for S 181.975 Axial	Recovery = 94.93%			
Sb 206.836†	516.0	475.58 µg/L	52.614	11.06%
QC value within limits for Sb 206.836	Recovery = 95.12%			
Se 196.026†	338.6	483.52 µg/L	45.006	9.31%
QC value within limits for Se 196.026	Recovery = 96.70%			
SiO2†	26145.5	5160.8 µg/L	319.20	6.19%
QC value within limits for SiO2	Recovery = 96.51%			
Si 251.611†	31718.0	2411.3 µg/L	144.62	6.00%
QC value within limits for Si 251.611	Recovery = 96.45%			
Sn 189.927†	1124.2	474.14 µg/L	62.634	13.21%
QC value within limits for Sn 189.927	Recovery = 94.83%			
Sr 421.552†	52154.3	481.13 µg/L	3.783	0.79%
QC value within limits for Sr 421.552	Recovery = 96.23%			
Ti 334.940†	216172.0	477.91 µg/L	29.003	6.07%
QC value within limits for Ti 334.940	Recovery = 95.58%			
Tl 190.801†	368.0	483.81 µg/L	39.291	8.12%
QC value within limits for Tl 190.801	Recovery = 96.76%			
U 409.014†	5755.8	477.21 µg/L	45.578	9.55%
QC value within limits for U 409.014	Recovery = 95.44%			
V 292.402†	48612.2	479.57 µg/L	40.178	8.38%
QC value within limits for V 292.402	Recovery = 95.91%			
Zn 213.857†	20571.9	479.23 µg/L	37.184	7.76%
QC value within limits for Zn 213.857	Recovery = 95.85%			

All analyte(s) passed QC.

Sequence No.: 22

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 02:19:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57729.5	57729.5	102 %		02:19:48
1	Al 396.153Radial†	-17.4	-24.4	-17.001 µg/L	-17.001 ppb	02:19:48
1	Ca 317.933Radial†	191.9	-23.5	-20.043 µg/L	-20.043 ppb	02:20:08
1	Fe 238.204 Radial†	17.5	0.5	4.2213 µg/L	4.2213 ppb	02:20:08
1	K 766.490 Radial†	216.3	46.7	30.488 µg/L	30.488 ppb	02:19:48
1	Mg 279.077 IEC†	10.2	-2.8	-25.466 µg/L	-25.466 ppb	02:20:08
1	Na 589.592 Radial†	458.8	-23.2	-7.1181 µg/L	-7.1181 ppb	02:19:48
1	Sr 421.552†	41.6	11.9	0.1101 µg/L	0.1101 ppb	02:19:48
1	Sc 361.383	2012982.2	2012982.2	102.54 %		02:21:10
1	Y 371.029	1391221.6	1391221.6	102.84 %		02:21:10
1	Ag 328.068†	-376.4	34.5	0.2577 µg/L	0.2577 ppb	02:21:16
1	As 188.979†	0.9	1.3	2.4043 µg/L	2.4043 ppb	02:21:36
1	B 249.677†	358.4	-34.6	-1.4130 µg/L	-1.4130 ppb	02:21:36
1	Ba 233.527†	-13.7	3.8	0.0906 µg/L	0.0906 ppb	02:21:36
1	Be 313.107†	-2822.7	102.9	0.0610 µg/L	0.0610 ppb	02:21:16
1	Cd 226.502†	-143.6	1.7	0.0414 µg/L	0.0414 ppb	02:21:36
1	Co 228.616†	13.0	10.8	0.4870 µg/L	0.4870 ppb	02:21:36
1	Cr 267.716†	-60.0	-8.1	-0.1624 µg/L	-0.1624 ppb	02:21:16
1	Cu 324.752†	2581.5	-26.2	-0.1706 µg/L	-0.1706 ppb	02:21:16
1	Mn 257.610†	-191.2	69.6	0.2195 µg/L	0.2195 ppb	02:21:36
1	Mo 202.031†	-1.0	4.3	0.4238 µg/L	0.4238 ppb	02:21:36
1	Ni 231.604†	317.8	-2.4	-0.1193 µg/L	-0.1193 ppb	02:21:36
1	P 214.914†	18.9	3.1	6.0757 µg/L	6.0757 ppb	02:21:36
1	Pb 220.353†	86.2	-6.9	-1.6658 µg/L	-1.6658 ppb	02:21:36
1	S 181.975 Axial†	19.7	0.2	0.9452 µg/L	0.9452 ppb	02:21:36
1	Sb 206.836†	20.5	-2.5	-2.3172 µg/L	-2.3172 ppb	02:21:36
1	Se 196.026†	16.0	-3.7	-5.2215 µg/L	-5.2215 ppb	02:21:36
1	SiO2†	1492.0	63.5	12.534 µg/L	12.534 ppb	02:21:16
1	Si 251.611†	376.6	56.7	4.3078 µg/L	4.3078 ppb	02:21:36
1	Sn 189.927†	2.4	2.0	0.8365 µg/L	0.8365 ppb	02:21:36
1	Ti 334.940†	324.8	141.7	0.3151 µg/L	0.3151 ppb	02:21:16
1	Tl 190.801†	-19.9	3.0	3.8867 µg/L	3.8867 ppb	02:21:36
1	U 409.014†	-83.1	-4.0	-0.3304 µg/L	-0.3304 ppb	02:21:16
1	V 292.402†	-22.0	23.3	0.2303 µg/L	0.2303 ppb	02:21:16
1	Zn 213.857†	530.6	-16.9	-0.3954 µg/L	-0.3954 ppb	02:21:36
2	Sc RADIAL	57608.9	57608.9	102 %		02:20:14
2	Al 396.153Radial†	0.7	-6.7	-4.6630 µg/L	-4.6630 ppb	02:20:14
2	Ca 317.933Radial†	197.8	-17.3	-14.771 µg/L	-14.771 ppb	02:20:34
2	Fe 238.204 Radial†	16.4	-0.5	-4.1892 µg/L	-4.1892 ppb	02:20:34
2	K 766.490 Radial†	195.3	26.6	17.353 µg/L	17.353 ppb	02:20:14
2	Mg 279.077 IEC†	10.5	-2.5	-22.571 µg/L	-22.571 ppb	02:20:34
2	Na 589.592 Radial†	494.6	12.8	3.9451 µg/L	3.9451 ppb	02:20:14
2	Sr 421.552†	24.5	-4.7	-0.0437 µg/L	-0.0437 ppb	02:20:14
2	Sc 361.383	2039746.3	2039746.3	103.90 %		02:21:42
2	Y 371.029	1408964.2	1408964.2	104.16 %		02:21:42
2	Ag 328.068†	-401.8	14.9	0.1084 µg/L	0.1084 ppb	02:21:48
2	As 188.979†	-0.4	0.1	0.2035 µg/L	0.2035 ppb	02:22:08
2	B 249.677†	347.9	-49.3	-2.0073 µg/L	-2.0073 ppb	02:22:08
2	Ba 233.527†	-12.4	5.1	0.1221 µg/L	0.1221 ppb	02:22:08
2	Be 313.107†	-2753.3	205.8	0.1220 µg/L	0.1220 ppb	02:21:48
2	Cd 226.502†	-138.7	8.2	0.2052 µg/L	0.2052 ppb	02:22:08
2	Co 228.616†	10.5	8.2	0.3693 µg/L	0.3693 ppb	02:22:08
2	Cr 267.716†	-54.4	-2.0	-0.0396 µg/L	-0.0396 ppb	02:21:48
2	Cu 324.752†	2596.8	-44.5	-0.2909 µg/L	-0.2909 ppb	02:21:48
2	Mn 257.610†	-173.0	89.5	0.2807 µg/L	0.2807 ppb	02:22:08
2	Mo 202.031†	-1.2	4.2	0.4087 µg/L	0.4087 ppb	02:22:08
2	Ni 231.604†	312.3	-11.8	-0.5894 µg/L	-0.5894 ppb	02:22:08
2	P 214.914†	10.7	-5.1	-9.9877 µg/L	-9.9877 ppb	02:22:08
2	Pb 220.353†	88.9	-5.4	-1.3052 µg/L	-1.3052 ppb	02:22:08

2	S 181.975 Axial†	16.4	-3.2	-13.188 µg/L	-13.188 ppb	02:22:08
2	Sb 206.836†	18.9	-4.3	-3.9396 µg/L	-3.9396 ppb	02:22:08
2	Se 196.026†	15.1	-4.7	-6.6360 µg/L	-6.6360 ppb	02:22:08
2	SiO2†	1508.6	60.3	11.907 µg/L	11.907 ppb	02:21:48
2	Si 251.611†	367.0	42.6	3.2357 µg/L	3.2357 ppb	02:22:08
2	Sn 189.927†	0.9	0.5	0.1899 µg/L	0.1899 ppb	02:22:08
2	Ti 334.940†	306.0	119.5	0.2658 µg/L	0.2658 ppb	02:21:48
2	Tl 190.801†	-25.9	-2.5	-3.3006 µg/L	-3.3006 ppb	02:22:08
2	U 409.014†	-67.0	12.6	1.0522 µg/L	1.0522 ppb	02:21:48
2	V 292.402†	-80.4	-32.6	-0.3143 µg/L	-0.3143 ppb	02:21:48
2	Zn 213.857†	571.4	15.5	0.3686 µg/L	0.3686 ppb	02:22:08
3	Sc RADIAL	57056.8	57056.8	101 %		02:20:39
3	Al 396.153Radial†	10.1	2.7	1.8492 µg/L	1.8492 ppb	02:20:39
3	Ca 317.933Radial†	194.0	-19.2	-16.395 µg/L	-16.395 ppb	02:21:00
3	Fe 238.204 Radial†	18.0	1.2	9.8270 µg/L	9.8270 ppb	02:21:00
3	K 766.490 Radial†	183.0	16.2	10.602 µg/L	10.602 ppb	02:20:39
3	Mg 279.077 IEC†	7.4	-5.5	-49.112 µg/L	-49.112 ppb	02:21:00
3	Na 589.592 Radial†	427.2	-49.2	-15.115 µg/L	-15.115 ppb	02:20:39
3	Sr 421.552†	45.7	16.5	0.1520 µg/L	0.1520 ppb	02:20:39
3	Sc 361.383	2026055.5	2026055.5	103.21 %		02:22:14
3	Y 371.029	1399581.3	1399581.3	103.46 %		02:22:14
3	Ag 328.068†	-331.7	80.2	0.5939 µg/L	0.5939 ppb	02:22:20
3	As 188.979†	3.2	3.6	6.4530 µg/L	6.4530 ppb	02:22:41
3	B 249.677†	343.3	-51.5	-2.1037 µg/L	-2.1037 ppb	02:22:41
3	Ba 233.527†	-10.3	7.1	0.1709 µg/L	0.1709 ppb	02:22:41
3	Be 313.107†	-2694.2	245.2	0.1455 µg/L	0.1455 ppb	02:22:20
3	Cd 226.502†	-134.3	11.6	0.2871 µg/L	0.2871 ppb	02:22:41
3	Co 228.616†	-3.8	-5.6	-0.2528 µg/L	-0.2528 ppb	02:22:41
3	Cr 267.716†	-51.6	0.4	0.0084 µg/L	0.0084 ppb	02:22:20
3	Cu 324.752†	2562.7	-60.6	-0.3944 µg/L	-0.3944 ppb	02:22:20
3	Mn 257.610†	-154.6	106.3	0.3360 µg/L	0.3360 ppb	02:22:41
3	Mo 202.031†	-7.3	-1.7	-0.1657 µg/L	-0.1657 ppb	02:22:41
3	Ni 231.604†	302.2	-19.6	-0.9746 µg/L	-0.9746 ppb	02:22:41
3	P 214.914†	5.7	-9.8	-19.450 µg/L	-19.450 ppb	02:22:41
3	Pb 220.353†	86.4	-7.2	-1.7506 µg/L	-1.7506 ppb	02:22:41
3	S 181.975 Axial†	17.5	-2.0	-8.2198 µg/L	-8.2198 ppb	02:22:41
3	Sb 206.836†	25.0	1.7	1.5508 µg/L	1.5508 ppb	02:22:41
3	Se 196.026†	15.6	-4.2	-5.8230 µg/L	-5.8230 ppb	02:22:41
3	SiO2†	1484.7	47.0	9.2857 µg/L	9.2857 ppb	02:22:20
3	Si 251.611†	397.1	74.1	5.6334 µg/L	5.6334 ppb	02:22:41
3	Sn 189.927†	-1.7	-2.0	-0.8540 µg/L	-0.8540 ppb	02:22:41
3	Ti 334.940†	284.1	100.3	0.2254 µg/L	0.2254 ppb	02:22:20
3	Tl 190.801†	-25.2	-2.0	-2.5688 µg/L	-2.5688 ppb	02:22:41
3	U 409.014†	-12.8	64.7	5.3749 µg/L	5.3749 ppb	02:22:20
3	V 292.402†	-61.2	-14.6	-0.1365 µg/L	-0.1365 ppb	02:22:20
3	Zn 213.857†	539.8	-11.4	-0.2593 µg/L	-0.2593 ppb	02:22:41

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2026261.4	103.22 %		0.682			0.66%
Sc RADIAL	57465.1	102 %		0.6			0.62%
Y 371.029	1399922.4	103.49 %		0.656			0.63%
Ag 328.068†	43.2	0.3200 µg/L		0.24871	0.3200 ppb	0.24871	77.73%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-9.5	-6.6051 µg/L		9.57422	-6.6051 ppb	9.57422	144.95%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.7	3.0203 µg/L		3.16995	3.0203 ppb	3.16995	104.96%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-45.1	-1.8413 µg/L		0.37408	-1.8413 ppb	0.37408	20.32%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	5.3	0.1278 µg/L		0.04049	0.1278 ppb	0.04049	31.68%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	184.7	0.1095 µg/L		0.04361	0.1095 ppb	0.04361	39.83%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-20.0	-17.070 µg/L		2.7003	-17.070 ppb	2.7003	15.82%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	7.2	0.1779 µg/L		0.12511	0.1779 ppb	0.12511	70.33%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.4	0.2012 µg/L		0.39754	0.2012 ppb	0.39754	197.62%

Cr	267.716†	-3.2	-0.0645 µg/L	0.08809	-0.0645 ppb	0.08809	136.54%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-43.8	-0.2853 µg/L	0.11199	-0.2853 ppb	0.11199	39.25%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.4	3.2864 µg/L	7.05469	3.2864 ppb	7.05469	214.66%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	29.8	19.481 µg/L	10.1120	19.481 ppb	10.1120	51.91%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-3.6	-32.383 µg/L	14.5597	-32.383 ppb	14.5597	44.96%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	88.5	0.2787 µg/L	0.05831	0.2787 ppb	0.05831	20.92%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	2.3	0.2223 µg/L	0.33607	0.2223 ppb	0.33607	151.21%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	-19.8	-6.0959 µg/L	9.57098	-6.0959 ppb	9.57098	157.01%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-11.3	-0.5611 µg/L	0.42835	-0.5611 ppb	0.42835	76.34%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-3.9	-7.7874 µg/L	12.90433	-7.7874 ppb	12.90433	165.71%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-6.5	-1.5739 µg/L	0.23649	-1.5739 ppb	0.23649	15.03%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	-1.6	-6.8209 µg/L	7.16966	-6.8209 ppb	7.16966	105.11%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-1.7	-1.5686 µg/L	2.82072	-1.5686 ppb	2.82072	179.82%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-4.2	-5.8935 µg/L	0.70989	-5.8935 ppb	0.70989	12.05%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		57.0	11.242 µg/L	1.7233	11.242 ppb	1.7233	15.33%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	57.8	4.3923 µg/L	1.20111	4.3923 ppb	1.20111	27.35%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	0.1	0.0575 µg/L	0.85300	0.0575 ppb	0.85300	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	7.9	0.0728 µg/L	0.10305	0.0728 ppb	0.10305	141.61%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	120.5	0.2688 µg/L	0.04493	0.2688 ppb	0.04493	16.72%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-0.5	-0.6609 µg/L	3.95533	-0.6609 ppb	3.95533	598.46%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	24.5	2.0322 µg/L	2.97621	2.0322 ppb	2.97621	146.45%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	-8.0	-0.0735 µg/L	0.27772	-0.0735 ppb	0.27772	377.95%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-4.3	-0.0954 µg/L	0.40752	-0.0954 ppb	0.40752	427.38%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 02:52:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57778.9	57778.9	102 %		02:52:53
1	Al 396.153Radial†	7177.2	7010.4	4866.2 µg/L	4866.2 ppb	02:52:53
1	Ca 317.933Radial†	6047.9	5702.3	4870.8 µg/L	4870.8 ppb	02:53:13
1	Fe 238.204 Radial†	658.6	627.4	4959.3 µg/L	4959.3 ppb	02:53:13
1	K 766.490 Radial†	7804.5	7466.2	4876.3 µg/L	4876.3 ppb	02:52:53
1	Mg 279.077 IEC†	585.8	559.9	5008.7 µg/L	5008.7 ppb	02:53:13
1	Na 589.592 Radial†	33121.9	31914.1	9802.2 µg/L	9802.2 ppb	02:52:53
1	Sr 421.552†	53091.4	51883.4	478.63 µg/L	478.63 ppb	02:52:53
1	Sc 361.383	2030998.9	2030998.9	103.46 %		02:54:17
1	Y 371.029	1396044.5	1396044.5	103.20 %		02:54:17
1	Ag 328.068†	67683.5	65823.0	491.16 µg/L	491.16 ppb	02:54:22
1	As 188.979†	296.3	286.8	513.10 µg/L	513.10 ppb	02:54:43
1	B 249.677†	12699.3	11890.8	482.85 µg/L	482.85 ppb	02:54:22
1	Ba 233.527†	21375.0	20677.7	497.30 µg/L	497.30 ppb	02:54:22
1	Be 313.107†	857944.5	832126.4	493.68 µg/L	493.68 ppb	02:54:17
1	Cd 226.502†	20640.1	20092.0	501.05 µg/L	501.05 ppb	02:54:22
1	Co 228.616†	11461.7	11076.7	501.07 µg/L	501.07 ppb	02:54:22
1	Cr 267.716†	25782.3	24971.0	501.86 µg/L	501.86 ppb	02:54:22
1	Cu 324.752†	80287.7	75060.7	490.65 µg/L	490.65 ppb	02:54:22
1	Mn 257.610†	165991.6	160699.9	503.69 µg/L	503.69 ppb	02:54:17
1	Mo 202.031†	5430.4	5254.2	514.71 µg/L	514.71 ppb	02:54:43
1	Ni 231.604†	10718.9	10048.3	500.37 µg/L	500.37 ppb	02:54:22
1	P 214.914†	1351.1	1290.6	2508.6 µg/L	2508.6 ppb	02:54:43
1	Pb 220.353†	2248.7	2082.6	506.47 µg/L	506.47 ppb	02:54:43
1	S 181.975 Axial†	272.2	244.2	1012.5 µg/L	1012.5 ppb	02:54:43
1	Sb 206.836†	592.0	549.8	507.00 µg/L	507.00 ppb	02:54:43
1	Se 196.026†	388.2	355.9	507.59 µg/L	507.59 ppb	02:54:43
1	SiO2†	29272.1	26902.2	5310.2 µg/L	5310.2 ppb	02:54:22
1	Si 251.611†	34157.2	32705.0	2486.3 µg/L	2486.3 ppb	02:54:22
1	Sn 189.927†	1270.8	1227.9	517.88 µg/L	517.88 ppb	02:54:43
1	Ti 334.940†	230923.5	223030.7	493.08 µg/L	493.08 ppb	02:54:17
1	Tl 190.801†	376.5	386.3	507.72 µg/L	507.72 ppb	02:54:43
1	U 409.014†	6085.3	5959.0	494.11 µg/L	494.11 ppb	02:54:22
1	V 292.402†	52388.6	50682.5	500.13 µg/L	500.13 ppb	02:54:22
1	Zn 213.857†	22700.3	21407.2	498.73 µg/L	498.73 ppb	02:54:22
2	Sc RADIAL	58158.4	58158.4	103 %		02:53:19
2	Al 396.153Radial†	7224.7	7010.8	4866.8 µg/L	4866.8 ppb	02:53:19
2	Ca 317.933Radial†	6073.8	5688.9	4859.3 µg/L	4859.3 ppb	02:53:39
2	Fe 238.204 Radial†	662.2	626.7	4953.3 µg/L	4953.3 ppb	02:53:39
2	K 766.490 Radial†	7816.2	7427.7	4851.2 µg/L	4851.2 ppb	02:53:19
2	Mg 279.077 IEC†	574.8	545.5	4879.7 µg/L	4879.7 ppb	02:53:39
2	Na 589.592 Radial†	33298.8	31874.5	9790.0 µg/L	9790.0 ppb	02:53:19
2	Sr 421.552†	53574.0	52013.4	479.83 µg/L	479.83 ppb	02:53:19
2	Sc 361.383	2037555.9	2037555.9	103.79 %		02:54:50
2	Y 371.029	1399097.7	1399097.7	103.43 %		02:54:50
2	Ag 328.068†	67259.2	65203.7	486.54 µg/L	486.54 ppb	02:54:56
2	As 188.979†	290.0	279.8	500.56 µg/L	500.56 ppb	02:55:16
2	B 249.677†	12600.4	11755.9	477.35 µg/L	477.35 ppb	02:54:56
2	Ba 233.527†	21207.5	20449.8	491.82 µg/L	491.82 ppb	02:54:56
2	Be 313.107†	859645.5	831096.6	493.07 µg/L	493.07 ppb	02:54:50
2	Cd 226.502†	20457.8	19852.1	495.07 µg/L	495.07 ppb	02:54:56
2	Co 228.616†	11348.6	10932.1	494.51 µg/L	494.51 ppb	02:54:56
2	Cr 267.716†	25564.2	24680.7	496.03 µg/L	496.03 ppb	02:54:56
2	Cu 324.752†	79737.8	74281.1	485.56 µg/L	485.56 ppb	02:54:56
2	Mn 257.610†	166111.1	160298.7	502.44 µg/L	502.44 ppb	02:54:50
2	Mo 202.031†	5301.7	5113.4	500.92 µg/L	500.92 ppb	02:55:16
2	Ni 231.604†	10626.3	9925.8	494.27 µg/L	494.27 ppb	02:54:56
2	P 214.914†	1334.2	1270.1	2468.4 µg/L	2468.4 ppb	02:55:16
2	Pb 220.353†	2244.0	2071.1	503.65 µg/L	503.65 ppb	02:55:16

2	S 181.975 Axial†	269.2	240.4	996.95 µg/L	996.95 ppb	02:55:16
2	Sb 206.836†	588.7	544.7	502.19 µg/L	502.19 ppb	02:55:16
2	Se 196.026†	385.7	352.3	502.58 µg/L	502.58 ppb	02:55:16
2	SiO2†	29167.5	26710.4	5272.3 µg/L	5272.3 ppb	02:54:56
2	Si 251.611†	34083.7	32527.9	2472.8 µg/L	2472.8 ppb	02:54:56
2	Sn 189.927†	1246.0	1200.1	506.11 µg/L	506.11 ppb	02:55:16
2	Ti 334.940†	231277.2	222653.1	492.25 µg/L	492.25 ppb	02:54:50
2	Tl 190.801†	375.0	383.7	504.32 µg/L	504.32 ppb	02:55:16
2	U 409.014†	6056.2	5912.1	490.22 µg/L	490.22 ppb	02:54:56
2	V 292.402†	51969.3	50115.5	494.48 µg/L	494.48 ppb	02:54:56
2	Zn 213.857†	22511.2	21154.4	492.84 µg/L	492.84 ppb	02:54:56
3	Sc RADIAL	58341.4	58341.4	103 %		02:53:45
3	Al 396.153Radial†	7271.4	7034.0	4884.9 µg/L	4884.9 ppb	02:53:45
3	Ca 317.933Radial†	6070.5	5667.2	4840.8 µg/L	4840.8 ppb	02:54:05
3	Fe 238.204 Radial†	660.3	622.8	4921.1 µg/L	4921.1 ppb	02:54:05
3	K 766.490 Radial†	7852.0	7438.6	4858.3 µg/L	4858.3 ppb	02:53:45
3	Mg 279.077 IEC†	578.9	547.8	4898.1 µg/L	4898.1 ppb	02:54:05
3	Na 589.592 Radial†	33319.4	31793.0	9765.0 µg/L	9765.0 ppb	02:53:45
3	Sr 421.552†	53503.5	51781.9	477.70 µg/L	477.70 ppb	02:53:45
3	Sc 361.383	2039180.7	2039180.7	103.87 %		02:55:23
3	Y 371.029	1402235.0	1402235.0	103.66 %		02:55:23
3	Ag 328.068†	62788.7	60848.3	453.87 µg/L	453.87 ppb	02:55:29
3	As 188.979†	243.4	234.8	420.07 µg/L	420.07 ppb	02:55:49
3	B 249.677†	11678.3	10858.5	440.68 µg/L	440.68 ppb	02:55:29
3	Ba 233.527†	19039.6	18346.5	441.22 µg/L	441.22 ppb	02:55:29
3	Be 313.107†	781655.7	755355.9	448.14 µg/L	448.14 ppb	02:55:23
3	Cd 226.502†	18319.3	17777.6	443.27 µg/L	443.27 ppb	02:55:29
3	Co 228.616†	10001.6	9626.6	435.41 µg/L	435.41 ppb	02:55:29
3	Cr 267.716†	21863.4	21098.3	424.03 µg/L	424.03 ppb	02:55:29
3	Cu 324.752†	70894.7	65706.7	429.58 µg/L	429.58 ppb	02:55:29
3	Mn 257.610†	151475.0	146081.0	457.91 µg/L	457.91 ppb	02:55:23
3	Mo 202.031†	4274.8	4120.7	403.71 µg/L	403.71 ppb	02:55:49
3	Ni 231.604†	9456.9	8791.9	437.82 µg/L	437.82 ppb	02:55:29
3	P 214.914†	1100.7	1044.3	2025.7 µg/L	2025.7 ppb	02:55:49
3	Pb 220.353†	1870.3	1709.6	415.65 µg/L	415.65 ppb	02:55:49
3	S 181.975 Axial†	230.3	202.7	840.78 µg/L	840.78 ppb	02:55:49
3	Sb 206.836†	489.3	448.5	413.15 µg/L	413.15 ppb	02:55:49
3	Se 196.026†	329.1	297.5	425.57 µg/L	425.57 ppb	02:55:49
3	SiO2†	26787.9	24397.1	4815.7 µg/L	4815.7 ppb	02:55:29
3	Si 251.611†	31152.2	29679.6	2256.3 µg/L	2256.3 ppb	02:55:29
3	Sn 189.927†	988.9	951.7	401.36 µg/L	401.36 ppb	02:55:49
3	Ti 334.940†	208613.5	200657.3	443.59 µg/L	443.59 ppb	02:55:23
3	Tl 190.801†	320.9	331.3	435.70 µg/L	435.70 ppb	02:55:49
3	U 409.014†	5241.3	5122.9	424.66 µg/L	424.66 ppb	02:55:29
3	V 292.402†	45594.8	43938.9	433.30 µg/L	433.30 ppb	02:55:29
3	Zn 213.857†	20007.8	18727.1	436.23 µg/L	436.23 ppb	02:55:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2035911.8	103.71 %	0.221			0.21%
Sc RADIAL	58092.9	103 %	0.5			0.49%
Y 371.029	1399125.7	103.43 %	0.229			0.22%
Ag 328.068†	63958.3	477.19 µg/L	20.325	477.19 ppb	20.325	4.26%
QC value within limits for Ag 328.068 Recovery = 95.44%						
Al 396.153Radial†	7018.4	4872.7 µg/L	10.63	4872.7 ppb	10.63	0.22%
QC value within limits for Al 396.153Radial Recovery = 97.45%						
As 188.979†	267.1	477.91 µg/L	50.481	477.91 ppb	50.481	10.56%
QC value within limits for As 188.979 Recovery = 95.58%						
B 249.677†	11501.7	466.96 µg/L	22.928	466.96 ppb	22.928	4.91%
QC value within limits for B 249.677 Recovery = 93.39%						
Ba 233.527†	19824.7	476.78 µg/L	30.920	476.78 ppb	30.920	6.49%
QC value within limits for Ba 233.527 Recovery = 95.36%						
Be 313.107†	806193.0	478.30 µg/L	26.121	478.30 ppb	26.121	5.46%
QC value within limits for Be 313.107 Recovery = 95.66%						
Ca 317.933Radial†	5686.1	4857.0 µg/L	15.11	4857.0 ppb	15.11	0.31%
QC value within limits for Ca 317.933Radial Recovery = 97.14%						
Cd 226.502†	19240.6	479.80 µg/L	31.772	479.80 ppb	31.772	6.62%
QC value within limits for Cd 226.502 Recovery = 95.96%						
Co 228.616†	10545.1	477.00 µg/L	36.168	477.00 ppb	36.168	7.58%

QC value within limits for Co 228.616 Recovery = 95.40%					
Cr 267.716†	23583.3	473.97 µg/L	43.347	473.97 ppb	9.15%
QC value within limits for Cr 267.716 Recovery = 94.79%					
Cu 324.752†	71682.8	468.59 µg/L	33.881	468.59 ppb	7.23%
QC value within limits for Cu 324.752 Recovery = 93.72%					
Fe 238.204 Radial†	625.7	4944.6 µg/L	20.51	4944.6 ppb	0.41%
QC value within limits for Fe 238.204 Radial Recovery = 98.89%					
K 766.490 Radial†	7444.2	4861.9 µg/L	12.95	4861.9 ppb	0.27%
QC value within limits for K 766.490 Radial Recovery = 97.24%					
Mg 279.077 IEC†	551.1	4928.8 µg/L	69.77	4928.8 ppb	1.42%
QC value within limits for Mg 279.077 IEC Recovery = 98.58%					
Mn 257.610†	155693.2	488.02 µg/L	26.077	488.02 ppb	5.34%
QC value within limits for Mn 257.610 Recovery = 97.60%					
Mo 202.031†	4829.4	473.12 µg/L	60.499	473.12 ppb	12.79%
QC value within limits for Mo 202.031 Recovery = 94.62%					
Na 589.592 Radial†	31860.6	9785.7 µg/L	18.96	9785.7 ppb	0.19%
QC value within limits for Na 589.592 Radial Recovery = 97.86%					
Ni 231.604†	9588.7	477.49 µg/L	34.492	477.49 ppb	7.22%
QC value within limits for Ni 231.604 Recovery = 95.50%					
P 214.914†	1201.7	2334.2 µg/L	267.92	2334.2 ppb	11.48%
QC value within limits for P 214.914 Recovery = 93.37%					
Pb 220.353†	1954.4	475.26 µg/L	51.638	475.26 ppb	10.87%
QC value within limits for Pb 220.353 Recovery = 95.05%					
S 181.975 Axial†	229.1	950.08 µg/L	94.971	950.08 ppb	10.00%
QC value within limits for S 181.975 Axial Recovery = 95.01%					
Sb 206.836†	514.3	474.11 µg/L	52.847	474.11 ppb	11.15%
QC value within limits for Sb 206.836 Recovery = 94.82%					
Se 196.026†	335.3	478.58 µg/L	45.974	478.58 ppb	9.61%
QC value within limits for Se 196.026 Recovery = 95.72%					
SiO2†	26003.2	5132.7 µg/L	275.21	5132.7 ppb	5.36%
QC value within limits for SiO2 Recovery = 95.98%					
Si 251.611†	31637.5	2405.1 µg/L	129.08	2405.1 ppb	5.37%
QC value within limits for Si 251.611 Recovery = 96.21%					
Sn 189.927†	1126.6	475.12 µg/L	64.145	475.12 ppb	13.50%
QC value within limits for Sn 189.927 Recovery = 95.02%					
Sr 421.552†	51892.9	478.72 µg/L	1.071	478.72 ppb	0.22%
QC value within limits for Sr 421.552 Recovery = 95.74%					
Ti 334.940†	215447.0	476.30 µg/L	28.336	476.30 ppb	5.95%
QC value within limits for Ti 334.940 Recovery = 95.26%					
Tl 190.801†	367.1	482.58 µg/L	40.632	482.58 ppb	8.42%
QC value within limits for Tl 190.801 Recovery = 96.52%					
U 409.014†	5664.7	469.66 µg/L	39.026	469.66 ppb	8.31%
QC value within limits for U 409.014 Recovery = 93.93%					
V 292.402†	48245.6	475.97 µg/L	37.061	475.97 ppb	7.79%
QC value within limits for V 292.402 Recovery = 95.19%					
Zn 213.857†	20429.6	475.93 µg/L	34.508	475.93 ppb	7.25%
QC value within limits for Zn 213.857 Recovery = 95.19%					
All analyte(s) passed QC.					

Sequence No.: 32

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 02:56:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57797.0	57797.0	102 %		02:56:32
1	Al 396.153Radial†	-18.6	-25.6	-17.793 µg/L	-17.793 ppb	02:56:32
1	Ca 317.933Radial†	197.3	-18.4	-15.728 µg/L	-15.728 ppb	02:56:53
1	Fe 238.204 Radial†	15.7	-1.2	-9.3829 µg/L	-9.3829 ppb	02:56:53
1	K 766.490 Radial†	213.7	43.9	28.650 µg/L	28.650 ppb	02:56:32
1	Mg 279.077 IEC†	12.1	-1.0	-8.6191 µg/L	-8.6191 ppb	02:56:53
1	Na 589.592 Radial†	440.5	-41.6	-12.790 µg/L	-12.790 ppb	02:56:32
1	Sr 421.552†	27.6	-1.8	-0.0168 µg/L	-0.0168 ppb	02:56:32
1	Sc 361.383	2019763.4	2019763.4	102.89 %		02:57:55
1	Y 371.029	1394395.1	1394395.1	103.08 %		02:57:55
1	Ag 328.068†	-428.5	-14.9	-0.1108 µg/L	-0.1108 ppb	02:58:00
1	As 188.979†	3.2	3.6	6.4604 µg/L	6.4604 ppb	02:58:21
1	B 249.677†	345.7	-48.1	-1.9571 µg/L	-1.9571 ppb	02:58:21
1	Ba 233.527†	-7.5	9.8	0.2351 µg/L	0.2351 ppb	02:58:21
1	Be 313.107†	-2773.4	160.1	0.0949 µg/L	0.0949 ppb	02:58:00
1	Cd 226.502†	-133.3	12.2	0.3043 µg/L	0.3043 ppb	02:58:21
1	Co 228.616†	9.1	6.9	0.3106 µg/L	0.3106 ppb	02:58:21
1	Cr 267.716†	-55.1	-3.2	-0.0637 µg/L	-0.0637 ppb	02:58:00
1	Cu 324.752†	2556.7	-58.7	-0.3847 µg/L	-0.3847 ppb	02:58:00
1	Mn 257.610†	-101.9	157.0	0.4906 µg/L	0.4906 ppb	02:58:21
1	Mo 202.031†	3.2	8.5	0.8317 µg/L	0.8317 ppb	02:58:21
1	Ni 231.604†	320.3	-1.0	-0.0526 µg/L	-0.0526 ppb	02:58:21
1	P 214.914†	10.2	-5.5	-10.790 µg/L	-10.790 ppb	02:58:21
1	Pb 220.353†	86.8	-6.6	-1.5953 µg/L	-1.5953 ppb	02:58:21
1	S 181.975 Axial†	18.7	-0.7	-3.1006 µg/L	-3.1006 ppb	02:58:21
1	Sb 206.836†	29.9	6.6	6.0348 µg/L	6.0348 ppb	02:58:21
1	Se 196.026†	20.1	0.2	0.3109 µg/L	0.3109 ppb	02:58:21
1	SiO2†	1515.1	81.0	15.993 µg/L	15.993 ppb	02:58:00
1	Si 251.611†	385.4	64.0	4.8661 µg/L	4.8661 ppb	02:58:21
1	Sn 189.927†	0.7	0.3	0.1230 µg/L	0.1230 ppb	02:58:21
1	Ti 334.940†	395.1	208.9	0.4627 µg/L	0.4627 ppb	02:58:00
1	Tl 190.801†	-24.8	-1.8	-2.2803 µg/L	-2.2803 ppb	02:58:21
1	U 409.014†	-77.7	1.6	0.1342 µg/L	0.1342 ppb	02:58:00
1	V 292.402†	-44.4	1.6	0.0211 µg/L	0.0211 ppb	02:58:00
1	Zn 213.857†	537.8	-11.7	-0.2724 µg/L	-0.2724 ppb	02:58:21
2	Sc RADIAL	57642.5	57642.5	102 %		02:56:58
2	Al 396.153Radial†	-20.1	-27.1	-18.856 µg/L	-18.856 ppb	02:56:58
2	Ca 317.933Radial†	196.6	-18.6	-15.885 µg/L	-15.885 ppb	02:57:19
2	Fe 238.204 Radial†	19.3	2.3	18.316 µg/L	18.316 ppb	02:57:19
2	K 766.490 Radial†	201.7	32.7	21.375 µg/L	21.375 ppb	02:56:58
2	Mg 279.077 IEC†	10.8	-2.2	-19.593 µg/L	-19.593 ppb	02:57:19
2	Na 589.592 Radial†	453.9	-27.3	-8.3799 µg/L	-8.3799 ppb	02:56:58
2	Sr 421.552†	25.2	-4.1	-0.0375 µg/L	-0.0375 ppb	02:56:58
2	Sc 361.383	2027859.8	2027859.8	103.30 %		02:58:27
2	Y 371.029	1399825.6	1399825.6	103.48 %		02:58:27
2	Ag 328.068†	-424.6	-9.5	-0.0690 µg/L	-0.0690 ppb	02:58:33
2	As 188.979†	2.0	2.4	4.3033 µg/L	4.3033 ppb	02:58:53
2	B 249.677†	336.8	-58.1	-2.3763 µg/L	-2.3763 ppb	02:58:53
2	Ba 233.527†	-13.7	3.8	0.0917 µg/L	0.0917 ppb	02:58:53
2	Be 313.107†	-2692.7	249.0	0.1477 µg/L	0.1477 ppb	02:58:33
2	Cd 226.502†	-141.2	5.0	0.1216 µg/L	0.1216 ppb	02:58:53
2	Co 228.616†	9.9	7.6	0.3463 µg/L	0.3463 ppb	02:58:53
2	Cr 267.716†	-51.7	0.3	0.0065 µg/L	0.0065 ppb	02:58:33
2	Cu 324.752†	2533.1	-91.5	-0.5949 µg/L	-0.5949 ppb	02:58:33
2	Mn 257.610†	-127.3	132.8	0.4190 µg/L	0.4190 ppb	02:58:53
2	Mo 202.031†	3.8	9.0	0.8817 µg/L	0.8817 ppb	02:58:53
2	Ni 231.604†	300.9	-21.1	-1.0511 µg/L	-1.0511 ppb	02:58:53
2	P 214.914†	7.1	-8.5	-16.768 µg/L	-16.768 ppb	02:58:53
2	Pb 220.353†	95.0	1.0	0.2385 µg/L	0.2385 ppb	02:58:53

2	S 181.975 Axial†	17.1	-2.4	-9.8306	µg/L	-9.8306	ppb	02:58:53
2	Sb 206.836†	23.8	0.5	0.5058	µg/L	0.5058	ppb	02:58:53
2	Se 196.026†	9.3	-10.3	-14.342	µg/L	-14.342	ppb	02:58:53
2	SiO2†	1508.3	68.6	13.543	µg/L	13.543	ppb	02:58:33
2	Si 251.611†	392.3	69.1	5.2542	µg/L	5.2542	ppb	02:58:53
2	Sn 189.927†	-0.3	-0.7	-0.2923	µg/L	-0.2923	ppb	02:58:53
2	Ti 334.940†	273.6	89.9	0.2001	µg/L	0.2001	ppb	02:58:33
2	Tl 190.801†	-17.5	5.4	7.0375	µg/L	7.0375	ppb	02:58:53
2	U 409.014†	31.4	107.5	8.9278	µg/L	8.9278	ppb	02:58:33
2	V 292.402†	-45.0	1.2	0.0295	µg/L	0.0295	ppb	02:58:33
2	Zn 213.857†	538.1	-13.5	-0.3105	µg/L	-0.3105	ppb	02:58:53
3	Sc RADIAL	57449.4	57449.4	102	%			02:57:24
3	Al 396.153Radial†	-3.1	-10.4	-7.2490	µg/L	-7.2490	ppb	02:57:24
3	Ca 317.933Radial†	193.8	-20.7	-17.700	µg/L	-17.700	ppb	02:57:45
3	Fe 238.204 Radial†	17.5	0.6	4.7494	µg/L	4.7494	ppb	02:57:45
3	K 766.490 Radial†	196.8	28.5	18.638	µg/L	18.638	ppb	02:57:24
3	Mg 279.077 IEC†	11.8	-1.2	-10.946	µg/L	-10.946	ppb	02:57:45
3	Na 589.592 Radial†	497.8	17.4	5.3388	µg/L	5.3388	ppb	02:57:24
3	Sr 421.552†	57.9	28.1	0.2593	µg/L	0.2593	ppb	02:57:24
3	Sc 361.383	2031544.4	2031544.4	103.49	%			02:58:59
3	Y 371.029	1402983.3	1402983.3	103.71	%			02:58:59
3	Ag 328.068†	-467.8	-50.5	-0.3723	µg/L	-0.3723	ppb	02:59:05
3	As 188.979†	-1.6	-1.0	-1.8804	µg/L	-1.8804	ppb	02:59:25
3	B 249.677†	355.7	-40.4	-1.6496	µg/L	-1.6496	ppb	02:59:25
3	Ba 233.527†	-1.9	15.3	0.3669	µg/L	0.3669	ppb	02:59:25
3	Be 313.107†	-2737.7	210.2	0.1246	µg/L	0.1246	ppb	02:59:05
3	Cd 226.502†	-133.7	12.5	0.3107	µg/L	0.3107	ppb	02:59:25
3	Co 228.616†	4.2	2.1	0.0944	µg/L	0.0944	ppb	02:59:25
3	Cr 267.716†	-52.7	-0.6	-0.0118	µg/L	-0.0118	ppb	02:59:05
3	Cu 324.752†	2546.1	-83.4	-0.5436	µg/L	-0.5436	ppb	02:59:05
3	Mn 257.610†	-143.3	117.5	0.3691	µg/L	0.3691	ppb	02:59:25
3	Mo 202.031†	0.8	6.1	0.6010	µg/L	0.6010	ppb	02:59:25
3	Ni 231.604†	314.6	-8.4	-0.4179	µg/L	-0.4179	ppb	02:59:25
3	P 214.914†	16.4	0.5	1.0733	µg/L	1.0733	ppb	02:59:25
3	Pb 220.353†	98.4	4.1	0.9979	µg/L	0.9979	ppb	02:59:25
3	S 181.975 Axial†	24.1	4.4	18.096	µg/L	18.096	ppb	02:59:25
3	Sb 206.836†	19.5	-3.6	-3.3228	µg/L	-3.3228	ppb	02:59:25
3	Se 196.026†	18.7	-1.2	-1.6748	µg/L	-1.6748	ppb	02:59:25
3	SiO2†	1502.9	60.7	11.980	µg/L	11.980	ppb	02:59:05
3	Si 251.611†	387.6	63.9	4.8591	µg/L	4.8591	ppb	02:59:25
3	Sn 189.927†	1.2	0.8	0.3328	µg/L	0.3328	ppb	02:59:25
3	Ti 334.940†	348.7	161.9	0.3587	µg/L	0.3587	ppb	02:59:05
3	Tl 190.801†	-24.4	-1.2	-1.4964	µg/L	-1.4964	ppb	02:59:25
3	U 409.014†	5.3	82.2	6.8272	µg/L	6.8272	ppb	02:59:05
3	V 292.402†	-26.0	19.6	0.2032	µg/L	0.2032	ppb	02:59:05
3	Zn 213.857†	528.6	-23.6	-0.5511	µg/L	-0.5511	ppb	02:59:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2026389.2	103.22 %	0.307			0.30%
Sc RADIAL	57629.6	102 %	0.3			0.30%
Y 371.029	1399068.0	103.42 %	0.321			0.31%
Ag 328.068†	-24.9	-0.1840 µg/L	0.16437	-0.1840 ppb	0.16437	89.33%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-21.0	-14.633 µg/L	6.4165	-14.633 ppb	6.4165	43.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.7	2.9611 µg/L	4.32938	2.9611 ppb	4.32938	146.21%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-48.9	-1.9943 µg/L	0.36477	-1.9943 ppb	0.36477	18.29%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.6	0.2312 µg/L	0.13766	0.2312 ppb	0.13766	59.53%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	206.4	0.1224 µg/L	0.02650	0.1224 ppb	0.02650	21.65%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-19.2	-16.438 µg/L	1.0961	-16.438 ppb	1.0961	6.67%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	9.9	0.2456 µg/L	0.10738	0.2456 ppb	0.10738	43.73%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	5.5	0.2505 µg/L	0.13628	0.2505 ppb	0.13628	54.41%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-1.1	-0.0230 µg/L	0.03639	-0.0230 ppb	0.03639 158.35%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	-77.9	-0.5078 µg/L	0.10960	-0.5078 ppb	0.10960 21.59%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	0.6	4.5608 µg/L	13.85041	4.5608 ppb	13.85041 303.68%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	35.0	22.888 µg/L	5.1747	22.888 ppb	5.1747 22.61%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-1.5	-13.053 µg/L	5.7821	-13.053 ppb	5.7821 44.30%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	135.8	0.4262 µg/L	0.06109	0.4262 ppb	0.06109 14.33%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	7.9	0.7715 µg/L	0.14973	0.7715 ppb	0.14973 19.41%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	-17.2	-5.2772 µg/L	9.45446	-5.2772 ppb	9.45446 179.16%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-10.2	-0.5072 µg/L	0.50520	-0.5072 ppb	0.50520 99.61%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-4.5	-8.8283 µg/L	9.08113	-8.8283 ppb	9.08113 102.86%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-0.5	-0.1196 µg/L	1.33315	-0.1196 ppb	1.33315 >999.9%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	0.4	1.7217 µg/L	14.57468	1.7217 ppb	14.57468 846.51%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	1.2	1.0726 µg/L	4.70446	1.0726 ppb	4.70446 438.59%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	-3.7	-5.2353 µg/L	7.94886	-5.2353 ppb	7.94886 151.83%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	70.1	13.839 µg/L	2.0231	13.839 ppb	2.0231 14.62%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	65.7	4.9931 µg/L	0.22609	4.9931 ppb	0.22609 4.53%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	0.1	0.0545 µg/L	0.31812	0.0545 ppb	0.31812 583.56%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	7.4	0.0683 µg/L	0.16570	0.0683 ppb	0.16570 242.62%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	153.6	0.3405 µg/L	0.13222	0.3405 ppb	0.13222 38.83%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	0.8	1.0869 µg/L	5.16822	1.0869 ppb	5.16822 475.49%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	63.7	5.2964 µg/L	4.59230	5.2964 ppb	4.59230 86.71%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	7.5	0.0846 µg/L	0.10279	0.0846 ppb	0.10279 121.53%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-16.3	-0.3780 µg/L	0.15110	-0.3780 ppb	0.15110 39.97%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/20/2010 03:01:04

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\022010.SIF

Batch ID:

Results Data Set: 021910A

Results Library: c:\pe\optimal\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 227

Sample ID: 1202032610|948764|1

Date Collected: 2/20/2010 03:01:06

Analyst: JWJ

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: 1202032610|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56156.7	56156.7	99.4 %		03:01:44
1	Al 396.153Radial†	24.3	17.1	11.846 µg/L	11.846 ppb	03:01:44
1	Ca 317.933Radial†	222.9	13.0	11.121 µg/L	11.121 ppb	03:02:05
1	Fe 238.204 Radial†	23.3	6.8	53.882 µg/L	53.882 ppb	03:02:05
1	K 766.490 Radial†	226.6	63.0	41.134 µg/L	41.134 ppb	03:01:44
1	Mg 279.077 IEC†	8.9	-3.8	-34.164 µg/L	-34.164 ppb	03:02:05
1	Na 589.592 Radial†	438.0	-31.6	-9.6981 µg/L	-9.6981 ppb	03:01:44
1	Sr 421.552†	63.1	34.7	0.3203 µg/L	0.3203 ppb	03:01:44
1	Sc 361.383	1964058.6	1964058.6	100.05 %		03:03:06
1	Y 371.029	1353992.1	1353992.1	100.09 %		03:03:06
1	Ag 328.068†	-420.0	-18.2	-0.1265 µg/L	-0.1265 ppb	03:03:12
1	As 188.979†	-6.1	-5.7	-10.190 µg/L	-10.190 ppb	03:03:32
1	B 249.677†	356.3	-28.0	-1.1640 µg/L	-1.1640 ppb	03:03:32
1	Ba 233.527†	3.9	20.9	0.5040 µg/L	0.5040 ppb	03:03:32
1	Be 313.107†	-2524.6	332.3	0.1969 µg/L	0.1969 ppb	03:03:12
1	Cd 226.502†	-127.8	14.0	0.3427 µg/L	0.3427 ppb	03:03:32
1	Co 228.616†	6.2	4.2	0.1904 µg/L	0.1904 ppb	03:03:32
1	Cr 267.716†	114.3	164.6	3.3075 µg/L	3.3075 ppb	03:03:12
1	Cu 324.752†	2692.3	147.3	0.9691 µg/L	0.9691 ppb	03:03:12
1	Mn 257.610†	307.2	563.1	1.7719 µg/L	1.7719 ppb	03:03:32
1	Mo 202.031†	3.0	8.3	0.8155 µg/L	0.8155 ppb	03:03:32
1	Ni 231.604†	321.3	8.8	0.4375 µg/L	0.4375 ppb	03:03:32
1	P 214.914†	13.7	-1.7	-3.4108 µg/L	-3.4108 ppb	03:03:32
1	Pb 220.353†	91.8	0.8	0.1889 µg/L	0.1889 ppb	03:03:32
1	S 181.975 Axial†	13.9	-5.1	-20.944 µg/L	-20.944 ppb	03:03:32
1	Sb 206.836†	19.3	-3.2	-2.9739 µg/L	-2.9739 ppb	03:03:32
1	Se 196.026†	16.0	-3.4	-4.5448 µg/L	-4.5448 ppb	03:03:32
1	SiO2†	1746.5	354.1	69.893 µg/L	69.893 ppb	03:03:12
1	Si 251.611†	754.4	443.4	33.708 µg/L	33.708 ppb	03:03:32
1	Sn 189.927†	4.6	4.3	1.7888 µg/L	1.7888 ppb	03:03:32
1	Ti 334.940†	631.9	456.6	1.0129 µg/L	1.0129 ppb	03:03:12
1	Tl 190.801†	-24.5	-2.1	-2.7127 µg/L	-2.7127 ppb	03:03:32
1	U 409.014†	-22.6	54.5	4.5207 µg/L	4.5207 ppb	03:03:12
1	V 292.402†	33.2	77.9	0.7843 µg/L	0.7843 ppb	03:03:12
1	Zn 213.857†	676.4	141.7	3.3207 µg/L	3.3207 ppb	03:03:32
2	Sc RADIAL	55918.0	55918.0	99.0 %		03:02:10
2	Al 396.153Radial†	19.1	12.0	8.3237 µg/L	8.3237 ppb	03:02:10
2	Ca 317.933Radial†	225.1	16.1	13.786 µg/L	13.786 ppb	03:02:30
2	Fe 238.204 Radial†	24.0	7.6	60.201 µg/L	60.201 ppb	03:02:30
2	K 766.490 Radial†	214.8	52.0	33.975 µg/L	33.975 ppb	03:02:10
2	Mg 279.077 IEC†	7.5	-5.2	-46.586 µg/L	-46.586 ppb	03:02:30
2	Na 589.592 Radial†	469.3	1.9	0.5866 µg/L	0.5866 ppb	03:02:10
2	Sr 421.552†	80.2	52.2	0.4813 µg/L	0.4813 ppb	03:02:10
2	Sc 361.383	1977036.3	1977036.3	100.71 %		03:03:38
2	Y 371.029	1362497.9	1362497.9	100.72 %		03:03:38
2	Ag 328.068†	-438.4	-33.7	-0.2479 µg/L	-0.2479 ppb	03:03:44
2	As 188.979†	-4.3	-3.9	-6.8984 µg/L	-6.8984 ppb	03:04:05

2	B 249.677†	357.1	-29.5	-1.2290 µg/L	-1.2290 ppb	03:04:05
2	Ba 233.527†	3.4	20.5	0.4913 µg/L	0.4913 ppb	03:04:05
2	Be 313.107†	-2484.1	389.0	0.2306 µg/L	0.2306 ppb	03:03:44
2	Cd 226.502†	-141.5	1.2	0.0221 µg/L	0.0221 ppb	03:04:05
2	Co 228.616†	6.7	4.7	0.2132 µg/L	0.2132 ppb	03:04:05
2	Cr 267.716†	120.3	169.8	3.4109 µg/L	3.4109 ppb	03:03:44
2	Cu 324.752†	2689.4	126.8	0.8359 µg/L	0.8359 ppb	03:03:44
2	Mn 257.610†	263.8	517.9	1.6318 µg/L	1.6318 ppb	03:04:05
2	Mo 202.031†	-3.4	2.0	0.1969 µg/L	0.1969 ppb	03:04:05
2	Ni 231.604†	313.5	-1.1	-0.0543 µg/L	-0.0543 ppb	03:04:05
2	P 214.914†	14.2	-1.2	-2.4729 µg/L	-2.4729 ppb	03:04:05
2	Pb 220.353†	84.2	-7.4	-1.7919 µg/L	-1.7919 ppb	03:04:05
2	S 181.975 Axial†	23.6	4.5	18.841 µg/L	18.841 ppb	03:04:05
2	Sb 206.836†	21.2	-1.5	-1.3974 µg/L	-1.3974 ppb	03:04:05
2	Se 196.026†	19.7	0.2	0.5207 µg/L	0.5207 ppb	03:04:05
2	SiO2†	1788.3	384.1	75.815 µg/L	75.815 ppb	03:03:44
2	Si 251.611†	765.2	449.2	34.149 µg/L	34.149 ppb	03:04:05
2	Sn 189.927†	6.8	6.4	2.6660 µg/L	2.6660 ppb	03:04:05
2	Ti 334.940†	585.4	406.2	0.9026 µg/L	0.9026 ppb	03:03:44
2	Tl 190.801†	-20.2	2.3	3.0030 µg/L	3.0030 ppb	03:04:05
2	U 409.014†	-75.4	2.3	0.1783 µg/L	0.1783 ppb	03:03:44
2	V 292.402†	-73.6	-28.3	-0.2594 µg/L	-0.2594 ppb	03:03:44
2	Zn 213.857†	682.0	142.8	3.3492 µg/L	3.3492 ppb	03:04:05
3	Sc RADIAL	56062.0	56062.0	99.2 %		03:02:36
3	Al 396.153Radial†	1.8	-5.5	-3.8550 µg/L	-3.8550 ppb	03:02:36
3	Ca 317.933Radial†	221.0	11.4	9.7540 µg/L	9.7540 ppb	03:02:56
3	Fe 238.204 Radial†	24.2	7.8	61.780 µg/L	61.780 ppb	03:02:56
3	K 766.490 Radial†	234.1	70.9	46.293 µg/L	46.293 ppb	03:02:36
3	Mg 279.077 IEC†	10.4	-2.3	-20.922 µg/L	-20.922 ppb	03:02:56
3	Na 589.592 Radial†	445.4	-23.4	-7.1827 µg/L	-7.1827 ppb	03:02:36
3	Sr 421.552†	114.2	86.3	0.7964 µg/L	0.7964 ppb	03:02:36
3	Sc 361.383	1965675.5	1965675.5	100.13 %		03:04:11
3	Y 371.029	1354197.3	1354197.3	100.11 %		03:04:11
3	Ag 328.068†	-442.7	-40.6	-0.2949 µg/L	-0.2949 ppb	03:04:16
3	As 188.979†	-0.1	0.4	0.6688 µg/L	0.6688 ppb	03:04:37
3	B 249.677†	355.3	-29.3	-1.2195 µg/L	-1.2195 ppb	03:04:37
3	Ba 233.527†	1.1	18.2	0.4378 µg/L	0.4378 ppb	03:04:37
3	Be 313.107†	-2477.1	381.8	0.2263 µg/L	0.2263 ppb	03:04:16
3	Cd 226.502†	-132.0	9.8	0.2381 µg/L	0.2381 ppb	03:04:37
3	Co 228.616†	9.3	7.4	0.3318 µg/L	0.3318 ppb	03:04:37
3	Cr 267.716†	118.3	168.5	3.3844 µg/L	3.3844 ppb	03:04:16
3	Cu 324.752†	2680.0	132.8	0.8755 µg/L	0.8755 ppb	03:04:16
3	Mn 257.610†	244.2	499.9	1.5746 µg/L	1.5746 ppb	03:04:37
3	Mo 202.031†	-2.3	3.1	0.3048 µg/L	0.3048 ppb	03:04:37
3	Ni 231.604†	319.1	6.3	0.3144 µg/L	0.3144 ppb	03:04:37
3	P 214.914†	12.7	-2.7	-5.4212 µg/L	-5.4212 ppb	03:04:37
3	Pb 220.353†	90.1	-1.0	-0.2484 µg/L	-0.2484 ppb	03:04:37
3	S 181.975 Axial†	20.2	1.2	4.9912 µg/L	4.9912 ppb	03:04:37
3	Sb 206.836†	26.0	3.5	3.1847 µg/L	3.1847 ppb	03:04:37
3	Se 196.026†	19.5	0.1	0.3949 µg/L	0.3949 ppb	03:04:37
3	SiO2†	1805.6	411.6	81.253 µg/L	81.253 ppb	03:04:16
3	Si 251.611†	767.6	455.9	34.662 µg/L	34.662 ppb	03:04:37
3	Sn 189.927†	9.5	9.1	3.8366 µg/L	3.8366 ppb	03:04:37
3	Ti 334.940†	584.6	408.8	0.9061 µg/L	0.9061 ppb	03:04:16
3	Tl 190.801†	-24.1	-1.6	-2.1172 µg/L	-2.1172 ppb	03:04:37
3	U 409.014†	-48.7	28.4	2.3517 µg/L	2.3517 ppb	03:04:16
3	V 292.402†	-18.6	26.2	0.2754 µg/L	0.2754 ppb	03:04:16
3	Zn 213.857†	661.3	126.0	2.9519 µg/L	2.9519 ppb	03:04:37

Mean Data: 1202032610|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1968923.5	100.30 %	0.360			0.36%
Sc RADIAL	56045.6	99.2 %	0.21			0.21%
Y 371.029	1356895.8	100.31 %	0.359			0.36%
Ag 328.068†	-30.8	-0.2231 µg/L	0.08687	-0.2231 ppb	0.08687	38.94%
Al 396.153Radial†	7.8	5.4383 µg/L	8.23872	5.4383 ppb	8.23872	151.49%
As 188.979†	-3.1	-5.4732 µg/L	5.56784	-5.4732 ppb	5.56784	101.73%
B 249.677†	-28.9	-1.2041 µg/L	0.03512	-1.2041 ppb	0.03512	2.92%
Ba 233.527†	19.9	0.4777 µg/L	0.03515	0.4777 ppb	0.03515	7.36%

Be 313.107†	367.7	0.2179 µg/L	0.01835	0.2179 ppb	0.01835	8.42%
Ca 317.933Radial†	13.5	11.554 µg/L	2.0507	11.554 ppb	2.0507	17.75%
Cd 226.502†	8.3	0.2010 µg/L	0.16351	0.2010 ppb	0.16351	81.37%
Co 228.616†	5.4	0.2451 µg/L	0.07591	0.2451 ppb	0.07591	30.97%
Cr 267.716†	167.7	3.3676 µg/L	0.05372	3.3676 ppb	0.05372	1.60%
Cu 324.752†	135.6	0.8935 µg/L	0.06839	0.8935 ppb	0.06839	7.65%
Fe 238.204 Radial†	7.4	58.621 µg/L	4.1792	58.621 ppb	4.1792	7.13%
K 766.490 Radial†	62.0	40.467 µg/L	6.1861	40.467 ppb	6.1861	15.29%
Mg 279.077 IEC†	-3.8	-33.890 µg/L	12.8342	-33.890 ppb	12.8342	37.87%
Mn 257.610†	527.0	1.6594 µg/L	0.10152	1.6594 ppb	0.10152	6.12%
Mo 202.031†	4.5	0.4391 µg/L	0.33039	0.4391 ppb	0.33039	75.25%
Na 589.592 Radial†	-17.7	-5.4314 µg/L	5.36134	-5.4314 ppb	5.36134	98.71%
Ni 231.604†	4.7	0.2325 µg/L	0.25588	0.2325 ppb	0.25588	110.04%
P 214.914†	-1.9	-3.7683 µg/L	1.50633	-3.7683 ppb	1.50633	39.97%
Pb 220.353†	-2.5	-0.6171 µg/L	1.04061	-0.6171 ppb	1.04061	168.62%
S 181.975 Axial†	0.2	0.9629 µg/L	20.19632	0.9629 ppb	20.19632	>999.9%
Sb 206.836†	-0.4	-0.3955 µg/L	3.19919	-0.3955 ppb	3.19919	808.83%
Se 196.026†	-1.0	-1.2097 µg/L	2.88893	-1.2097 ppb	2.88893	238.81%
SiO2†	383.3	75.653 µg/L	5.6817	75.653 ppb	5.6817	7.51%
Si 251.611†	449.5	34.173 µg/L	0.4775	34.173 ppb	0.4775	1.40%
Sn 189.927†	6.6	2.7638 µg/L	1.02743	2.7638 ppb	1.02743	37.17%
Sr 421.552†	57.7	0.5327 µg/L	0.24217	0.5327 ppb	0.24217	45.46%
Ti 334.940†	423.9	0.9405 µg/L	0.06272	0.9405 ppb	0.06272	6.67%
Tl 190.801†	-0.5	-0.6090 µg/L	3.14219	-0.6090 ppb	3.14219	515.99%
U 409.014†	28.4	2.3502 µg/L	2.17122	2.3502 ppb	2.17122	92.38%
V 292.402†	25.3	0.2668 µg/L	0.52190	0.2668 ppb	0.52190	195.64%
Zn 213.857†	136.8	3.2072 µg/L	0.22161	3.2072 ppb	0.22161	6.91%

Sequence No.: 2

Sample ID: 1202032615|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 228

Date Collected: 2/20/2010 03:04:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032615|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57187.6	57187.6	101 %		03:05:25
1	Al 396.153Radial†	131625.2	130025.0	90441 µg/L	90441 ppb	03:05:20
1	Ca 317.933Radial†	122663.1	120967.5	103330 µg/L	103330 ppb	03:05:20
1	Fe 238.204 Radial†	25104.4	24784.1	195490 µg/L	195490 ppb	03:05:25
1	K 766.490 Radial†	63874.1	62936.2	41105 µg/L	41105 ppb	03:05:20
1	Mg 279.077 IEC†	4556.3	4488.3	39921 µg/L	39921 ppb	03:05:25
1	Na 589.592 Radial†	34858.0	33964.0	10432 µg/L	10432 ppb	03:05:20
1	Sr 421.552†	256056.6	252929.3	2333.3 µg/L	2333.3 ppb	03:05:20
1	Sc 361.383	1971434.5	1971434.5	100.42 %		03:06:00
1	Y 371.029	1386605.5	1386605.5	102.50 %		03:06:00
1	Ag 328.068†	39830.0	40063.7	317.38 µg/L	317.38 ppb	03:06:06
1	As 188.979†	639.1	636.8	1146.3 µg/L	1146.3 ppb	03:06:26
1	B 249.677†	39578.2	39027.1	1492.7 µg/L	1492.7 ppb	03:06:06
1	Ba 233.527†	83081.8	82748.5	1988.8 µg/L	1988.8 ppb	03:06:06
1	Be 313.107†	1415324.4	1412210.9	836.03 µg/L	836.03 ppb	03:06:00
1	Cd 226.502†	25790.0	25822.9	623.39 µg/L	623.39 ppb	03:06:06
1	Co 228.616†	21991.8	21897.1	980.52 µg/L	980.52 ppb	03:06:06
1	Cr 267.716†	127672.3	127184.3	2555.3 µg/L	2555.3 ppb	03:06:06
1	Cu 324.752†	290473.2	286704.4	1898.6 µg/L	1898.6 ppb	03:06:06
1	Mn 257.610†	1962464.8	1954444.0	6144.8 µg/L	6144.8 ppb	03:06:00
1	Mo 202.031†	5607.3	5589.0	554.74 µg/L	554.74 ppb	03:06:26
1	Ni 231.604†	29128.0	28692.8	1431.7 µg/L	1431.7 ppb	03:06:06
1	P 214.914†	4466.3	4432.2	8461.8 µg/L	8461.8 ppb	03:06:26
1	Pb 220.353†	3733.8	3627.1	877.79 µg/L	877.79 ppb	03:06:26
1	S 181.975 Axial†	1000.4	977.3	4052.7 µg/L	4052.7 ppb	03:06:26
1	Sb 206.836†	1648.2	1618.7	1457.1 µg/L	1457.1 ppb	03:06:26
1	Se 196.026†	2184.1	2155.6	3497.2 µg/L	3497.2 ppb	03:06:26
1	SiO2†	329859.4	327076.6	64561 µg/L	64561 ppb	03:06:06
1	Si 251.611†	405135.4	403116.1	30646 µg/L	30646 ppb	03:06:00
1	Sn 189.927†	2748.6	2736.6	1137.4 µg/L	1137.4 ppb	03:06:26
1	Ti 334.940†	2533034.4	2522176.1	5578.1 µg/L	5578.1 ppb	03:06:00
1	Tl 190.801†	936.7	955.1	1335.6 µg/L	1335.6 ppb	03:06:26
1	U 409.014†	-1315.3	-1232.6	-135.89 µg/L	-135.89 ppb	03:06:06
1	V 292.402†	129459.0	128957.8	1289.7 µg/L	1289.7 ppb	03:06:06
1	Zn 213.857†	262341.6	260700.7	6095.5 µg/L	6095.5 ppb	03:06:06
2	Sc RADIAL	57119.8	57119.8	101 %		03:05:36
2	Al 396.153Radial†	131997.4	130547.7	90805 µg/L	90805 ppb	03:05:31
2	Ca 317.933Radial†	122916.4	121362.0	103660 µg/L	103660 ppb	03:05:31
2	Fe 238.204 Radial†	25160.7	24869.2	196160 µg/L	196160 ppb	03:05:36
2	K 766.490 Radial†	63988.6	63124.4	41228 µg/L	41228 ppb	03:05:31
2	Mg 279.077 IEC†	4581.3	4518.5	40189 µg/L	40189 ppb	03:05:36
2	Na 589.592 Radial†	34934.5	34080.6	10468 µg/L	10468 ppb	03:05:31
2	Sr 421.552†	256608.4	253775.6	2341.1 µg/L	2341.1 ppb	03:05:31
2	Sc 361.383	1981158.8	1981158.8	100.92 %		03:06:34
2	Y 371.029	1392697.8	1392697.8	102.95 %		03:06:34
2	Ag 328.068†	40172.1	40207.9	318.54 µg/L	318.54 ppb	03:06:40
2	As 188.979†	637.0	631.6	1137.0 µg/L	1137.0 ppb	03:07:00
2	B 249.677†	39966.9	39218.8	1500.2 µg/L	1500.2 ppb	03:06:40
2	Ba 233.527†	83961.2	83213.8	2000.0 µg/L	2000.0 ppb	03:06:40
2	Be 313.107†	1408650.6	1398680.2	828.02 µg/L	828.02 ppb	03:06:34
2	Cd 226.502†	26042.1	25946.7	626.41 µg/L	626.41 ppb	03:06:40
2	Co 228.616†	22241.2	22036.8	986.96 µg/L	986.96 ppb	03:06:40
2	Cr 267.716†	128939.1	127815.5	2568.0 µg/L	2568.0 ppb	03:06:40
2	Cu 324.752†	293001.0	287789.4	1905.8 µg/L	1905.8 ppb	03:06:40
2	Mn 257.610†	1953466.4	1935935.6	6086.9 µg/L	6086.9 ppb	03:06:34
2	Mo 202.031†	5626.0	5580.1	553.90 µg/L	553.90 ppb	03:07:00
2	Ni 231.604†	29383.2	28803.3	1437.2 µg/L	1437.2 ppb	03:06:40
2	P 214.914†	4498.2	4441.9	8479.9 µg/L	8479.9 ppb	03:07:00
2	Pb 220.353†	3768.2	3642.9	881.61 µg/L	881.61 ppb	03:07:00

2	S 181.975 Axial†	1011.7	983.6	4078.9 µg/L	4078.9 ppb	03:07:00
2	Sb 206.836†	1649.1	1611.6	1450.3 µg/L	1450.3 ppb	03:07:00
2	Se 196.026†	2177.4	2138.3	3474.3 µg/L	3474.3 ppb	03:07:00
2	SiO2†	333060.4	328636.2	64869 µg/L	64869 ppb	03:06:40
2	Si 251.611†	403639.0	399653.1	30382 µg/L	30382 ppb	03:06:34
2	Sn 189.927†	2751.9	2726.5	1133.1 µg/L	1133.1 ppb	03:07:00
2	Ti 334.940†	2520940.4	2497811.6	5524.2 µg/L	5524.2 ppb	03:06:34
2	Tl 190.801†	938.5	952.4	1331.3 µg/L	1331.3 ppb	03:07:00
2	U 409.014†	-1369.3	-1279.8	-139.92 µg/L	-139.92 ppb	03:06:40
2	V 292.402†	130885.7	129738.7	1297.4 µg/L	1297.4 ppb	03:06:40
2	Zn 213.857†	265168.2	262219.4	6131.1 µg/L	6131.1 ppb	03:06:40
3	Sc RADIAL	56905.9	56905.9	101 %		03:05:47
3	Al 396.153Radial†	130845.4	129894.7	90350 µg/L	90350 ppb	03:05:42
3	Ca 317.933Radial†	121390.8	120304.3	102760 µg/L	102760 ppb	03:05:42
3	Fe 238.204 Radial†	25144.7	24946.8	196770 µg/L	196770 ppb	03:05:47
3	K 766.490 Radial†	63326.4	62704.9	40954 µg/L	40954 ppb	03:05:42
3	Mg 279.077 IEC†	4577.2	4531.4	40304 µg/L	40304 ppb	03:05:47
3	Na 589.592 Radial†	34657.0	33934.9	10423 µg/L	10423 ppb	03:05:42
3	Sr 421.552†	253842.3	251983.3	2324.6 µg/L	2324.6 ppb	03:05:42
3	Sc 361.383	1975185.6	1975185.6	100.61 %		03:07:08
3	Y 371.029	1388866.8	1388866.8	102.67 %		03:07:08
3	Ag 328.068†	40280.8	40436.4	320.34 µg/L	320.34 ppb	03:07:13
3	As 188.979†	629.4	626.0	1127.0 µg/L	1127.0 ppb	03:07:34
3	B 249.677†	40076.2	39447.2	1509.2 µg/L	1509.2 ppb	03:07:13
3	Ba 233.527†	84270.8	83773.1	2013.5 µg/L	2013.5 ppb	03:07:13
3	Be 313.107†	1411322.6	1405557.0	832.09 µg/L	832.09 ppb	03:07:08
3	Cd 226.502†	26119.4	26101.5	630.21 µg/L	630.21 ppb	03:07:13
3	Co 228.616†	22315.9	22177.6	993.27 µg/L	993.27 ppb	03:07:13
3	Cr 267.716†	129249.3	128510.1	2582.0 µg/L	2582.0 ppb	03:07:13
3	Cu 324.752†	293854.8	289516.0	1917.2 µg/L	1917.2 ppb	03:07:13
3	Mn 257.610†	1953241.4	1941565.7	6104.6 µg/L	6104.6 ppb	03:07:08
3	Mo 202.031†	5593.7	5564.9	552.42 µg/L	552.42 ppb	03:07:34
3	Ni 231.604†	29492.4	28999.9	1447.0 µg/L	1447.0 ppb	03:07:13
3	P 214.914†	4464.0	4421.4	8437.4 µg/L	8437.4 ppb	03:07:34
3	Pb 220.353†	3730.4	3616.7	875.16 µg/L	875.16 ppb	03:07:34
3	S 181.975 Axial†	997.5	972.4	4032.7 µg/L	4032.7 ppb	03:07:34
3	Sb 206.836†	1637.6	1605.1	1444.3 µg/L	1444.3 ppb	03:07:34
3	Se 196.026†	2148.2	2115.7	3444.5 µg/L	3444.5 ppb	03:07:34
3	SiO2†	333898.9	330467.7	65230 µg/L	65230 ppb	03:07:13
3	Si 251.611†	404461.4	401680.0	30536 µg/L	30536 ppb	03:07:08
3	Sn 189.927†	2732.1	2715.0	1128.2 µg/L	1128.2 ppb	03:07:34
3	Ti 334.940†	2527363.3	2511749.4	5555.0 µg/L	5555.0 ppb	03:07:08
3	Tl 190.801†	935.0	951.7	1330.9 µg/L	1330.9 ppb	03:07:34
3	U 409.014†	-1254.7	-1170.0	-130.83 µg/L	-130.83 ppb	03:07:13
3	V 292.402†	131453.2	130695.0	1306.9 µg/L	1306.9 ppb	03:07:13
3	Zn 213.857†	265841.2	263682.9	6165.3 µg/L	6165.3 ppb	03:07:13

Mean Data: 1202032615|948764|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1975926.3	100.65 %		0.250				0.25%
Sc RADIAL	57071.1	101 %		0.3				0.26%
Y 371.029	1389390.0	102.71 %		0.228				0.22%
Ag 328.068†	40236.0	318.75 µg/L		1.488	318.75 ppb		1.488	0.47%
Al 396.153Radial†	130155.8	90532 µg/L		240.4	90532 ppb		240.4	0.27%
As 188.979†	631.5	1136.8 µg/L		9.64	1136.8 ppb		9.64	0.85%
B 249.677†	39231.0	1500.7 µg/L		8.26	1500.7 ppb		8.26	0.55%
Ba 233.527†	83245.1	2000.8 µg/L		12.33	2000.8 ppb		12.33	0.62%
Be 313.107†	1405482.7	832.05 µg/L		4.005	832.05 ppb		4.005	0.48%
Ca 317.933Radial†	120877.9	103250 µg/L		456.6	103250 ppb		456.6	0.44%
Cd 226.502†	25957.0	626.67 µg/L		3.417	626.67 ppb		3.417	0.55%
Co 228.616†	22037.2	986.92 µg/L		6.374	986.92 ppb		6.374	0.65%
Cr 267.716†	127836.6	2568.4 µg/L		13.33	2568.4 ppb		13.33	0.52%
Cu 324.752†	288003.3	1907.2 µg/L		9.34	1907.2 ppb		9.34	0.49%
Fe 238.204 Radial†	24866.7	196140 µg/L		642.1	196140 ppb		642.1	0.33%
K 766.490 Radial†	62921.8	41095 µg/L		137.2	41095 ppb		137.2	0.33%
Mg 279.077 IEC†	4512.7	40138 µg/L		196.9	40138 ppb		196.9	0.49%
Mn 257.610†	1943981.8	6112.1 µg/L		29.66	6112.1 ppb		29.66	0.49%
Mo 202.031†	5578.0	553.69 µg/L		1.173	553.69 ppb		1.173	0.21%
Na 589.592 Radial†	33993.2	10441 µg/L		23.7	10441 ppb		23.7	0.23%

Ni 231.604†	28832.0	1438.6 µg/L	7.75	1438.6 ppb	7.75	0.54%
P 214.914†	4431.8	8459.7 µg/L	21.31	8459.7 ppb	21.31	0.25%
Pb 220.353†	3628.9	878.19 µg/L	3.245	878.19 ppb	3.245	0.37%
S 181.975 Axial†	977.8	4054.8 µg/L	23.18	4054.8 ppb	23.18	0.57%
Sb 206.836†	1611.8	1450.5 µg/L	6.40	1450.5 ppb	6.40	0.44%
Se 196.026†	2136.5	3472.0 µg/L	26.40	3472.0 ppb	26.40	0.76%
SiO2†	328726.8	64886 µg/L	335.0	64886 ppb	335.0	0.52%
Si 251.611†	401483.1	30522 µg/L	132.3	30522 ppb	132.3	0.43%
Sn 189.927†	2726.1	1132.9 µg/L	4.60	1132.9 ppb	4.60	0.41%
Sr 421.552†	252896.1	2333.0 µg/L	8.27	2333.0 ppb	8.27	0.35%
Ti 334.940†	2510579.0	5552.4 µg/L	27.05	5552.4 ppb	27.05	0.49%
Tl 190.801†	953.1	1332.6 µg/L	2.59	1332.6 ppb	2.59	0.19%
U 409.014†	-1227.5	-135.54 µg/L	4.556	-135.54 ppb	4.556	3.36%
V 292.402†	129797.1	1298.0 µg/L	8.58	1298.0 ppb	8.58	0.66%
Zn 213.857†	262201.0	6130.6 µg/L	34.89	6130.6 ppb	34.89	0.57%

Sequence No.: 3

Sample ID: 245979001|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 229

Date Collected: 2/20/2010 03:07:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979001|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57199.5	57199.5	101 %			03:08:16
1	Al 396.153Radial†	61475.0	60711.1	42234 µg/L		42234 ppb	03:08:16
1	Ca 317.933Radial†	19025.5	18580.1	15871 µg/L		15871 ppb	03:08:16
1	Fe 238.204 Radial†	15765.8	15555.2	122680 µg/L		122680 ppb	03:08:16
1	K 766.490 Radial†	10529.8	10235.2	6684.8 µg/L		6684.8 ppb	03:08:16
1	Mg 279.077 IEC†	975.7	950.8	8368.2 µg/L		8368.2 ppb	03:08:37
1	Na 589.592 Radial†	8956.0	8373.6	2571.9 µg/L		2571.9 ppb	03:08:16
1	Sr 421.552†	13240.5	13048.8	120.38 µg/L		120.38 ppb	03:08:16
1	Sc 361.383	2007320.2	2007320.2	102.25 %			03:09:42
1	Y 371.029	1465215.3	1465215.3	108.31 %			03:09:42
1	Ag 328.068†	-1900.5	-1457.0	-2.5386 µg/L		-2.5386 ppb	03:09:47
1	As 188.979†	15.2	15.3	33.656 µg/L		33.656 ppb	03:10:08
1	B 249.677†	984.9	579.1	-40.137 µg/L		-40.137 ppb	03:09:47
1	Ba 233.527†	21081.3	20634.2	495.51 µg/L		495.51 ppb	03:09:47
1	Be 313.107†	11851.2	14445.9	7.6422 µg/L		7.6422 ppb	03:09:47
1	Cd 226.502†	302.3	437.3	-2.8602 µg/L		-2.8602 ppb	03:10:08
1	Co 228.616†	1008.9	984.7	39.504 µg/L		39.504 ppb	03:10:08
1	Cr 267.716†	8787.2	8644.1	173.67 µg/L		173.67 ppb	03:09:47
1	Cu 324.752†	6011.3	3335.2	38.823 µg/L		38.823 ppb	03:09:47
1	Mn 257.610†	744170.8	728040.5	2295.9 µg/L		2295.9 ppb	03:09:42
1	Mo 202.031†	105.9	108.9	15.328 µg/L		15.328 ppb	03:10:08
1	Ni 231.604†	2284.5	1921.8	97.344 µg/L		97.344 ppb	03:10:08
1	P 214.914†	277.0	255.6	416.31 µg/L		416.31 ppb	03:10:08
1	Pb 220.353†	464.5	363.4	86.179 µg/L		86.179 ppb	03:10:08
1	S 181.975 Axial†	161.1	138.6	574.74 µg/L		574.74 ppb	03:10:08
1	Sb 206.836†	29.1	6.0	2.3066 µg/L		2.3066 ppb	03:10:08
1	Se 196.026†	-60.7	-78.7	212.90 µg/L		212.90 ppb	03:10:08
1	SiO2†	308111.2	299935.2	59203 µg/L		59203 ppb	03:09:42
1	Si 251.611†	369377.4	360933.3	27439 µg/L		27439 ppb	03:09:42
1	Sn 189.927†	10.3	9.7	-8.0618 µg/L		-8.0618 ppb	03:10:08
1	Ti 334.940†	1130229.6	1105167.4	2444.5 µg/L		2444.5 ppb	03:09:42
1	Tl 190.801†	-55.7	-32.1	7.8118 µg/L		7.8118 ppb	03:10:08
1	U 409.014†	-2401.8	-2271.8	-206.77 µg/L		-206.77 ppb	03:09:42
1	V 292.402†	8311.0	8172.7	94.371 µg/L		94.371 ppb	03:09:47
1	Zn 213.857†	20922.5	19927.4	460.76 µg/L		460.76 ppb	03:09:47
2	Sc RADIAL	57062.8	57062.8	101 %			03:08:42
2	Al 396.153Radial†	61549.1	60930.0	42386 µg/L		42386 ppb	03:08:42
2	Ca 317.933Radial†	19006.4	18606.3	15893 µg/L		15893 ppb	03:08:42
2	Fe 238.204 Radial†	15754.3	15581.1	122890 µg/L		122890 ppb	03:08:42
2	K 766.490 Radial†	10498.1	10228.8	6680.6 µg/L		6680.6 ppb	03:08:42
2	Mg 279.077 IEC†	978.5	956.0	8414.1 µg/L		8414.1 ppb	03:09:03
2	Na 589.592 Radial†	9051.1	8489.0	2607.3 µg/L		2607.3 ppb	03:08:42
2	Sr 421.552†	13254.6	13094.1	120.79 µg/L		120.79 ppb	03:08:42
2	Sc 361.383	1990866.0	1990866.0	101.41 %			03:10:15
2	Y 371.029	1455070.6	1455070.6	107.56 %			03:10:15
2	Ag 328.068†	-1904.2	-1476.0	-2.6584 µg/L		-2.6584 ppb	03:10:21
2	As 188.979†	19.9	20.1	42.291 µg/L		42.291 ppb	03:10:42
2	B 249.677†	959.3	561.8	-40.942 µg/L		-40.942 ppb	03:10:21
2	Ba 233.527†	21159.3	20881.5	501.45 µg/L		501.45 ppb	03:10:21
2	Be 313.107†	11880.5	14570.6	7.7097 µg/L		7.7097 ppb	03:10:21
2	Cd 226.502†	299.4	436.9	-2.8933 µg/L		-2.8933 ppb	03:10:42
2	Co 228.616†	995.5	979.7	39.241 µg/L		39.241 ppb	03:10:42
2	Cr 267.716†	8845.7	8772.8	176.26 µg/L		176.26 ppb	03:10:21
2	Cu 324.752†	6040.1	3412.2	39.354 µg/L		39.354 ppb	03:10:21
2	Mn 257.610†	742284.4	732195.4	2308.9 µg/L		2308.9 ppb	03:10:15
2	Mo 202.031†	106.2	110.1	15.448 µg/L		15.448 ppb	03:10:42
2	Ni 231.604†	2264.1	1920.2	97.266 µg/L		97.266 ppb	03:10:42
2	P 214.914†	270.7	251.6	408.24 µg/L		408.24 ppb	03:10:42
2	Pb 220.353†	457.0	359.7	85.298 µg/L		85.298 ppb	03:10:42

2	S 181.975 Axial†	169.3	148.0	613.90 µg/L	613.90 ppb	03:10:42
2	Sb 206.836†	38.0	14.9	10.514 µg/L	10.514 ppb	03:10:42
2	Se 196.026†	-60.9	-79.3	212.49 µg/L	212.49 ppb	03:10:42
2	SiO2†	307264.2	301590.3	59530 µg/L	59530 ppb	03:10:15
2	Si 251.611†	368579.0	363131.6	27606 µg/L	27606 ppb	03:10:15
2	Sn 189.927†	10.9	10.4	-7.8183 µg/L	-7.8183 ppb	03:10:42
2	Ti 334.940†	1128864.1	1112956.4	2461.7 µg/L	2461.7 ppb	03:10:15
2	Tl 190.801†	-48.2	-25.1	17.146 µg/L	17.146 ppb	03:10:42
2	U 409.014†	-2407.3	-2296.7	-208.87 µg/L	-208.87 ppb	03:10:15
2	V 292.402†	8371.5	8299.5	95.636 µg/L	95.636 ppb	03:10:21
2	Zn 213.857†	20992.9	20165.9	466.34 µg/L	466.34 ppb	03:10:21
3	Sc RADIAL	57541.1	57541.1	102 %		03:09:08
3	Al 396.153Radial†	60737.9	59626.9	41479 µg/L	41479 ppb	03:09:08
3	Ca 317.933Radial†	18748.6	18196.7	15543 µg/L	15543 ppb	03:09:08
3	Fe 238.204 Radial†	15536.2	15237.3	120180 µg/L	120180 ppb	03:09:08
3	K 766.490 Radial†	10378.4	10024.8	6547.4 µg/L	6547.4 ppb	03:09:08
3	Mg 279.077 IEC†	971.2	940.7	8280.6 µg/L	8280.6 ppb	03:09:28
3	Na 589.592 Radial†	8923.9	8289.5	2546.1 µg/L	2546.1 ppb	03:09:08
3	Sr 421.552†	13069.1	12802.8	118.11 µg/L	118.11 ppb	03:09:08
3	Sc 361.383	2028567.7	2028567.7	103.33 %		03:10:50
3	Y 371.029	1474442.3	1474442.3	109.00 %		03:10:50
3	Ag 328.068†	-1753.0	-1294.8	-1.5383 µg/L	-1.5383 ppb	03:10:55
3	As 188.979†	7.7	7.9	20.297 µg/L	20.297 ppb	03:11:15
3	B 249.677†	932.9	518.7	-41.315 µg/L	-41.315 ppb	03:10:55
3	Ba 233.527†	19807.0	19185.0	460.71 µg/L	460.71 ppb	03:10:55
3	Be 313.107†	10715.1	13225.1	6.9661 µg/L	6.9661 ppb	03:10:55
3	Cd 226.502†	261.0	394.2	-3.6622 µg/L	-3.6622 ppb	03:11:15
3	Co 228.616†	912.5	881.1	35.075 µg/L	35.075 ppb	03:11:15
3	Cr 267.716†	8066.1	7856.3	157.84 µg/L	157.84 ppb	03:10:55
3	Cu 324.752†	5729.3	3000.7	36.292 µg/L	36.292 ppb	03:10:55
3	Mn 257.610†	718302.1	695383.4	2193.3 µg/L	2193.3 ppb	03:10:50
3	Mo 202.031†	100.8	102.9	14.642 µg/L	14.642 ppb	03:11:15
3	Ni 231.604†	2093.6	1713.7	86.941 µg/L	86.941 ppb	03:11:15
3	P 214.914†	247.7	224.3	356.48 µg/L	356.48 ppb	03:11:15
3	Pb 220.353†	439.5	334.4	79.190 µg/L	79.190 ppb	03:11:15
3	S 181.975 Axial†	160.5	136.3	565.40 µg/L	565.40 ppb	03:11:15
3	Sb 206.836†	38.2	14.5	10.307 µg/L	10.307 ppb	03:11:15
3	Se 196.026†	-42.9	-60.8	231.30 µg/L	231.30 ppb	03:11:15
3	SiO2†	299856.9	288791.0	57004 µg/L	57004 ppb	03:10:50
3	Si 251.611†	359433.4	347526.3	26420 µg/L	26420 ppb	03:10:50
3	Sn 189.927†	10.6	9.8	-7.7607 µg/L	-7.7607 ppb	03:11:15
3	Ti 334.940†	1082731.2	1047623.9	2317.2 µg/L	2317.2 ppb	03:10:50
3	Tl 190.801†	-52.1	-28.0	11.234 µg/L	11.234 ppb	03:11:15
3	U 409.014†	-2278.5	-2127.9	-194.45 µg/L	-194.45 ppb	03:10:50
3	V 292.402†	7703.7	7499.9	87.490 µg/L	87.490 ppb	03:10:55
3	Zn 213.857†	19667.6	18498.7	427.41 µg/L	427.41 ppb	03:10:55

Mean Data: 245979001|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008918.0	102.33 %	0.963			0.94%
Sc RADIAL	57267.8	101 %	0.4			0.43%
Y 371.029	1464909.4	108.29 %	0.716			0.66%
Ag 328.068†	-1409.3	-2.2451 µg/L	0.61503	-2.2451 ppb	0.61503	27.39%
Al 396.153Radial†	60422.7	42033 µg/L	485.4	42033 ppb	485.4	1.15%
As 188.979†	14.4	32.081 µg/L	11.0813	32.081 ppb	11.0813	34.54%
B 249.677†	553.2	-40.798 µg/L	0.6020	-40.798 ppb	0.6020	1.48%
Ba 233.527†	20233.6	485.89 µg/L	22.009	485.89 ppb	22.009	4.53%
Be 313.107†	14080.5	7.4393 µg/L	0.41119	7.4393 ppb	0.41119	5.53%
Ca 317.933Radial†	18461.0	15769 µg/L	195.8	15769 ppb	195.8	1.24%
Cd 226.502†	422.8	-3.1386 µg/L	0.45376	-3.1386 ppb	0.45376	14.46%
Co 228.616†	948.5	37.940 µg/L	2.4846	37.940 ppb	2.4846	6.55%
Cr 267.716†	8424.4	169.25 µg/L	9.969	169.25 ppb	9.969	5.89%
Cu 324.752†	3249.3	38.156 µg/L	1.6365	38.156 ppb	1.6365	4.29%
Fe 238.204 Radial†	15457.9	121920 µg/L	1509.8	121920 ppb	1509.8	1.24%
K 766.490 Radial†	10163.0	6637.6 µg/L	78.15	6637.6 ppb	78.15	1.18%
Mg 279.077 IEC†	949.2	8354.3 µg/L	67.83	8354.3 ppb	67.83	0.81%
Mn 257.610†	718539.8	2266.0 µg/L	63.33	2266.0 ppb	63.33	2.79%
Mo 202.031†	107.3	15.139 µg/L	0.4348	15.139 ppb	0.4348	2.87%
Na 589.592 Radial†	8384.0	2575.1 µg/L	30.75	2575.1 ppb	30.75	1.19%

Ni 231.604†	1851.9	93.850 µg/L	5.9841	93.850 ppb	5.9841	6.38%
P 214.914†	243.8	393.68 µg/L	32.466	393.68 ppb	32.466	8.25%
Pb 220.353†	352.5	83.556 µg/L	3.8063	83.556 ppb	3.8063	4.56%
S 181.975 Axial†	141.0	584.68 µg/L	25.735	584.68 ppb	25.735	4.40%
Sb 206.836†	11.8	7.7093 µg/L	4.67998	7.7093 ppb	4.67998	60.71%
Se 196.026†	-72.9	218.90 µg/L	10.742	218.90 ppb	10.742	4.91%
SiO2†	296772.2	58579 µg/L	1374.1	58579 ppb	1374.1	2.35%
Si 251.611†	357197.1	27155 µg/L	642.2	27155 ppb	642.2	2.36%
Sn 189.927†	10.0	-7.8803 µg/L	0.15984	-7.8803 ppb	0.15984	2.03%
Sr 421.552†	12981.9	119.76 µg/L	1.446	119.76 ppb	1.446	1.21%
Ti 334.940†	1088582.5	2407.8 µg/L	78.94	2407.8 ppb	78.94	3.28%
Tl 190.801†	-28.4	12.064 µg/L	4.7220	12.064 ppb	4.7220	39.14%
U 409.014†	-2232.1	-203.36 µg/L	7.790	-203.36 ppb	7.790	3.83%
V 292.402†	7990.7	92.499 µg/L	4.3835	92.499 ppb	4.3835	4.74%
Zn 213.857†	19530.6	451.50 µg/L	21.050	451.50 ppb	21.050	4.66%

Sequence No.: 4

Sample ID: 1202032611|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 230

Date Collected: 2/20/2010 03:11:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032611|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58485.8	58485.8	104 %		03:11:57
1	Al 396.153Radial†	56411.0	54484.1	37902 µg/L	37902 ppb	03:11:57
1	Ca 317.933Radial†	19115.2	18253.5	15592 µg/L	15592 ppb	03:11:57
1	Fe 238.204 Radial†	16320.3	15748.4	124210 µg/L	124210 ppb	03:11:57
1	K 766.490 Radial†	10066.1	9558.6	6242.9 µg/L	6242.9 ppb	03:11:57
1	Mg 279.077 IEC†	931.1	886.6	7792.2 µg/L	7792.2 ppb	03:12:17
1	Na 589.592 Radial†	8377.4	7620.2	2340.5 µg/L	2340.5 ppb	03:11:57
1	Sr 421.552†	12436.6	11984.6	110.56 µg/L	110.56 ppb	03:11:57
1	Sc 361.383	2015543.9	2015543.9	102.67 %		03:13:22
1	Y 371.029	1469086.7	1469086.7	108.60 %		03:13:22
1	Ag 328.068†	-1799.4	-1351.0	-1.6795 µg/L	-1.6795 ppb	03:13:27
1	As 188.979†	15.0	15.1	33.462 µg/L	33.462 ppb	03:13:48
1	B 249.677†	884.2	477.1	-45.216 µg/L	-45.216 ppb	03:13:27
1	Ba 233.527†	17603.7	17162.9	412.17 µg/L	412.17 ppb	03:13:27
1	Be 313.107†	11420.4	13979.0	7.3217 µg/L	7.3217 ppb	03:13:27
1	Cd 226.502†	304.5	438.2	-3.0449 µg/L	-3.0449 ppb	03:13:48
1	Co 228.616†	823.3	800.0	30.898 µg/L	30.898 ppb	03:13:48
1	Cr 267.716†	4750.3	4677.2	93.990 µg/L	93.990 ppb	03:13:27
1	Cu 324.752†	5593.9	2904.7	36.225 µg/L	36.225 ppb	03:13:27
1	Mn 257.610†	761341.3	741795.0	2339.1 µg/L	2339.1 ppb	03:13:22
1	Mo 202.031†	93.9	96.8	14.201 µg/L	14.201 ppb	03:13:48
1	Ni 231.604†	1571.7	1218.5	62.312 µg/L	62.312 ppb	03:13:48
1	P 214.914†	273.7	251.2	405.43 µg/L	405.43 ppb	03:13:48
1	Pb 220.353†	466.1	363.0	85.771 µg/L	85.771 ppb	03:13:48
1	S 181.975 Axial†	162.1	138.9	576.19 µg/L	576.19 ppb	03:13:48
1	Sb 206.836†	26.9	3.7	1.1335 µg/L	1.1335 ppb	03:13:48
1	Se 196.026†	-63.2	-80.9	214.53 µg/L	214.53 ppb	03:13:48
1	SiO2†	296410.1	287309.0	56711 µg/L	56711 ppb	03:13:22
1	Si 251.611†	355294.3	345742.6	26284 µg/L	26284 ppb	03:13:22
1	Sn 189.927†	2.7	2.3	-11.448 µg/L	-11.448 ppb	03:13:48
1	Ti 334.940†	1187767.5	1156698.8	2558.5 µg/L	2558.5 ppb	03:13:22
1	Tl 190.801†	-56.7	-32.8	7.9919 µg/L	7.9919 ppb	03:13:48
1	U 409.014†	-2099.0	-1967.3	-181.67 µg/L	-181.67 ppb	03:13:22
1	V 292.402†	7986.9	7823.9	90.985 µg/L	90.985 ppb	03:13:27
1	Zn 213.857†	20318.3	19255.4	445.11 µg/L	445.11 ppb	03:13:27
2	Sc RADIAL	57280.1	57280.1	101 %		03:12:23
2	Al 396.153Radial†	56146.9	55370.5	38518 µg/L	38518 ppb	03:12:23
2	Ca 317.933Radial†	18878.4	18408.6	15724 µg/L	15724 ppb	03:12:23
2	Fe 238.204 Radial†	16155.8	15917.9	125540 µg/L	125540 ppb	03:12:23
2	K 766.490 Radial†	10012.6	9710.5	6342.1 µg/L	6342.1 ppb	03:12:23
2	Mg 279.077 IEC†	937.2	911.5	8013.5 µg/L	8013.5 ppb	03:12:43
2	Na 589.592 Radial†	8272.1	7686.6	2360.9 µg/L	2360.9 ppb	03:12:23
2	Sr 421.552†	12303.3	12106.0	111.68 µg/L	111.68 ppb	03:12:23
2	Sc 361.383	2009553.3	2009553.3	102.37 %		03:13:56
2	Y 371.029	1465536.2	1465536.2	108.34 %		03:13:56
2	Ag 328.068†	-1868.5	-1423.7	-2.1294 µg/L	-2.1294 ppb	03:14:01
2	As 188.979†	15.7	15.8	34.726 µg/L	34.726 ppb	03:14:22
2	B 249.677†	885.6	481.0	-45.751 µg/L	-45.751 ppb	03:14:01
2	Ba 233.527†	17819.3	17424.6	418.45 µg/L	418.45 ppb	03:14:01
2	Be 313.107†	11605.3	14192.9	7.4393 µg/L	7.4393 ppb	03:14:01
2	Cd 226.502†	324.7	458.9	-2.6806 µg/L	-2.6806 ppb	03:14:22
2	Co 228.616†	826.7	805.7	31.105 µg/L	31.105 ppb	03:14:22
2	Cr 267.716†	4810.6	4749.9	95.451 µg/L	95.451 ppb	03:14:01
2	Cu 324.752†	5586.0	2913.2	36.466 µg/L	36.466 ppb	03:14:01
2	Mn 257.610†	766168.2	748720.8	2361.0 µg/L	2361.0 ppb	03:13:56
2	Mo 202.031†	98.5	101.6	14.722 µg/L	14.722 ppb	03:14:22
2	Ni 231.604†	1563.1	1214.6	62.138 µg/L	62.138 ppb	03:14:22
2	P 214.914†	284.2	262.3	426.44 µg/L	426.44 ppb	03:14:22
2	Pb 220.353†	458.0	356.5	84.184 µg/L	84.184 ppb	03:14:22

2	S 181.975 Axial†	157.8	135.2	560.60 µg/L	560.60 ppb	03:14:22
2	Sb 206.836†	38.7	15.3	11.778 µg/L	11.778 ppb	03:14:22
2	Se 196.026†	-52.5	-70.6	232.34 µg/L	232.34 ppb	03:14:22
2	SiO2†	298062.2	289783.5	57199 µg/L	57199 ppb	03:13:56
2	Si 251.611†	357088.5	348526.9	26496 µg/L	26496 ppb	03:13:56
2	Sn 189.927†	2.4	2.0	-11.685 µg/L	-11.685 ppb	03:14:22
2	Ti 334.940†	1195527.1	1167727.7	2582.9 µg/L	2582.9 ppb	03:13:56
2	Tl 190.801†	-54.1	-30.5	11.530 µg/L	11.530 ppb	03:14:22
2	U 409.014†	-2287.1	-2157.2	-197.64 µg/L	-197.64 ppb	03:13:56
2	V 292.402†	8033.5	7892.7	91.803 µg/L	91.803 ppb	03:14:01
2	Zn 213.857†	20503.7	19495.5	450.67 µg/L	450.67 ppb	03:14:01
3	Sc RADIAL	57636.1	57636.1	102 %		03:12:49
3	Al 396.153Radial†	56682.5	55553.5	38646 µg/L	38646 ppb	03:12:49
3	Ca 317.933Radial†	19053.4	18465.1	15773 µg/L	15773 ppb	03:12:49
3	Fe 238.204 Radial†	16300.0	15960.9	125880 µg/L	125880 ppb	03:12:49
3	K 766.490 Radial†	10179.1	9812.7	6408.8 µg/L	6408.8 ppb	03:12:49
3	Mg 279.077 IEC†	937.5	906.2	7965.4 µg/L	7965.4 ppb	03:13:09
3	Na 589.592 Radial†	8397.7	7759.3	2383.2 µg/L	2383.2 ppb	03:12:49
3	Sr 421.552†	12451.5	12176.3	112.33 µg/L	112.33 ppb	03:12:49
3	Sc 361.383	2000289.5	2000289.5	101.89 %		03:14:29
3	Y 371.029	1456705.6	1456705.6	107.68 %		03:14:29
3	Ag 328.068†	-1819.1	-1383.7	-1.8358 µg/L	-1.8358 ppb	03:14:35
3	As 188.979†	11.1	11.3	26.799 µg/L	26.799 ppb	03:14:55
3	B 249.677†	855.1	455.1	-46.996 µg/L	-46.996 ppb	03:14:35
3	Ba 233.527†	16891.8	16595.0	398.53 µg/L	398.53 ppb	03:14:35
3	Be 313.107†	10720.1	13376.6	6.9845 µg/L	6.9845 ppb	03:14:35
3	Cd 226.502†	269.4	406.1	-4.0405 µg/L	-4.0405 ppb	03:14:55
3	Co 228.616†	744.2	728.4	27.765 µg/L	27.765 ppb	03:14:55
3	Cr 267.716†	4450.2	4417.9	88.781 µg/L	88.781 ppb	03:14:35
3	Cu 324.752†	5497.3	2851.4	36.110 µg/L	36.110 ppb	03:14:35
3	Mn 257.610†	741698.3	728171.9	2296.7 µg/L	2296.7 ppb	03:14:29
3	Mo 202.031†	79.8	83.7	12.977 µg/L	12.977 ppb	03:14:55
3	Ni 231.604†	1451.8	1112.5	57.054 µg/L	57.054 ppb	03:14:55
3	P 214.914†	245.1	225.2	352.75 µg/L	352.75 ppb	03:14:55
3	Pb 220.353†	438.9	339.8	80.119 µg/L	80.119 ppb	03:14:55
3	S 181.975 Axial†	148.7	127.0	526.85 µg/L	526.85 ppb	03:14:55
3	Sb 206.836†	30.5	7.4	4.5382 µg/L	4.5382 ppb	03:14:55
3	Se 196.026†	-50.7	-69.0	235.56 µg/L	235.56 ppb	03:14:55
3	SiO2†	291581.6	284771.8	56210 µg/L	56210 ppb	03:14:29
3	Si 251.611†	349676.0	342867.7	26065 µg/L	26065 ppb	03:14:29
3	Sn 189.927†	0.7	0.3	-12.419 µg/L	-12.419 ppb	03:14:55
3	Ti 334.940†	1154205.6	1132582.9	2505.1 µg/L	2505.1 ppb	03:14:29
3	Tl 190.801†	-49.3	-26.0	16.524 µg/L	16.524 ppb	03:14:55
3	U 409.014†	-2166.6	-2049.2	-188.72 µg/L	-188.72 ppb	03:14:29
3	V 292.402†	7612.4	7515.7	88.149 µg/L	88.149 ppb	03:14:35
3	Zn 213.857†	19532.6	18635.2	430.50 µg/L	430.50 ppb	03:14:35

Mean Data: 1202032611|948764|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008462.2	102.31 %	%	0.391			0.38%
Sc RADIAL	57800.7	102 %	%	1.1			1.07%
Y 371.029	1463776.2	108.21 %	%	0.471			0.44%
Ag 328.068†	-1386.1	-1.8815 µg/L	µg/L	0.22841	-1.8815 ppb	0.22841	12.14%
Al 396.153Radial†	55136.0	38355 µg/L	µg/L	397.9	38355 ppb	397.9	1.04%
As 188.979†	14.1	31.662 µg/L	µg/L	4.2590	31.662 ppb	4.2590	13.45%
B 249.677†	471.1	-45.988 µg/L	µg/L	0.9130	-45.988 ppb	0.9130	1.99%
Ba 233.527†	17060.8	409.72 µg/L	µg/L	10.185	409.72 ppb	10.185	2.49%
Be 313.107†	13849.5	7.2485 µg/L	µg/L	0.23608	7.2485 ppb	0.23608	3.26%
Ca 317.933Radial†	18375.7	15696 µg/L	µg/L	93.6	15696 ppb	93.6	0.60%
Cd 226.502†	434.4	-3.2554 µg/L	µg/L	0.70394	-3.2554 ppb	0.70394	21.62%
Co 228.616†	778.0	29.923 µg/L	µg/L	1.8712	29.923 ppb	1.8712	6.25%
Cr 267.716†	4615.0	92.741 µg/L	µg/L	3.5060	92.741 ppb	3.5060	3.78%
Cu 324.752†	2889.7	36.267 µg/L	µg/L	0.1818	36.267 ppb	0.1818	0.50%
Fe 238.204 Radial†	15875.7	125210 µg/L	µg/L	886.2	125210 ppb	886.2	0.71%
K 766.490 Radial†	9693.9	6331.3 µg/L	µg/L	83.49	6331.3 ppb	83.49	1.32%
Mg 279.077 IEC†	901.4	7923.7 µg/L	µg/L	116.39	7923.7 ppb	116.39	1.47%
Mn 257.610†	739562.6	2332.3 µg/L	µg/L	32.70	2332.3 ppb	32.70	1.40%
Mo 202.031†	94.0	13.967 µg/L	µg/L	0.8955	13.967 ppb	0.8955	6.41%
Na 589.592 Radial†	7688.7	2361.5 µg/L	µg/L	21.37	2361.5 ppb	21.37	0.90%

Ni 231.604†	1181.9	60.501 µg/L	2.9864	60.501 ppb	2.9864	4.94%
P 214.914†	246.2	394.87 µg/L	37.962	394.87 ppb	37.962	9.61%
Pb 220.353†	353.1	83.358 µg/L	2.9148	83.358 ppb	2.9148	3.50%
S 181.975 Axial†	133.7	554.55 µg/L	25.221	554.55 ppb	25.221	4.55%
Sb 206.836†	8.8	5.8164 µg/L	5.43597	5.8164 ppb	5.43597	93.46%
Se 196.026†	-73.5	227.48 µg/L	11.326	227.48 ppb	11.326	4.98%
SiO2†	287288.1	56707 µg/L	494.6	56707 ppb	494.6	0.87%
Si 251.611†	345712.4	26282 µg/L	215.1	26282 ppb	215.1	0.82%
Sn 189.927†	1.5	-11.851 µg/L	0.5064	-11.851 ppb	0.5064	4.27%
Sr 421.552†	12089.0	111.52 µg/L	0.894	111.52 ppb	0.894	0.80%
Ti 334.940†	1152336.5	2548.8 µg/L	39.76	2548.8 ppb	39.76	1.56%
Tl 190.801†	-29.8	12.015 µg/L	4.2867	12.015 ppb	4.2867	35.68%
U 409.014†	-2057.9	-189.34 µg/L	8.002	-189.34 ppb	8.002	4.23%
V 292.402†	7744.1	90.312 µg/L	1.9174	90.312 ppb	1.9174	2.12%
Zn 213.857†	19128.7	442.09 µg/L	10.421	442.09 ppb	10.421	2.36%

Sequence No.: 5

Sample ID: 1202032613|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 231

Date Collected: 2/20/2010 03:15:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032613|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57218.5	57218.5	101 %		03:15:38
1	Al 396.153Radial†	106676.9	105321.8	73257 µg/L	73257 ppb	03:15:38
1	Ca 317.933Radial†	22579.4	22082.9	18863 µg/L	18863 ppb	03:15:59
1	Fe 238.204 Radial†	16160.3	15939.5	125720 µg/L	125720 ppb	03:15:59
1	K 766.490 Radial†	20081.0	19662.3	12842 µg/L	12842 ppb	03:15:38
1	Mg 279.077 IEC†	1833.9	1797.9	15945 µg/L	15945 ppb	03:15:59
1	Na 589.592 Radial†	23968.5	23193.5	7123.7 µg/L	7123.7 ppb	03:15:38
1	Sr 421.552†	65733.2	64873.9	598.47 µg/L	598.47 ppb	03:15:38
1	Sc 361.383	2012327.1	2012327.1	102.51 %		03:17:04
1	Y 371.029	1482553.7	1482553.7	109.60 %		03:17:04
1	Ag 328.068†	64736.0	63554.7	482.48 µg/L	482.48 ppb	03:17:10
1	As 188.979†	298.7	291.8	528.40 µg/L	528.40 ppb	03:17:30
1	B 249.677†	13041.4	12338.4	438.21 µg/L	438.21 ppb	03:17:10
1	Ba 233.527†	41674.3	40672.3	977.46 µg/L	977.46 ppb	03:17:10
1	Be 313.107†	865048.5	846751.3	501.29 µg/L	501.29 ppb	03:17:04
1	Cd 226.502†	20267.1	19913.2	482.99 µg/L	482.99 ppb	03:17:10
1	Co 228.616†	11763.5	11473.9	513.18 µg/L	513.18 ppb	03:17:10
1	Cr 267.716†	29491.9	28821.1	579.24 µg/L	579.24 ppb	03:17:10
1	Cu 324.752†	85543.2	80907.6	545.60 µg/L	545.60 ppb	03:17:10
1	Mn 257.610†	887841.1	866386.8	2729.2 µg/L	2729.2 ppb	03:17:04
1	Mo 202.031†	5156.2	5035.4	497.88 µg/L	497.88 ppb	03:17:30
1	Ni 231.604†	11538.2	10943.7	546.56 µg/L	546.56 ppb	03:17:10
1	P 214.914†	563.0	533.9	927.94 µg/L	927.94 ppb	03:17:30
1	Pb 220.353†	2542.8	2389.7	580.37 µg/L	580.37 ppb	03:17:30
1	S 181.975 Axial†	1410.9	1357.5	5629.5 µg/L	5629.5 ppb	03:17:30
1	Sb 206.836†	511.2	476.2	437.05 µg/L	437.05 ppb	03:17:30
1	Se 196.026†	313.2	286.2	726.01 µg/L	726.01 ppb	03:17:30
1	SiO2†	351285.4	341303.9	67369 µg/L	67369 ppb	03:17:04
1	Si 251.611†	421433.8	410817.8	31231 µg/L	31231 ppb	03:17:04
1	Sn 189.927†	1253.6	1222.5	503.95 µg/L	503.95 ppb	03:17:30
1	Ti 334.940†	1531151.2	1493535.0	3303.1 µg/L	3303.1 ppb	03:17:04
1	Tl 190.801†	317.8	332.4	492.22 µg/L	492.22 ppb	03:17:30
1	U 409.014†	3815.7	3799.5	297.05 µg/L	297.05 ppb	03:17:04
1	V 292.402†	60132.1	58706.4	592.37 µg/L	592.37 ppb	03:17:10
1	Zn 213.857†	41583.5	40032.2	929.07 µg/L	929.07 ppb	03:17:10
2	Sc RADIAL	58340.8	58340.8	103 %		03:16:04
2	Al 396.153Radial†	107186.7	103789.4	72191 µg/L	72191 ppb	03:16:04
2	Ca 317.933Radial†	22642.5	21715.1	18549 µg/L	18549 ppb	03:16:25
2	Fe 238.204 Radial†	16210.5	15681.2	123690 µg/L	123690 ppb	03:16:25
2	K 766.490 Radial†	20102.7	19301.9	12606 µg/L	12606 ppb	03:16:04
2	Mg 279.077 IEC†	1836.6	1765.7	15659 µg/L	15659 ppb	03:16:25
2	Na 589.592 Radial†	24150.4	22914.4	7038.0 µg/L	7038.0 ppb	03:16:04
2	Sr 421.552†	66150.4	64029.5	590.68 µg/L	590.68 ppb	03:16:04
2	Sc 361.383	2016110.2	2016110.2	102.70 %		03:17:39
2	Y 371.029	1484305.6	1484305.6	109.72 %		03:17:39
2	Ag 328.068†	64988.5	63682.0	483.30 µg/L	483.30 ppb	03:17:44
2	As 188.979†	294.2	287.0	519.58 µg/L	519.58 ppb	03:18:05
2	B 249.677†	13111.1	12382.3	441.06 µg/L	441.06 ppb	03:17:44
2	Ba 233.527†	41722.6	40643.1	976.76 µg/L	976.76 ppb	03:17:44
2	Be 313.107†	868335.3	848368.1	502.25 µg/L	502.25 ppb	03:17:39
2	Cd 226.502†	20269.3	19878.2	482.35 µg/L	482.35 ppb	03:17:44
2	Co 228.616†	11822.6	11510.0	514.79 µg/L	514.79 ppb	03:17:44
2	Cr 267.716†	29593.3	28865.9	580.14 µg/L	580.14 ppb	03:17:44
2	Cu 324.752†	86120.4	81313.1	547.96 µg/L	547.96 ppb	03:17:44
2	Mn 257.610†	891219.8	868051.5	2734.1 µg/L	2734.1 ppb	03:17:39
2	Mo 202.031†	5090.4	4962.0	490.61 µg/L	490.61 ppb	03:18:05
2	Ni 231.604†	11593.8	10976.8	548.17 µg/L	548.17 ppb	03:17:44
2	P 214.914†	555.3	525.3	911.86 µg/L	911.86 ppb	03:18:05
2	Pb 220.353†	2499.3	2342.7	568.94 µg/L	568.94 ppb	03:18:05

2	S 181.975 Axial†	1404.6	1348.8	5593.3 µg/L	5593.3 ppb	03:18:05
2	Sb 206.836†	499.2	463.6	425.34 µg/L	425.34 ppb	03:18:05
2	Se 196.026†	304.2	276.9	707.72 µg/L	707.72 ppb	03:18:05
2	SiO2†	352301.2	341649.9	67437 µg/L	67437 ppb	03:17:39
2	Si 251.611†	422762.7	411340.4	31271 µg/L	31271 ppb	03:17:39
2	Sn 189.927†	1230.6	1197.8	493.72 µg/L	493.72 ppb	03:18:05
2	Ti 334.940†	1536725.6	1496160.1	3308.9 µg/L	3308.9 ppb	03:17:39
2	Tl 190.801†	323.2	337.1	498.10 µg/L	498.10 ppb	03:18:05
2	U 409.014†	3744.0	3722.7	290.98 µg/L	290.98 ppb	03:17:39
2	V 292.402†	60218.2	58680.2	591.82 µg/L	591.82 ppb	03:17:44
2	Zn 213.857†	41643.4	40014.5	928.76 µg/L	928.76 ppb	03:17:44
3	Sc RADIAL	57922.3	57922.3	103 %		03:16:30
3	Al 396.153Radial†	106693.9	104058.6	72380 µg/L	72380 ppb	03:16:30
3	Ca 317.933Radial†	22751.5	21979.9	18775 µg/L	18775 ppb	03:16:50
3	Fe 238.204 Radial†	16276.7	15859.2	125090 µg/L	125090 ppb	03:16:50
3	K 766.490 Radial†	20079.2	19419.6	12683 µg/L	12683 ppb	03:16:30
3	Mg 279.077 IEC†	1845.5	1787.2	15849 µg/L	15849 ppb	03:16:50
3	Na 589.592 Radial†	24051.7	22987.1	7060.3 µg/L	7060.3 ppb	03:16:30
3	Sr 421.552†	65819.9	64169.9	591.98 µg/L	591.98 ppb	03:16:30
3	Sc 361.383	2001800.6	2001800.6	101.97 %		03:18:13
3	Y 371.029	1472159.0	1472159.0	108.83 %		03:18:13
3	Ag 328.068†	63138.6	62320.2	473.09 µg/L	473.09 ppb	03:18:19
3	As 188.979†	274.7	269.9	489.13 µg/L	489.13 ppb	03:18:39
3	B 249.677†	12579.1	11951.9	422.73 µg/L	422.73 ppb	03:18:19
3	Ba 233.527†	39551.2	38804.1	932.55 µg/L	932.55 ppb	03:18:19
3	Be 313.107†	838772.9	825421.0	488.67 µg/L	488.67 ppb	03:18:13
3	Cd 226.502†	19406.2	19172.9	464.57 µg/L	464.57 ppb	03:18:19
3	Co 228.616†	11143.9	10926.6	488.54 µg/L	488.54 ppb	03:18:19
3	Cr 267.716†	27636.0	27152.3	545.70 µg/L	545.70 ppb	03:18:19
3	Cu 324.752†	81300.9	77186.2	521.22 µg/L	521.22 ppb	03:18:19
3	Mn 257.610†	863885.2	847448.4	2669.8 µg/L	2669.8 ppb	03:18:13
3	Mo 202.031†	4634.5	4550.2	450.34 µg/L	450.34 ppb	03:18:39
3	Ni 231.604†	10945.0	10421.2	520.53 µg/L	520.53 ppb	03:18:19
3	P 214.914†	501.1	476.0	815.47 µg/L	815.47 ppb	03:18:39
3	Pb 220.353†	2313.8	2178.1	528.82 µg/L	528.82 ppb	03:18:39
3	S 181.975 Axial†	1314.4	1270.1	5266.9 µg/L	5266.9 ppb	03:18:39
3	Sb 206.836†	475.0	443.3	406.43 µg/L	406.43 ppb	03:18:39
3	Se 196.026†	302.7	277.5	712.21 µg/L	712.21 ppb	03:18:39
3	SiO2†	342971.3	334952.5	66115 µg/L	66115 ppb	03:18:13
3	Si 251.611†	411602.6	403338.5	30663 µg/L	30663 ppb	03:18:13
3	Sn 189.927†	1129.8	1107.6	455.54 µg/L	455.54 ppb	03:18:39
3	Ti 334.940†	1481950.3	1453139.6	3213.7 µg/L	3213.7 ppb	03:18:13
3	Tl 190.801†	298.3	314.9	468.45 µg/L	468.45 ppb	03:18:39
3	U 409.014†	3625.6	3632.7	283.29 µg/L	283.29 ppb	03:18:13
3	V 292.402†	56572.0	55523.6	560.82 µg/L	560.82 ppb	03:18:19
3	Zn 213.857†	39635.2	38334.9	889.44 µg/L	889.44 ppb	03:18:19

Mean Data: 1202032613|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2010079.3	102.39 %	0.378			0.37%
Sc RADIAL	57827.2	102 %	1.0			0.98%
Y 371.029	1479672.8	109.38 %	0.485			0.44%
Ag 328.068†	63185.6	479.62 µg/L	5.670	479.62 ppb	5.670	1.18%
Al 396.153Radial†	104390.0	72609 µg/L	568.9	72609 ppb	568.9	0.78%
As 188.979†	282.9	512.37 µg/L	20.605	512.37 ppb	20.605	4.02%
B 249.677†	12224.2	434.00 µg/L	9.864	434.00 ppb	9.864	2.27%
Ba 233.527†	40039.8	962.26 µg/L	25.727	962.26 ppb	25.727	2.67%
Be 313.107†	840180.1	497.40 µg/L	7.581	497.40 ppb	7.581	1.52%
Ca 317.933Radial†	21926.0	18729 µg/L	162.1	18729 ppb	162.1	0.87%
Cd 226.502†	19654.8	476.64 µg/L	10.454	476.64 ppb	10.454	2.19%
Co 228.616†	11303.5	505.50 µg/L	14.716	505.50 ppb	14.716	2.91%
Cr 267.716†	28279.8	568.36 µg/L	19.627	568.36 ppb	19.627	3.45%
Cu 324.752†	79802.3	538.26 µg/L	14.805	538.26 ppb	14.805	2.75%
Fe 238.204 Radial†	15826.6	124830 µg/L	1042.6	124830 ppb	1042.6	0.84%
K 766.490 Radial†	19461.3	12710 µg/L	120.0	12710 ppb	120.0	0.94%
Mg 279.077 IEC†	1783.6	15818 µg/L	145.8	15818 ppb	145.8	0.92%
Mn 257.610†	860628.9	2711.0 µg/L	35.80	2711.0 ppb	35.80	1.32%
Mo 202.031†	4849.2	479.61 µg/L	25.606	479.61 ppb	25.606	5.34%
Na 589.592 Radial†	23031.7	7074.0 µg/L	44.48	7074.0 ppb	44.48	0.63%

Ni 231.604†	10780.5	538.42 µg/L	15.516	538.42 ppb	15.516	2.88%
P 214.914†	511.8	885.09 µg/L	60.827	885.09 ppb	60.827	6.87%
Pb 220.353†	2303.5	559.38 µg/L	27.071	559.38 ppb	27.071	4.84%
S 181.975 Axial†	1325.4	5496.6 µg/L	199.73	5496.6 ppb	199.73	3.63%
Sb 206.836†	461.0	422.94 µg/L	15.448	422.94 ppb	15.448	3.65%
Se 196.026†	280.2	715.32 µg/L	9.530	715.32 ppb	9.530	1.33%
SiO2†	339302.1	66974 µg/L	744.3	66974 ppb	744.3	1.11%
Si 251.611†	408498.9	31055 µg/L	340.3	31055 ppb	340.3	1.10%
Sn 189.927†	1176.0	484.40 µg/L	25.516	484.40 ppb	25.516	5.27%
Sr 421.552†	64357.8	593.71 µg/L	4.174	593.71 ppb	4.174	0.70%
Ti 334.940†	1480944.9	3275.2 µg/L	53.35	3275.2 ppb	53.35	1.63%
Tl 190.801†	328.1	486.26 µg/L	15.701	486.26 ppb	15.701	3.23%
U 409.014†	3718.3	290.44 µg/L	6.900	290.44 ppb	6.900	2.38%
V 292.402†	57636.8	581.67 µg/L	18.057	581.67 ppb	18.057	3.10%
Zn 213.857†	39460.5	915.76 µg/L	22.791	915.76 ppb	22.791	2.49%

Sequence No.: 6

Sample ID: 1202032614|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 232

Date Collected: 2/20/2010 03:18:49

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032614|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58185.7	58185.7	103 %		03:19:21
1	Al 396.153Radial†	98909.7	96029.5	66793 µg/L	66793 ppb	03:19:21
1	Ca 317.933Radial†	21217.0	20389.4	17416 µg/L	17416 ppb	03:19:42
1	Fe 238.204 Radial†	15233.6	14774.5	116540 µg/L	116540 ppb	03:19:42
1	K 766.490 Radial†	19093.8	18374.2	12001 µg/L	12001 ppb	03:19:21
1	Mg 279.077 IEC†	1680.8	1619.2	14357 µg/L	14357 ppb	03:19:42
1	Na 589.592 Radial†	23285.5	22137.0	6799.2 µg/L	6799.2 ppb	03:19:21
1	Sr 421.552†	63652.3	61774.6	569.88 µg/L	569.88 ppb	03:19:21
1	Sc 361.383	1996633.2	1996633.2	101.71 %		03:20:48
1	Y 371.029	1467748.1	1467748.1	108.50 %		03:20:48
1	Ag 328.068†	64129.6	63454.8	481.11 µg/L	481.11 ppb	03:20:53
1	As 188.979†	293.9	289.4	523.59 µg/L	523.59 ppb	03:21:14
1	B 249.677†	12807.6	12208.4	437.70 µg/L	437.70 ppb	03:20:53
1	Ba 233.527†	40507.2	39844.3	957.57 µg/L	957.57 ppb	03:20:53
1	Be 313.107†	857085.2	845554.7	500.60 µg/L	500.60 ppb	03:20:48
1	Cd 226.502†	19955.3	19762.0	480.26 µg/L	480.26 ppb	03:20:53
1	Co 228.616†	11527.3	11331.9	506.82 µg/L	506.82 ppb	03:20:53
1	Cr 267.716†	29078.0	28640.3	575.60 µg/L	575.60 ppb	03:20:53
1	Cu 324.752†	84394.2	80433.9	541.23 µg/L	541.23 ppb	03:20:53
1	Mn 257.610†	903274.5	888369.1	2796.9 µg/L	2796.9 ppb	03:20:48
1	Mo 202.031†	5075.4	4995.5	493.62 µg/L	493.62 ppb	03:21:14
1	Ni 231.604†	11378.1	10874.8	543.01 µg/L	543.01 ppb	03:20:53
1	P 214.914†	548.2	523.6	913.47 µg/L	913.47 ppb	03:21:14
1	Pb 220.353†	2480.7	2348.2	570.25 µg/L	570.25 ppb	03:21:14
1	S 181.975 Axial†	1378.6	1336.5	5542.6 µg/L	5542.6 ppb	03:21:14
1	Sb 206.836†	517.1	485.9	446.03 µg/L	446.03 ppb	03:21:14
1	Se 196.026†	307.7	283.3	698.60 µg/L	698.60 ppb	03:21:14
1	SiO2†	345135.1	337950.5	66707 µg/L	66707 ppb	03:20:48
1	Si 251.611†	413911.0	406652.9	30915 µg/L	30915 ppb	03:20:48
1	Sn 189.927†	1233.5	1212.4	500.49 µg/L	500.49 ppb	03:21:14
1	Ti 334.940†	1501918.5	1476533.8	3265.6 µg/L	3265.6 ppb	03:20:48
1	Tl 190.801†	331.5	348.3	511.17 µg/L	511.17 ppb	03:21:14
1	U 409.014†	3759.5	3773.5	296.26 µg/L	296.26 ppb	03:20:48
1	V 292.402†	58802.1	57859.8	583.00 µg/L	583.00 ppb	03:20:53
1	Zn 213.857†	40049.7	38843.1	901.72 µg/L	901.72 ppb	03:20:53
2	Sc RADIAL	58313.1	58313.1	103 %		03:19:47
2	Al 396.153Radial†	99486.0	96377.9	67036 µg/L	67036 ppb	03:19:47
2	Ca 317.933Radial†	21245.4	20372.0	17401 µg/L	17401 ppb	03:20:08
2	Fe 238.204 Radial†	15278.1	14785.4	116620 µg/L	116620 ppb	03:20:08
2	K 766.490 Radial†	19186.7	18423.7	12033 µg/L	12033 ppb	03:19:47
2	Mg 279.077 IEC†	1681.5	1616.2	14331 µg/L	14331 ppb	03:20:08
2	Na 589.592 Radial†	23381.9	22180.9	6812.7 µg/L	6812.7 ppb	03:19:47
2	Sr 421.552†	63974.2	61951.5	571.51 µg/L	571.51 ppb	03:19:47
2	Sc 361.383	1999212.3	1999212.3	101.84 %		03:21:22
2	Y 371.029	1469469.3	1469469.3	108.63 %		03:21:22
2	Ag 328.068†	64639.4	63874.0	484.24 µg/L	484.24 ppb	03:21:28
2	As 188.979†	290.7	285.9	517.39 µg/L	517.39 ppb	03:21:48
2	B 249.677†	12926.6	12309.1	441.76 µg/L	441.76 ppb	03:21:28
2	Ba 233.527†	40846.4	40126.0	964.34 µg/L	964.34 ppb	03:21:28
2	Be 313.107†	860841.6	848156.2	502.14 µg/L	502.14 ppb	03:21:22
2	Cd 226.502†	20077.5	19856.7	482.61 µg/L	482.61 ppb	03:21:28
2	Co 228.616†	11627.2	11415.4	510.58 µg/L	510.58 ppb	03:21:28
2	Cr 267.716†	29331.3	28852.2	579.86 µg/L	579.86 ppb	03:21:28
2	Cu 324.752†	84920.7	80843.8	543.92 µg/L	543.92 ppb	03:21:28
2	Mn 257.610†	907945.9	891810.4	2807.7 µg/L	2807.7 ppb	03:21:22
2	Mo 202.031†	5038.2	4952.6	489.42 µg/L	489.42 ppb	03:21:48
2	Ni 231.604†	11496.1	10976.3	548.06 µg/L	548.06 ppb	03:21:28
2	P 214.914†	547.9	522.7	911.27 µg/L	911.27 ppb	03:21:48
2	Pb 220.353†	2478.8	2343.1	569.02 µg/L	569.02 ppb	03:21:48

2	S 181.975 Axial†	1375.7	1331.9	5523.3 µg/L	5523.3 ppb	03:21:48
2	Sb 206.836†	500.8	469.3	430.65 µg/L	430.65 ppb	03:21:48
2	Se 196.026†	302.3	277.5	690.79 µg/L	690.79 ppb	03:21:48
2	SiO2†	345879.4	338243.5	66765 µg/L	66765 ppb	03:21:22
2	Si 251.611†	415092.3	407287.9	30963 µg/L	30963 ppb	03:21:22
2	Sn 189.927†	1233.3	1210.6	499.72 µg/L	499.72 ppb	03:21:48
2	Ti 334.940†	1508738.3	1481325.5	3276.2 µg/L	3276.2 ppb	03:21:22
2	Tl 190.801†	322.4	339.0	499.25 µg/L	499.25 ppb	03:21:48
2	U 409.014†	3765.9	3775.0	296.37 µg/L	296.37 ppb	03:21:22
2	V 292.402†	59237.3	58212.6	586.42 µg/L	586.42 ppb	03:21:28
2	Zn 213.857†	40381.2	39117.8	908.14 µg/L	908.14 ppb	03:21:28
3	Sc RADIAL	57961.2	57961.2	103 %		03:20:13
3	Al 396.153Radial†	99337.5	96818.4	67343 µg/L	67343 ppb	03:20:13
3	Ca 317.933Radial†	21286.4	20536.9	17542 µg/L	17542 ppb	03:20:34
3	Fe 238.204 Radial†	15249.2	14847.0	117110 µg/L	117110 ppb	03:20:34
3	K 766.490 Radial†	19077.3	18430.0	12037 µg/L	12037 ppb	03:20:13
3	Mg 279.077 IEC†	1678.5	1623.3	14392 µg/L	14392 ppb	03:20:34
3	Na 589.592 Radial†	23346.9	22284.4	6844.5 µg/L	6844.5 ppb	03:20:13
3	Sr 421.552†	63842.4	62199.3	573.80 µg/L	573.80 ppb	03:20:13
3	Sc 361.383	1980531.4	1980531.4	100.89 %		03:21:56
3	Y 371.029	1452227.1	1452227.1	107.35 %		03:21:56
3	Ag 328.068†	62634.2	62485.2	473.79 µg/L	473.79 ppb	03:22:02
3	As 188.979†	264.4	262.5	475.52 µg/L	475.52 ppb	03:22:22
3	B 249.677†	12428.7	11935.3	426.22 µg/L	426.22 ppb	03:22:02
3	Ba 233.527†	38650.0	38327.3	921.10 µg/L	921.10 ppb	03:22:02
3	Be 313.107†	822760.4	818383.0	484.51 µg/L	484.51 ppb	03:21:56
3	Cd 226.502†	19151.8	19125.1	464.28 µg/L	464.28 ppb	03:22:02
3	Co 228.616†	10955.3	10857.0	485.51 µg/L	485.51 ppb	03:22:02
3	Cr 267.716†	27345.3	27155.3	545.76 µg/L	545.76 ppb	03:22:02
3	Cu 324.752†	80399.3	77148.7	519.86 µg/L	519.86 ppb	03:22:02
3	Mn 257.610†	871004.9	863603.6	2719.4 µg/L	2719.4 ppb	03:21:56
3	Mo 202.031†	4564.1	4529.4	447.99 µg/L	447.99 ppb	03:22:22
3	Ni 231.604†	10789.5	10382.3	518.49 µg/L	518.49 ppb	03:22:02
3	P 214.914†	486.6	467.0	802.58 µg/L	802.58 ppb	03:22:22
3	Pb 220.353†	2284.9	2173.9	527.82 µg/L	527.82 ppb	03:22:22
3	S 181.975 Axial†	1287.3	1257.1	5213.1 µg/L	5213.1 ppb	03:22:22
3	Sb 206.836†	476.7	450.0	412.69 µg/L	412.69 ppb	03:22:22
3	Se 196.026†	304.1	282.1	698.48 µg/L	698.48 ppb	03:22:22
3	SiO2†	333368.2	329045.8	64949 µg/L	64949 ppb	03:21:56
3	Si 251.611†	399813.9	395988.4	30104 µg/L	30104 ppb	03:21:56
3	Sn 189.927†	1109.8	1099.7	452.89 µg/L	452.89 ppb	03:22:22
3	Ti 334.940†	1439163.0	1426335.8	3154.5 µg/L	3154.5 ppb	03:21:56
3	Tl 190.801†	302.6	322.3	476.29 µg/L	476.29 ppb	03:22:22
3	U 409.014†	3584.9	3630.5	284.29 µg/L	284.29 ppb	03:21:56
3	V 292.402†	55671.1	55226.4	556.97 µg/L	556.97 ppb	03:22:02
3	Zn 213.857†	38243.0	37372.4	867.33 µg/L	867.33 ppb	03:22:02

Mean Data: 1202032614|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1992125.6	101.48 %	0.516			0.51%
Sc RADIAL	58153.3	103 %	0.3			0.31%
Y 371.029	1463148.2	108.16 %	0.702			0.65%
Ag 328.068†	63271.3	479.72 µg/L	5.362	479.72 ppb	5.362	1.12%
Al 396.153Radial†	96408.6	67057 µg/L	275.5	67057 ppb	275.5	0.41%
As 188.979†	279.3	505.50 µg/L	26.147	505.50 ppb	26.147	5.17%
B 249.677†	12150.9	435.23 µg/L	8.061	435.23 ppb	8.061	1.85%
Ba 233.527†	39432.6	947.67 µg/L	23.255	947.67 ppb	23.255	2.45%
Be 313.107†	837364.6	495.75 µg/L	9.761	495.75 ppb	9.761	1.97%
Ca 317.933Radial†	20432.8	17453 µg/L	77.4	17453 ppb	77.4	0.44%
Cd 226.502†	19581.3	475.72 µg/L	9.973	475.72 ppb	9.973	2.10%
Co 228.616†	11201.4	500.97 µg/L	13.521	500.97 ppb	13.521	2.70%
Cr 267.716†	28215.9	567.07 µg/L	18.581	567.07 ppb	18.581	3.28%
Cu 324.752†	79475.5	535.00 µg/L	13.179	535.00 ppb	13.179	2.46%
Fe 238.204 Radial†	14802.3	116760 µg/L	308.2	116760 ppb	308.2	0.26%
K 766.490 Radial†	18409.3	12023 µg/L	19.9	12023 ppb	19.9	0.17%
Mg 279.077 IEC†	1619.6	14360 µg/L	30.9	14360 ppb	30.9	0.21%
Mn 257.610†	881261.0	2774.6 µg/L	48.15	2774.6 ppb	48.15	1.74%
Mo 202.031†	4825.8	477.01 µg/L	25.219	477.01 ppb	25.219	5.29%
Na 589.592 Radial†	22200.8	6818.8 µg/L	23.24	6818.8 ppb	23.24	0.34%

Ni 231.604†	10744.5	536.52 µg/L	15.817	536.52 ppb	15.817	2.95%
P 214.914†	504.4	875.77 µg/L	63.395	875.77 ppb	63.395	7.24%
Pb 220.353†	2288.4	555.70 µg/L	24.149	555.70 ppb	24.149	4.35%
S 181.975 Axial†	1308.5	5426.3 µg/L	184.89	5426.3 ppb	184.89	3.41%
Sb 206.836†	468.4	429.79 µg/L	16.690	429.79 ppb	16.690	3.88%
Se 196.026†	281.0	695.96 µg/L	4.475	695.96 ppb	4.475	0.64%
SiO2†	335079.9	66140 µg/L	1031.9	66140 ppb	1031.9	1.56%
Si 251.611†	403309.7	30660 µg/L	482.6	30660 ppb	482.6	1.57%
Sn 189.927†	1174.3	484.37 µg/L	27.260	484.37 ppb	27.260	5.63%
Sr 421.552†	61975.1	571.73 µg/L	1.968	571.73 ppb	1.968	0.34%
Ti 334.940†	1461398.4	3232.1 µg/L	67.38	3232.1 ppb	67.38	2.08%
Tl 190.801†	336.5	495.57 µg/L	17.727	495.57 ppb	17.727	3.58%
U 409.014†	3726.3	292.31 µg/L	6.944	292.31 ppb	6.944	2.38%
V 292.402†	57099.6	575.46 µg/L	16.108	575.46 ppb	16.108	2.80%
Zn 213.857†	38444.4	892.39 µg/L	21.943	892.39 ppb	21.943	2.46%

Sequence No.: 7
 Sample ID: 1202032612|948764|5
 Analyst: JWW
 Initial Sample Wt:
 Dilution:

Autosampler Location: 233
 Date Collected: 2/20/2010 03:22:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202032612|948764|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56445.7	56445.7	99.9 %			03:23:04
1	Al 396.153Radial†	12554.7	12558.5	8736.3 µg/L	8736.3 ppb	8736.3 ppb	03:23:04
1	Ca 317.933Radial†	3945.8	3738.1	3193.0 µg/L	3193.0 ppb	3193.0 ppb	03:23:24
1	Fe 238.204 Radial†	3210.9	3197.1	25216 µg/L	25216 ppb	25216 ppb	03:23:24
1	K 766.490 Radial†	2270.6	2107.6	1376.5 µg/L	1376.5 ppb	1376.5 ppb	03:23:04
1	Mg 279.077 IEC†	210.7	198.1	1743.9 µg/L	1743.9 ppb	1743.9 ppb	03:23:24
1	Na 589.592 Radial†	2210.7	1740.5	534.58 µg/L	534.58 ppb	534.58 ppb	03:23:04
1	Sr 421.552†	2732.8	2706.4	24.967 µg/L	24.967 ppb	24.967 ppb	03:23:04
1	Sc 361.383	2013598.9	2013598.9	102.57 %			03:24:27
1	Y 371.029	1403759.1	1403759.1	103.77 %			03:24:27
1	Ag 328.068†	-724.8	-305.0	-0.5647 µg/L	-0.5647 ppb	-0.5647 ppb	03:24:33
1	As 188.979†	1.3	1.7	4.3753 µg/L	4.3753 ppb	4.3753 ppb	03:24:54
1	B 249.677†	505.4	108.6	-8.6760 µg/L	-8.6760 ppb	-8.6760 ppb	03:24:33
1	Ba 233.527†	4257.4	4167.7	100.08 µg/L	100.08 ppb	100.08 ppb	03:24:33
1	Be 313.107†	272.9	3121.8	1.6633 µg/L	1.6633 ppb	1.6633 ppb	03:24:33
1	Cd 226.502†	-48.1	94.8	-0.4665 µg/L	-0.4665 ppb	-0.4665 ppb	03:24:54
1	Co 228.616†	209.4	202.2	8.1233 µg/L	8.1233 ppb	8.1233 ppb	03:24:54
1	Cr 267.716†	1768.4	1774.5	35.651 µg/L	35.651 ppb	35.651 ppb	03:24:33
1	Cu 324.752†	3221.5	597.0	7.4021 µg/L	7.4021 ppb	7.4021 ppb	03:24:33
1	Mn 257.610†	152646.6	149075.9	470.12 µg/L	470.12 ppb	470.12 ppb	03:24:27
1	Mo 202.031†	22.5	27.3	3.6325 µg/L	3.6325 ppb	3.6325 ppb	03:24:54
1	Ni 231.604†	722.6	392.2	19.867 µg/L	19.867 ppb	19.867 ppb	03:24:54
1	P 214.914†	57.3	40.6	61.952 µg/L	61.952 ppb	61.952 ppb	03:24:54
1	Pb 220.353†	164.9	69.8	16.536 µg/L	16.536 ppb	16.536 ppb	03:24:54
1	S 181.975 Axial†	49.4	29.2	121.17 µg/L	121.17 ppb	121.17 ppb	03:24:54
1	Sb 206.836†	26.4	3.3	2.3654 µg/L	2.3654 ppb	2.3654 ppb	03:24:54
1	Se 196.026†	-7.8	-26.9	28.617 µg/L	28.617 ppb	28.617 ppb	03:24:54
1	SiO2†	63320.8	60341.8	11911 µg/L	11911 ppb	11911 ppb	03:24:33
1	Si 251.611†	74978.1	72787.8	5533.5 µg/L	5533.5 ppb	5533.5 ppb	03:24:33
1	Sn 189.927†	4.0	3.5	-1.0231 µg/L	-1.0231 ppb	-1.0231 ppb	03:24:54
1	Ti 334.940†	230744.1	224784.5	497.18 µg/L	497.18 ppb	497.18 ppb	03:24:27
1	Tl 190.801†	-28.3	-5.2	3.3920 µg/L	3.3920 ppb	3.3920 ppb	03:24:54
1	U 409.014†	-510.4	-420.5	-38.635 µg/L	-38.635 ppb	-38.635 ppb	03:24:33
1	V 292.402†	1643.7	1647.3	19.087 µg/L	19.087 ppb	19.087 ppb	03:24:33
1	Zn 213.857†	4706.4	4054.0	93.722 µg/L	93.722 ppb	93.722 ppb	03:24:33
2	Sc RADIAL	57265.4	57265.4	101 %			03:23:30
2	Al 396.153Radial†	12559.5	12383.3	8614.5 µg/L	8614.5 ppb	8614.5 ppb	03:23:30
2	Ca 317.933Radial†	3944.7	3680.4	3143.7 µg/L	3143.7 ppb	3143.7 ppb	03:23:50
2	Fe 238.204 Radial†	3195.7	3136.2	24735 µg/L	24735 ppb	24735 ppb	03:23:50
2	K 766.490 Radial†	2247.8	2052.6	1340.6 µg/L	1340.6 ppb	1340.6 ppb	03:23:30
2	Mg 279.077 IEC†	205.9	190.3	1674.9 µg/L	1674.9 ppb	1674.9 ppb	03:23:50
2	Na 589.592 Radial†	2206.1	1704.3	523.46 µg/L	523.46 ppb	523.46 ppb	03:23:30
2	Sr 421.552†	2736.4	2670.8	24.639 µg/L	24.639 ppb	24.639 ppb	03:23:30
2	Sc 361.383	2015162.2	2015162.2	102.65 %			03:25:00
2	Y 371.029	1404073.0	1404073.0	103.79 %			03:25:00
2	Ag 328.068†	-710.5	-290.6	-0.4867 µg/L	-0.4867 ppb	-0.4867 ppb	03:25:06
2	As 188.979†	2.9	3.3	7.1879 µg/L	7.1879 ppb	7.1879 ppb	03:25:26
2	B 249.677†	497.2	100.2	-8.7658 µg/L	-8.7658 ppb	-8.7658 ppb	03:25:06
2	Ba 233.527†	4296.2	4202.3	100.92 µg/L	100.92 ppb	100.92 ppb	03:25:06
2	Be 313.107†	204.4	3054.8	1.6223 µg/L	1.6223 ppb	1.6223 ppb	03:25:06
2	Cd 226.502†	-63.9	79.4	-0.7958 µg/L	-0.7958 ppb	-0.7958 ppb	03:25:26
2	Co 228.616†	212.6	205.2	8.2506 µg/L	8.2506 ppb	8.2506 ppb	03:25:26
2	Cr 267.716†	1765.3	1770.0	35.562 µg/L	35.562 ppb	35.562 ppb	03:25:06
2	Cu 324.752†	3267.4	639.3	7.6114 µg/L	7.6114 ppb	7.6114 ppb	03:25:06
2	Mn 257.610†	153923.5	150204.3	473.59 µg/L	473.59 ppb	473.59 ppb	03:25:00
2	Mo 202.031†	16.2	21.1	3.0100 µg/L	3.0100 ppb	3.0100 ppb	03:25:26
2	Ni 231.604†	711.8	381.1	19.307 µg/L	19.307 ppb	19.307 ppb	03:25:26
2	P 214.914†	63.1	46.2	73.356 µg/L	73.356 ppb	73.356 ppb	03:25:26
2	Pb 220.353†	148.5	53.7	12.624 µg/L	12.624 ppb	12.624 ppb	03:25:26

2	S 181.975 Axial†	47.0	26.9	111.52 µg/L	111.52 ppb	03:25:26
2	Sb 206.836†	24.9	1.7	0.9437 µg/L	0.9437 ppb	03:25:26
2	Se 196.026†	3.7	-15.7	43.164 µg/L	43.164 ppb	03:25:26
2	SiO2†	63514.0	60482.2	11938 µg/L	11938 ppb	03:25:06
2	Si 251.611†	75139.6	72888.4	5541.1 µg/L	5541.1 ppb	03:25:06
2	Sn 189.927†	4.2	3.7	-0.8737 µg/L	-0.8737 ppb	03:25:26
2	Ti 334.940†	232557.9	226377.0	500.71 µg/L	500.71 ppb	03:25:00
2	Tl 190.801†	-25.5	-2.5	6.8652 µg/L	6.8652 ppb	03:25:26
2	U 409.014†	-539.7	-448.7	-40.910 µg/L	-40.910 ppb	03:25:06
2	V 292.402†	1670.7	1672.3	19.267 µg/L	19.267 ppb	03:25:06
2	Zn 213.857†	4738.6	4081.9	94.405 µg/L	94.405 ppb	03:25:06
3	Sc RADIAL	56550.3	56550.3	100 %		03:23:56
3	Al 396.153Radial†	12466.8	12447.4	8659.0 µg/L	8659.0 ppb	03:23:56
3	Ca 317.933Radial†	3930.8	3715.8	3173.9 µg/L	3173.9 ppb	03:24:16
3	Fe 238.204 Radial†	3188.9	3169.3	24996 µg/L	24996 ppb	03:24:16
3	K 766.490 Radial†	2259.4	2092.3	1366.5 µg/L	1366.5 ppb	03:23:56
3	Mg 279.077 IEC†	210.9	197.9	1742.4 µg/L	1742.4 ppb	03:24:16
3	Na 589.592 Radial†	2176.6	1702.3	522.84 µg/L	522.84 ppb	03:23:56
3	Sr 421.552†	2713.2	2681.8	24.740 µg/L	24.740 ppb	03:23:56
3	Sc 361.383	2005681.0	2005681.0	102.17 %		03:25:33
3	Y 371.029	1395392.0	1395392.0	103.15 %		03:25:33
3	Ag 328.068†	-726.0	-309.0	-0.6186 µg/L	-0.6186 ppb	03:25:39
3	As 188.979†	-1.4	-0.9	-0.3230 µg/L	-0.3230 ppb	03:25:59
3	B 249.677†	452.0	58.3	-10.618 µg/L	-10.618 ppb	03:25:39
3	Ba 233.527†	3849.1	3784.5	90.882 µg/L	90.882 ppb	03:25:39
3	Be 313.107†	-21.6	2834.6	1.5070 µg/L	1.5070 ppb	03:25:39
3	Cd 226.502†	-66.5	76.6	-0.8972 µg/L	-0.8972 ppb	03:25:59
3	Co 228.616†	169.6	164.1	6.4717 µg/L	6.4717 ppb	03:25:59
3	Cr 267.716†	1532.5	1550.4	31.149 µg/L	31.149 ppb	03:25:39
3	Cu 324.752†	3130.4	520.2	6.8700 µg/L	6.8700 ppb	03:25:39
3	Mn 257.610†	142310.8	139547.0	440.25 µg/L	440.25 ppb	03:25:33
3	Mo 202.031†	16.3	21.3	3.0353 µg/L	3.0353 ppb	03:25:59
3	Ni 231.604†	655.4	329.2	16.725 µg/L	16.725 ppb	03:25:59
3	P 214.914†	58.5	42.0	64.894 µg/L	64.894 ppb	03:25:59
3	Pb 220.353†	145.8	51.8	12.152 µg/L	12.152 ppb	03:25:59
3	S 181.975 Axial†	39.7	19.9	82.546 µg/L	82.546 ppb	03:25:59
3	Sb 206.836†	20.4	-2.6	-2.9577 µg/L	-2.9577 ppb	03:25:59
3	Se 196.026†	3.2	-16.2	43.144 µg/L	43.144 ppb	03:25:59
3	SiO2†	58016.4	55393.7	10934 µg/L	10934 ppb	03:25:39
3	Si 251.611†	68547.3	66782.1	5076.9 µg/L	5076.9 ppb	03:25:39
3	Sn 189.927†	-1.5	-1.9	-3.2638 µg/L	-3.2638 ppb	03:25:59
3	Ti 334.940†	212677.1	207989.0	460.03 µg/L	460.03 ppb	03:25:33
3	Tl 190.801†	-29.8	-6.8	0.8573 µg/L	0.8573 ppb	03:25:59
3	U 409.014†	-561.2	-472.2	-42.899 µg/L	-42.899 ppb	03:25:39
3	V 292.402†	1475.5	1488.9	17.499 µg/L	17.499 ppb	03:25:39
3	Zn 213.857†	4245.0	3620.5	83.576 µg/L	83.576 ppb	03:25:39

Mean Data: 1202032612|948764|5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2011480.7	102.46 %	0.259			0.25%
Sc RADIAL	56753.8	100 %	0.8			0.79%
Y 371.029	1401074.7	103.57 %	0.364			0.35%
Ag 328.068†	-301.5	-0.5566 µg/L	0.06632	-0.5566 ppb	0.06632	11.91%
Al 396.153Radial†	12463.1	8669.9 µg/L	61.64	8669.9 ppb	61.64	0.71%
As 188.979†	1.4	3.7467 µg/L	3.79468	3.7467 ppb	3.79468	101.28%
B 249.677†	89.0	-9.3534 µg/L	1.09649	-9.3534 ppb	1.09649	11.72%
Ba 233.527†	4051.5	97.294 µg/L	5.5685	97.294 ppb	5.5685	5.72%
Be 313.107†	3003.7	1.5975 µg/L	0.08102	1.5975 ppb	0.08102	5.07%
Ca 317.933Radial†	3711.4	3170.2 µg/L	24.83	3170.2 ppb	24.83	0.78%
Cd 226.502†	83.6	-0.7199 µg/L	0.22518	-0.7199 ppb	0.22518	31.28%
Co 228.616†	190.5	7.6152 µg/L	0.99235	7.6152 ppb	0.99235	13.03%
Cr 267.716†	1698.3	34.121 µg/L	2.5739	34.121 ppb	2.5739	7.54%
Cu 324.752†	585.5	7.2945 µg/L	0.38222	7.2945 ppb	0.38222	5.24%
Fe 238.204 Radial†	3167.5	24982 µg/L	240.6	24982 ppb	240.6	0.96%
K 766.490 Radial†	2084.1	1361.2 µg/L	18.55	1361.2 ppb	18.55	1.36%
Mg 279.077 IEC†	195.5	1720.4 µg/L	39.40	1720.4 ppb	39.40	2.29%
Mn 257.610†	146275.7	461.32 µg/L	18.330	461.32 ppb	18.330	3.97%
Mo 202.031†	23.2	3.2259 µg/L	0.35230	3.2259 ppb	0.35230	10.92%
Na 589.592 Radial†	1715.7	526.96 µg/L	6.608	526.96 ppb	6.608	1.25%

Ni 231.604†	367.5	18.633 µg/L	1.6761	18.633 ppb	1.6761	9.00%
P 214.914†	42.9	66.734 µg/L	5.9209	66.734 ppb	5.9209	8.87%
Pb 220.353†	58.4	13.771 µg/L	2.4067	13.771 ppb	2.4067	17.48%
S 181.975 Axial†	25.3	105.08 µg/L	20.100	105.08 ppb	20.100	19.13%
Sb 206.836†	0.8	0.1171 µg/L	2.75613	0.1171 ppb	2.75613	>999.9%
Se 196.026†	-19.6	38.308 µg/L	8.3932	38.308 ppb	8.3932	21.91%
SiO2†	58739.2	11594 µg/L	572.1	11594 ppb	572.1	4.93%
Si 251.611†	70819.4	5383.8 µg/L	265.84	5383.8 ppb	265.84	4.94%
Sn 189.927†	1.8	-1.7202 µg/L	1.33889	-1.7202 ppb	1.33889	77.83%
Sr 421.552†	2686.3	24.782 µg/L	0.1679	24.782 ppb	0.1679	0.68%
Ti 334.940†	219716.8	485.97 µg/L	22.539	485.97 ppb	22.539	4.64%
Tl 190.801†	-4.8	3.7048 µg/L	3.01614	3.7048 ppb	3.01614	81.41%
U 409.014†	-447.1	-40.815 µg/L	2.1335	-40.815 ppb	2.1335	5.23%
V 292.402†	1602.8	18.618 µg/L	0.9731	18.618 ppb	0.9731	5.23%
Zn 213.857†	3918.8	90.568 µg/L	6.0642	90.568 ppb	6.0642	6.70%

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 03:26:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57212.4	57212.4	101 %		03:26:48
1	Al 396.153Radial†	7221.7	7123.9	4945.0 µg/L	4945.0 ppb	03:26:48
1	Ca 317.933Radial†	6039.9	5752.9	4914.0 µg/L	4914.0 ppb	03:27:08
1	Fe 238.204 Radial†	657.7	632.9	5002.2 µg/L	5002.2 ppb	03:27:08
1	K 766.490 Radial†	7773.6	7511.3	4905.7 µg/L	4905.7 ppb	03:26:48
1	Mg 279.077 IEC†	576.7	556.7	4979.8 µg/L	4979.8 ppb	03:27:08
1	Na 589.592 Radial†	33112.9	32225.8	9897.9 µg/L	9897.9 ppb	03:26:48
1	Sr 421.552†	53038.4	52345.0	482.89 µg/L	482.89 ppb	03:26:48
1	Sc 361.383	1993765.6	1993765.6	101.56 %		03:28:12
1	Y 371.029	1370868.6	1370868.6	101.34 %		03:28:12
1	Ag 328.068†	67894.2	67252.3	501.83 µg/L	501.83 ppb	03:28:17
1	As 188.979†	294.5	290.4	519.53 µg/L	519.53 ppb	03:28:38
1	B 249.677†	12704.9	12125.5	492.42 µg/L	492.42 ppb	03:28:17
1	Ba 233.527†	21371.5	21060.1	506.50 µg/L	506.50 ppb	03:28:17
1	Be 313.107†	858170.6	847835.6	503.00 µg/L	503.00 ppb	03:28:12
1	Cd 226.502†	20638.2	20462.7	510.31 µg/L	510.31 ppb	03:28:17
1	Co 228.616†	11463.8	11285.7	510.52 µg/L	510.52 ppb	03:28:17
1	Cr 267.716†	25860.6	25513.5	512.76 µg/L	512.76 ppb	03:28:17
1	Cu 324.752†	80857.6	77071.1	503.77 µg/L	503.77 ppb	03:28:17
1	Mn 257.610†	165802.5	163510.0	512.50 µg/L	512.50 ppb	03:28:12
1	Mo 202.031†	5403.2	5325.5	521.70 µg/L	521.70 ppb	03:28:38
1	Ni 231.604†	10742.0	10264.6	511.14 µg/L	511.14 ppb	03:28:17
1	P 214.914†	1331.2	1295.4	2516.7 µg/L	2516.7 ppb	03:28:38
1	Pb 220.353†	2234.6	2109.3	512.96 µg/L	512.96 ppb	03:28:38
1	S 181.975 Axial†	268.2	245.1	1016.5 µg/L	1016.5 ppb	03:28:38
1	Sb 206.836†	589.8	558.2	514.73 µg/L	514.73 ppb	03:28:38
1	Se 196.026†	384.8	359.5	512.76 µg/L	512.76 ppb	03:28:38
1	SiO2†	29369.4	27526.4	5433.4 µg/L	5433.4 ppb	03:28:17
1	Si 251.611†	34262.4	33425.1	2541.0 µg/L	2541.0 ppb	03:28:17
1	Sn 189.927†	1265.3	1245.4	525.25 µg/L	525.25 ppb	03:28:38
1	Ti 334.940†	231373.3	227641.8	503.28 µg/L	503.28 ppb	03:28:12
1	Tl 190.801†	368.3	385.0	506.09 µg/L	506.09 ppb	03:28:38
1	U 409.014†	6173.2	6155.4	510.42 µg/L	510.42 ppb	03:28:17
1	V 292.402†	52648.4	51883.9	511.94 µg/L	511.94 ppb	03:28:17
1	Zn 213.857†	22714.9	21831.3	508.61 µg/L	508.61 ppb	03:28:17
2	Sc RADIAL	56871.2	56871.2	101 %		03:27:14
2	Al 396.153Radial†	7239.9	7184.7	4987.7 µg/L	4987.7 ppb	03:27:14
2	Ca 317.933Radial†	6035.7	5784.6	4941.1 µg/L	4941.1 ppb	03:27:34
2	Fe 238.204 Radial†	663.2	642.2	5076.0 µg/L	5076.0 ppb	03:27:34
2	K 766.490 Radial†	7823.4	7606.8	4968.1 µg/L	4968.1 ppb	03:27:14
2	Mg 279.077 IEC†	581.9	565.2	5055.8 µg/L	5055.8 ppb	03:27:34
2	Na 589.592 Radial†	33213.9	32522.4	9989.0 µg/L	9989.0 ppb	03:27:14
2	Sr 421.552†	53190.1	52810.0	487.18 µg/L	487.18 ppb	03:27:14
2	Sc 361.383	1999572.7	1999572.7	101.86 %		03:28:45
2	Y 371.029	1373816.0	1373816.0	101.56 %		03:28:45
2	Ag 328.068†	68063.4	67224.2	501.62 µg/L	501.62 ppb	03:28:51
2	As 188.979†	288.8	284.0	508.01 µg/L	508.01 ppb	03:29:11
2	B 249.677†	12733.1	12116.8	492.02 µg/L	492.02 ppb	03:28:51
2	Ba 233.527†	21363.0	20990.6	504.84 µg/L	504.84 ppb	03:28:51
2	Be 313.107†	853526.9	840822.5	498.84 µg/L	498.84 ppb	03:28:45
2	Cd 226.502†	20623.9	20389.6	508.47 µg/L	508.47 ppb	03:28:51
2	Co 228.616†	11432.5	11222.2	507.64 µg/L	507.64 ppb	03:28:51
2	Cr 267.716†	25860.5	25439.4	511.28 µg/L	511.28 ppb	03:28:51
2	Cu 324.752†	80870.5	76852.5	502.36 µg/L	502.36 ppb	03:28:51
2	Mn 257.610†	165122.7	162368.4	508.93 µg/L	508.93 ppb	03:28:45
2	Mo 202.031†	5264.3	5173.7	506.83 µg/L	506.83 ppb	03:29:11
2	Ni 231.604†	10725.6	10217.7	508.81 µg/L	508.81 ppb	03:28:51
2	P 214.914†	1324.3	1284.9	2495.8 µg/L	2495.8 ppb	03:29:11
2	Pb 220.353†	2219.0	2087.7	507.64 µg/L	507.64 ppb	03:29:11

2	S 181.975 Axial†	264.5	240.7	998.16 µg/L	998.16 ppb	03:29:11
2	Sb 206.836†	577.8	544.8	502.20 µg/L	502.20 ppb	03:29:11
2	Se 196.026†	382.7	356.5	508.58 µg/L	508.58 ppb	03:29:11
2	SiO2†	29379.5	27452.4	5418.7 µg/L	5418.7 ppb	03:28:51
2	Si 251.611†	34314.2	33378.0	2537.5 µg/L	2537.5 ppb	03:28:51
2	Sn 189.927†	1240.0	1217.0	513.28 µg/L	513.28 ppb	03:29:11
2	Ti 334.940†	230411.4	226035.9	499.72 µg/L	499.72 ppb	03:28:45
2	Tl 190.801†	372.8	388.4	510.44 µg/L	510.44 ppb	03:29:11
2	U 409.014†	6254.7	6217.7	515.59 µg/L	515.59 ppb	03:28:51
2	V 292.402†	52664.6	51749.3	510.53 µg/L	510.53 ppb	03:28:51
2	Zn 213.857†	22716.4	21767.8	507.12 µg/L	507.12 ppb	03:28:51
3	Sc RADIAL	56633.2	56633.2	100 %		03:27:40
3	Al 396.153Radial†	7184.6	7159.8	4972.3 µg/L	4972.3 ppb	03:27:40
3	Ca 317.933Radial†	6039.8	5813.9	4966.1 µg/L	4966.1 ppb	03:28:00
3	Fe 238.204 Radial†	658.2	640.0	5057.1 µg/L	5057.1 ppb	03:28:00
3	K 766.490 Radial†	7744.9	7561.1	4938.3 µg/L	4938.3 ppb	03:27:40
3	Mg 279.077 IEC†	579.6	565.4	5055.2 µg/L	5055.2 ppb	03:28:00
3	Na 589.592 Radial†	32940.6	32388.4	9947.9 µg/L	9947.9 ppb	03:27:40
3	Sr 421.552†	52798.4	52641.3	485.62 µg/L	485.62 ppb	03:27:40
3	Sc 361.383	1995369.2	1995369.2	101.64 %		03:29:18
3	Y 371.029	1372396.7	1372396.7	101.45 %		03:29:18
3	Ag 328.068†	62762.1	62149.3	463.57 µg/L	463.57 ppb	03:29:24
3	As 188.979†	237.8	234.4	419.40 µg/L	419.40 ppb	03:29:44
3	B 249.677†	11637.0	11064.8	449.03 µg/L	449.03 ppb	03:29:24
3	Ba 233.527†	18864.8	18577.0	446.77 µg/L	446.77 ppb	03:29:24
3	Be 313.107†	780539.5	770780.0	457.29 µg/L	457.29 ppb	03:29:18
3	Cd 226.502†	18108.9	17957.9	447.76 µg/L	447.76 ppb	03:29:24
3	Co 228.616†	9930.0	9767.6	441.78 µg/L	441.78 ppb	03:29:24
3	Cr 267.716†	21775.0	21473.5	431.57 µg/L	431.57 ppb	03:29:24
3	Cu 324.752†	71176.3	67482.2	441.19 µg/L	441.19 ppb	03:29:24
3	Mn 257.610†	151372.1	149181.6	467.63 µg/L	467.63 ppb	03:29:18
3	Mo 202.031†	4263.6	4200.0	411.48 µg/L	411.48 ppb	03:29:44
3	Ni 231.604†	9362.5	8898.8	443.14 µg/L	443.14 ppb	03:29:24
3	P 214.914†	1081.8	1048.9	2033.5 µg/L	2033.5 ppb	03:29:44
3	Pb 220.353†	1856.2	1735.3	421.89 µg/L	421.89 ppb	03:29:44
3	S 181.975 Axial†	226.1	203.5	843.90 µg/L	843.90 ppb	03:29:44
3	Sb 206.836†	481.4	451.1	415.55 µg/L	415.55 ppb	03:29:44
3	Se 196.026†	325.5	300.9	430.53 µg/L	430.53 ppb	03:29:44
3	SiO2†	26607.2	24785.6	4892.3 µg/L	4892.3 ppb	03:29:24
3	Si 251.611†	30917.4	30107.1	2288.8 µg/L	2288.8 ppb	03:29:24
3	Sn 189.927†	968.6	952.6	401.75 µg/L	401.75 ppb	03:29:44
3	Ti 334.940†	209100.9	205546.4	454.39 µg/L	454.39 ppb	03:29:18
3	Tl 190.801†	325.7	342.9	450.90 µg/L	450.90 ppb	03:29:44
3	U 409.014†	5326.0	5317.0	440.75 µg/L	440.75 ppb	03:29:24
3	V 292.402†	45458.5	44768.6	441.50 µg/L	441.50 ppb	03:29:24
3	Zn 213.857†	19829.7	18974.8	441.98 µg/L	441.98 ppb	03:29:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1996235.8	101.69 %	0.153			0.15%
Sc RADIAL	56905.6	101 %	0.5			0.51%
Y 371.029	1372360.4	101.45 %	0.109			0.11%
Ag 328.068†	65541.9	489.01 µg/L	22.025	489.01 ppb	22.025	4.50%
QC value within limits for Ag 328.068 Recovery = 97.80%						
Al 396.153Radial†	7156.1	4968.3 µg/L	21.59	4968.3 ppb	21.59	0.43%
QC value within limits for Al 396.153Radial Recovery = 99.37%						
As 188.979†	269.6	482.31 µg/L	54.785	482.31 ppb	54.785	11.36%
QC value within limits for As 188.979 Recovery = 96.46%						
B 249.677†	11769.0	477.82 µg/L	24.940	477.82 ppb	24.940	5.22%
QC value within limits for B 249.677 Recovery = 95.56%						
Ba 233.527†	20209.2	486.04 µg/L	34.017	486.04 ppb	34.017	7.00%
QC value within limits for Ba 233.527 Recovery = 97.21%						
Be 313.107†	819812.7	486.38 µg/L	25.278	486.38 ppb	25.278	5.20%
QC value within limits for Be 313.107 Recovery = 97.28%						
Ca 317.933Radial†	5783.8	4940.4 µg/L	26.03	4940.4 ppb	26.03	0.53%
QC value within limits for Ca 317.933Radial Recovery = 98.81%						
Cd 226.502†	19603.4	488.85 µg/L	35.593	488.85 ppb	35.593	7.28%
QC value within limits for Cd 226.502 Recovery = 97.77%						
Co 228.616†	10758.5	486.65 µg/L	38.886	486.65 ppb	38.886	7.99%

QC value within limits for Co 228.616 Recovery = 97.33%					
Cr 267.716†	24142.1	485.20 µg/L	46.451	485.20 ppb	9.57%
QC value within limits for Cr 267.716 Recovery = 97.04%					
Cu 324.752†	73801.9	482.44 µg/L	35.731	482.44 ppb	7.41%
QC value within limits for Cu 324.752 Recovery = 96.49%					
Fe 238.204 Radial†	638.4	5045.1 µg/L	38.32	5045.1 ppb	0.76%
QC value within limits for Fe 238.204 Radial Recovery = 100.90%					
K 766.490 Radial†	7559.7	4937.4 µg/L	31.20	4937.4 ppb	0.63%
QC value within limits for K 766.490 Radial Recovery = 98.75%					
Mg 279.077 IEC†	562.4	5030.3 µg/L	43.71	5030.3 ppb	0.87%
QC value within limits for Mg 279.077 IEC Recovery = 100.61%					
Mn 257.610†	158353.4	496.36 µg/L	24.937	496.36 ppb	5.02%
QC value within limits for Mn 257.610 Recovery = 99.27%					
Mo 202.031†	4899.7	480.00 µg/L	59.804	480.00 ppb	12.46%
QC value within limits for Mo 202.031 Recovery = 96.00%					
Na 589.592 Radial†	32378.9	9945.0 µg/L	45.62	9945.0 ppb	0.46%
QC value within limits for Na 589.592 Radial Recovery = 99.45%					
Ni 231.604†	9793.7	487.70 µg/L	38.604	487.70 ppb	7.92%
QC value within limits for Ni 231.604 Recovery = 97.54%					
P 214.914†	1209.7	2348.7 µg/L	273.13	2348.7 ppb	11.63%
QC value within limits for P 214.914 Recovery = 93.95%					
Pb 220.353†	1977.4	480.83 µg/L	51.115	480.83 ppb	10.63%
QC value within limits for Pb 220.353 Recovery = 96.17%					
S 181.975 Axial†	229.8	952.84 µg/L	94.793	952.84 ppb	9.95%
QC value within limits for S 181.975 Axial Recovery = 95.28%					
Sb 206.836†	518.0	477.49 µg/L	54.007	477.49 ppb	11.31%
QC value within limits for Sb 206.836 Recovery = 95.50%					
Se 196.026†	339.0	483.96 µg/L	46.317	483.96 ppb	9.57%
QC value within limits for Se 196.026 Recovery = 96.79%					
SiO2†	26588.1	5248.2 µg/L	308.22	5248.2 ppb	5.87%
QC value within limits for SiO2 Recovery = 98.14%					
Si 251.611†	32303.4	2455.8 µg/L	144.61	2455.8 ppb	5.89%
QC value within limits for Si 251.611 Recovery = 98.23%					
Sn 189.927†	1138.4	480.09 µg/L	68.112	480.09 ppb	14.19%
QC value within limits for Sn 189.927 Recovery = 96.02%					
Sr 421.552†	52598.8	485.23 µg/L	2.171	485.23 ppb	0.45%
QC value within limits for Sr 421.552 Recovery = 97.05%					
Ti 334.940†	219741.4	485.80 µg/L	27.255	485.80 ppb	5.61%
QC value within limits for Ti 334.940 Recovery = 97.16%					
Tl 190.801†	372.1	489.14 µg/L	33.189	489.14 ppb	6.79%
QC value within limits for Tl 190.801 Recovery = 97.83%					
U 409.014†	5896.7	488.92 µg/L	41.795	488.92 ppb	8.55%
QC value within limits for U 409.014 Recovery = 97.78%					
V 292.402†	49467.3	487.99 µg/L	40.268	487.99 ppb	8.25%
QC value within limits for V 292.402 Recovery = 97.60%					
Zn 213.857†	20858.0	485.90 µg/L	38.044	485.90 ppb	7.83%
QC value within limits for Zn 213.857 Recovery = 97.18%					

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 03:29:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56695.0	56695.0	100 %		03:30:26
1	Al 396.153Radial†	1.6	-5.8	-4.0734 µg/L	-4.0734 ppb	03:30:26
1	Ca 317.933Radial†	197.4	-14.5	-12.410 µg/L	-12.410 ppb	03:30:46
1	Fe 238.204 Radial†	19.7	3.1	24.221 µg/L	24.221 ppb	03:30:46
1	K 766.490 Radial†	142.7	-22.8	-14.871 µg/L	-14.871 ppb	03:30:26
1	Mg 279.077 IEC†	10.8	-2.1	-18.332 µg/L	-18.332 ppb	03:30:46
1	Na 589.592 Radial†	435.4	-38.3	-11.758 µg/L	-11.758 ppb	03:30:26
1	Sr 421.552†	60.5	31.5	0.2906 µg/L	0.2906 ppb	03:30:26
1	Sc 361.383	2006882.6	2006882.6	102.23 %		03:31:48
1	Y 371.029	1386009.6	1386009.6	102.46 %		03:31:48
1	Ag 328.068†	-395.2	15.0	0.1118 µg/L	0.1118 ppb	03:31:54
1	As 188.979†	2.1	2.5	4.4637 µg/L	4.4637 ppb	03:32:14
1	B 249.677†	396.3	3.5	0.1302 µg/L	0.1302 ppb	03:31:54
1	Ba 233.527†	-11.0	6.3	0.1505 µg/L	0.1505 ppb	03:32:14
1	Be 313.107†	-2589.8	322.4	0.1912 µg/L	0.1912 ppb	03:31:54
1	Cd 226.502†	-144.9	-0.0	-0.0041 µg/L	-0.0041 ppb	03:32:14
1	Co 228.616†	4.0	2.0	0.0920 µg/L	0.0920 ppb	03:32:14
1	Cr 267.716†	-36.6	14.6	0.2923 µg/L	0.2923 ppb	03:31:54
1	Cu 324.752†	2522.6	-76.2	-0.4938 µg/L	-0.4938 ppb	03:31:54
1	Mn 257.610†	-176.4	83.5	0.2654 µg/L	0.2654 ppb	03:32:14
1	Mo 202.031†	8.6	13.8	1.3521 µg/L	1.3521 ppb	03:32:14
1	Ni 231.604†	312.5	-6.7	-0.3335 µg/L	-0.3335 ppb	03:32:14
1	P 214.914†	10.1	-5.4	-10.701 µg/L	-10.701 ppb	03:32:14
1	Pb 220.353†	78.0	-14.6	-3.5690 µg/L	-3.5690 ppb	03:32:14
1	S 181.975 Axial†	15.8	-3.5	-14.406 µg/L	-14.406 ppb	03:32:14
1	Sb 206.836†	16.9	-5.9	-5.4181 µg/L	-5.4181 ppb	03:32:14
1	Se 196.026†	15.6	-4.0	-5.5583 µg/L	-5.5583 ppb	03:32:14
1	SiO2†	1460.5	37.1	7.3190 µg/L	7.3190 ppb	03:31:54
1	Si 251.611†	391.4	72.2	5.4895 µg/L	5.4895 ppb	03:32:14
1	Sn 189.927†	2.0	1.6	0.6628 µg/L	0.6628 ppb	03:32:14
1	Ti 334.940†	266.4	85.6	0.1905 µg/L	0.1905 ppb	03:31:54
1	Tl 190.801†	-25.4	-2.5	-3.1841 µg/L	-3.1841 ppb	03:32:14
1	U 409.014†	57.5	133.3	11.074 µg/L	11.074 ppb	03:31:54
1	V 292.402†	-58.5	-12.5	-0.0959 µg/L	-0.0959 ppb	03:31:54
1	Zn 213.857†	534.9	-11.1	-0.2594 µg/L	-0.2594 ppb	03:32:14
2	Sc RADIAL	57182.6	57182.6	101 %		03:30:52
2	Al 396.153Radial†	7.2	-0.3	-0.1987 µg/L	-0.1987 ppb	03:30:52
2	Ca 317.933Radial†	203.6	-10.1	-8.6346 µg/L	-8.6346 ppb	03:31:12
2	Fe 238.204 Radial†	16.9	0.1	0.7221 µg/L	0.7221 ppb	03:31:12
2	K 766.490 Radial†	233.7	65.9	43.029 µg/L	43.029 ppb	03:30:52
2	Mg 279.077 IEC†	7.9	-5.0	-44.666 µg/L	-44.666 ppb	03:31:12
2	Na 589.592 Radial†	448.7	-28.9	-8.8827 µg/L	-8.8827 ppb	03:30:52
2	Sr 421.552†	21.0	-8.0	-0.0741 µg/L	-0.0741 ppb	03:30:52
2	Sc 361.383	2021110.7	2021110.7	102.95 %		03:32:21
2	Y 371.029	1395982.9	1395982.9	103.20 %		03:32:21
2	Ag 328.068†	-384.4	28.3	0.2109 µg/L	0.2109 ppb	03:32:26
2	As 188.979†	-3.3	-2.8	-4.9386 µg/L	-4.9386 ppb	03:32:47
2	B 249.677†	352.5	-41.7	-1.7012 µg/L	-1.7012 ppb	03:32:26
2	Ba 233.527†	-10.3	7.1	0.1709 µg/L	0.1709 ppb	03:32:47
2	Be 313.107†	-2633.9	297.4	0.1763 µg/L	0.1763 ppb	03:32:26
2	Cd 226.502†	-139.1	6.5	0.1628 µg/L	0.1628 ppb	03:32:47
2	Co 228.616†	10.2	8.0	0.3594 µg/L	0.3594 ppb	03:32:47
2	Cr 267.716†	-42.0	9.6	0.1935 µg/L	0.1935 ppb	03:32:26
2	Cu 324.752†	2554.9	-62.2	-0.4056 µg/L	-0.4056 ppb	03:32:26
2	Mn 257.610†	-152.5	107.8	0.3396 µg/L	0.3396 ppb	03:32:47
2	Mo 202.031†	-2.4	3.0	0.2950 µg/L	0.2950 ppb	03:32:47
2	Ni 231.604†	319.3	-2.2	-0.1083 µg/L	-0.1083 ppb	03:32:47
2	P 214.914†	13.4	-2.3	-4.5724 µg/L	-4.5724 ppb	03:32:47
2	Pb 220.353†	94.8	1.2	0.2888 µg/L	0.2888 ppb	03:32:47

2	S 181.975 Axial†	18.1	-1.4	-5.5998 µg/L	-5.5998 ppb	03:32:47
2	Sb 206.836†	23.2	0.1	0.0647 µg/L	0.0647 ppb	03:32:47
2	Se 196.026†	24.7	4.7	6.5863 µg/L	6.5863 ppb	03:32:47
2	SiO2†	1505.1	70.4	13.886 µg/L	13.886 ppb	03:32:26
2	Si 251.611†	417.6	94.9	7.2178 µg/L	7.2178 ppb	03:32:47
2	Sn 189.927†	-1.5	-1.8	-0.7598 µg/L	-0.7598 ppb	03:32:47
2	Ti 334.940†	414.1	227.2	0.5060 µg/L	0.5060 ppb	03:32:26
2	Tl 190.801†	-23.3	-0.2	-0.2608 µg/L	-0.2608 ppb	03:32:47
2	U 409.014†	-64.5	14.4	1.2004 µg/L	1.2004 ppb	03:32:26
2	V 292.402†	-20.8	24.5	0.2433 µg/L	0.2433 ppb	03:32:26
2	Zn 213.857†	539.6	-10.3	-0.2380 µg/L	-0.2380 ppb	03:32:47
3	Sc RADIAL	56943.0	56943.0	101 %		03:31:18
3	Al 396.153Radial†	-25.3	-32.5	-22.602 µg/L	-22.602 ppb	03:31:18
3	Ca 317.933Radial†	204.8	-8.1	-6.8895 µg/L	-6.8895 ppb	03:31:38
3	Fe 238.204 Radial†	14.5	-2.2	-17.407 µg/L	-17.407 ppb	03:31:38
3	K 766.490 Radial†	204.3	37.7	24.623 µg/L	24.623 ppb	03:31:18
3	Mg 279.077 IEC†	7.7	-5.2	-46.333 µg/L	-46.333 ppb	03:31:38
3	Na 589.592 Radial†	373.5	-101.7	-31.221 µg/L	-31.221 ppb	03:31:18
3	Sr 421.552†	7.3	-21.5	-0.1986 µg/L	-0.1986 ppb	03:31:18
3	Sc 361.383	2010796.9	2010796.9	102.43 %		03:32:53
3	Y 371.029	1388039.3	1388039.3	102.61 %		03:32:53
3	Ag 328.068†	-449.1	-36.8	-0.2718 µg/L	-0.2718 ppb	03:32:58
3	As 188.979†	0.2	0.6	1.1509 µg/L	1.1509 ppb	03:33:19
3	B 249.677†	382.5	-10.7	-0.4284 µg/L	-0.4284 ppb	03:32:58
3	Ba 233.527†	-6.8	10.5	0.2515 µg/L	0.2515 ppb	03:33:19
3	Be 313.107†	-2704.1	215.7	0.1279 µg/L	0.1279 ppb	03:32:58
3	Cd 226.502†	-146.2	-1.0	-0.0243 µg/L	-0.0243 ppb	03:33:19
3	Co 228.616†	0.0	-1.9	-0.0868 µg/L	-0.0868 ppb	03:33:19
3	Cr 267.716†	-30.6	20.5	0.4124 µg/L	0.4124 ppb	03:32:58
3	Cu 324.752†	2556.5	-47.8	-0.3146 µg/L	-0.3146 ppb	03:32:58
3	Mn 257.610†	-191.0	69.6	0.2174 µg/L	0.2174 ppb	03:33:19
3	Mo 202.031†	3.1	8.4	0.8194 µg/L	0.8194 ppb	03:33:19
3	Ni 231.604†	313.6	-6.2	-0.3090 µg/L	-0.3090 ppb	03:33:19
3	P 214.914†	12.1	-3.5	-6.9606 µg/L	-6.9606 ppb	03:33:19
3	Pb 220.353†	85.6	-7.4	-1.7980 µg/L	-1.7980 ppb	03:33:19
3	S 181.975 Axial†	15.6	-3.7	-15.522 µg/L	-15.522 ppb	03:33:19
3	Sb 206.836†	19.5	-3.4	-3.1307 µg/L	-3.1307 ppb	03:33:19
3	Se 196.026†	9.7	-9.9	-13.896 µg/L	-13.896 ppb	03:33:19
3	SiO2†	1506.4	79.1	15.615 µg/L	15.615 ppb	03:32:58
3	Si 251.611†	419.5	98.9	7.5182 µg/L	7.5182 ppb	03:33:19
3	Sn 189.927†	3.1	2.6	1.1022 µg/L	1.1022 ppb	03:33:19
3	Ti 334.940†	352.5	169.1	0.3777 µg/L	0.3777 ppb	03:32:58
3	Tl 190.801†	-19.2	3.6	4.6850 µg/L	4.6850 ppb	03:33:19
3	U 409.014†	-44.2	33.9	2.8206 µg/L	2.8206 ppb	03:32:58
3	V 292.402†	-14.6	30.5	0.3051 µg/L	0.3051 ppb	03:32:58
3	Zn 213.857†	534.4	-12.7	-0.2922 µg/L	-0.2922 ppb	03:33:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2012930.1	102.54 %	0.374			0.37%
Sc RADIAL	56940.2	101 %	0.4			0.43%
Y 371.029	1390010.6	102.75 %	0.390			0.38%
Ag 328.068†	2.1	0.0169 µg/L	0.25497	0.0169 ppb	0.25497	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-12.9	-8.9581 µg/L	11.97390	-8.9581 ppb	11.97390	133.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.1	0.2253 µg/L	4.76902	0.2253 ppb	4.76902	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-16.3	-0.6664 µg/L	0.93864	-0.6664 ppb	0.93864	140.84%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.9	0.1910 µg/L	0.05341	0.1910 ppb	0.05341	27.97%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	278.5	0.1651 µg/L	0.03313	0.1651 ppb	0.03313	20.06%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-10.9	-9.3112 µg/L	2.82155	-9.3112 ppb	2.82155	30.30%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	1.8	0.0448 µg/L	0.10272	0.0448 ppb	0.10272	229.28%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.7	0.1215 µg/L	0.22455	0.1215 ppb	0.22455	184.76%

QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	14.9	0.2994 µg/L	0.10965	0.2994 ppb	0.10965	36.62%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-62.0	-0.4047 µg/L	0.08965	-0.4047 ppb	0.08965	22.15%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.3	2.5122 µg/L	20.87142	2.5122 ppb	20.87142	830.82%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	26.9	17.594 µg/L	29.5833	17.594 ppb	29.5833	168.15%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-4.1	-36.444 µg/L	15.7073	-36.444 ppb	15.7073	43.10%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	87.0	0.2742 µg/L	0.06156	0.2742 ppb	0.06156	22.45%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	8.4	0.8222 µg/L	0.52855	0.8222 ppb	0.52855	64.29%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-56.3	-17.287 µg/L	12.1524	-17.287 ppb	12.1524	70.30%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-5.0	-0.2503 µg/L	0.12354	-0.2503 ppb	0.12354	49.36%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-3.8	-7.4113 µg/L	3.08897	-7.4113 ppb	3.08897	41.68%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-7.0	-1.6927 µg/L	1.93107	-1.6927 ppb	1.93107	114.08%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.9	-11.843 µg/L	5.4352	-11.843 ppb	5.4352	45.90%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	-3.1	-2.8280 µg/L	2.75388	-2.8280 ppb	2.75388	97.38%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.1	-4.2894 µg/L	10.30003	-4.2894 ppb	10.30003	240.13%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	62.2	12.274 µg/L	4.3770	12.274 ppb	4.3770	35.66%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	88.7	6.7418 µg/L	1.09492	6.7418 ppb	1.09492	16.24%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	0.8	0.3350 µg/L	0.97332	0.3350 ppb	0.97332	290.51%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	0.6	0.0060 µg/L	0.25423	0.0060 ppb	0.25423	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	160.6	0.3581 µg/L	0.15867	0.3581 ppb	0.15867	44.31%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.3	0.4134 µg/L	3.97762	0.4134 ppb	3.97762	962.27%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	60.6	5.0316 µg/L	5.29514	5.0316 ppb	5.29514	105.24%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	14.2	0.1508 µg/L	0.21593	0.1508 ppb	0.21593	143.17%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-11.4	-0.2632 µg/L	0.02732	-0.2632 ppb	0.02732	10.38%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: 245979002|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 234

Date Collected: 2/20/2010 03:33:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979002|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58144.1	58144.1	103 %		03:34:08
1	Al 396.153Radial†	130496.6	126789.4	88201 µg/L	88201 ppb	03:34:08
1	Ca 317.933Radial†	37275.5	36007.4	30757 µg/L	30757 ppb	03:34:28
1	Fe 238.204 Radial†	15264.7	14815.3	116850 µg/L	116850 ppb	03:34:28
1	K 766.490 Radial†	14782.3	14198.2	9273.1 µg/L	9273.1 ppb	03:34:08
1	Mg 279.077 IEC†	1639.0	1579.7	13996 µg/L	13996 ppb	03:34:28
1	Na 589.592 Radial†	2340.7	1802.1	553.51 µg/L	553.51 ppb	03:34:28
1	Sr 421.552†	19696.1	19108.9	176.28 µg/L	176.28 ppb	03:34:08
1	Sc 361.383	1991682.4	1991682.4	101.45 %		03:35:34
1	Y 371.029	1389568.2	1389568.2	102.72 %		03:35:34
1	Ag 328.068†	-1101.1	-683.7	3.5027 µg/L	3.5027 ppb	03:35:40
1	As 188.979†	18.6	18.8	38.878 µg/L	38.878 ppb	03:36:00
1	B 249.677†	1552.9	1146.5	-14.055 µg/L	-14.055 ppb	03:35:40
1	Ba 233.527†	45426.9	44792.6	1075.7 µg/L	1075.7 ppb	03:35:40
1	Be 313.107†	303085.4	301594.6	178.19 µg/L	178.19 ppb	03:35:34
1	Cd 226.502†	339.7	476.5	-1.2403 µg/L	-1.2403 ppb	03:36:00
1	Co 228.616†	792.7	779.4	30.870 µg/L	30.870 ppb	03:36:00
1	Cr 267.716†	5855.5	5821.9	117.05 µg/L	117.05 ppb	03:35:40
1	Cu 324.752†	854623.2	839823.4	5498.2 µg/L	5498.2 ppb	03:35:34
1	Mn 257.610†	487617.2	480880.3	1520.9 µg/L	1520.9 ppb	03:35:34
1	Mo 202.031†	57.1	61.7	10.479 µg/L	10.479 ppb	03:36:00
1	Ni 231.604†	1913.7	1573.9	79.937 µg/L	79.937 ppb	03:36:00
1	P 214.914†	1065.9	1035.3	1402.1 µg/L	1402.1 ppb	03:36:00
1	Pb 220.353†	10668.1	10424.1	2519.2 µg/L	2519.2 ppb	03:35:40
1	S 181.975 Axial†	134.4	113.5	470.67 µg/L	470.67 ppb	03:36:00
1	Sb 206.836†	100.7	76.8	66.586 µg/L	66.586 ppb	03:36:00
1	Se 196.026†	-52.2	-70.7	198.94 µg/L	198.94 ppb	03:36:00
1	SiO2†	271815.8	266526.1	52609 µg/L	52609 ppb	03:35:34
1	Si 251.611†	325789.0	320806.2	24388 µg/L	24388 ppb	03:35:34
1	Sn 189.927†	118.6	116.5	38.187 µg/L	38.187 ppb	03:36:00
1	Ti 334.940†	973849.1	959708.2	2122.5 µg/L	2122.5 ppb	03:35:34
1	Tl 190.801†	-48.0	-24.9	19.975 µg/L	19.975 ppb	03:36:00
1	U 409.014†	69947.1	69021.1	5716.5 µg/L	5716.5 ppb	03:35:34
1	V 292.402†	18976.4	18749.0	202.74 µg/L	202.74 ppb	03:35:40
1	Zn 213.857†	36457.5	35400.3	815.01 µg/L	815.01 ppb	03:35:40
2	Sc RADIAL	58254.9	58254.9	103 %		03:34:34
2	Al 396.153Radial†	131772.0	127785.1	88894 µg/L	88894 ppb	03:34:34
2	Ca 317.933Radial†	37371.9	36032.0	30778 µg/L	30778 ppb	03:34:54
2	Fe 238.204 Radial†	15301.9	14823.2	116910 µg/L	116910 ppb	03:34:54
2	K 766.490 Radial†	14889.6	14275.0	9323.2 µg/L	9323.2 ppb	03:34:34
2	Mg 279.077 IEC†	1652.6	1589.8	14086 µg/L	14086 ppb	03:34:54
2	Na 589.592 Radial†	2373.6	1829.7	561.98 µg/L	561.98 ppb	03:34:54
2	Sr 421.552†	19862.7	19234.0	177.44 µg/L	177.44 ppb	03:34:34
2	Sc 361.383	2022669.8	2022669.8	103.03 %		03:36:08
2	Y 371.029	1411663.2	1411663.2	104.35 %		03:36:08
2	Ag 328.068†	-1122.5	-687.9	3.4589 µg/L	3.4589 ppb	03:36:14
2	As 188.979†	18.3	18.2	37.746 µg/L	37.746 ppb	03:36:35
2	B 249.677†	1529.0	1099.8	-15.993 µg/L	-15.993 ppb	03:36:14
2	Ba 233.527†	45647.5	44320.6	1064.3 µg/L	1064.3 ppb	03:36:14
2	Be 313.107†	307690.9	301487.8	178.13 µg/L	178.13 ppb	03:36:08
2	Cd 226.502†	338.2	470.0	-1.4127 µg/L	-1.4127 ppb	03:36:35
2	Co 228.616†	803.5	777.9	30.811 µg/L	30.811 ppb	03:36:35
2	Cr 267.716†	5859.6	5737.5	115.35 µg/L	115.35 ppb	03:36:14
2	Cu 324.752†	867016.6	838946.8	5492.5 µg/L	5492.5 ppb	03:36:08
2	Mn 257.610†	495162.0	480839.8	1520.7 µg/L	1520.7 ppb	03:36:08
2	Mo 202.031†	70.2	73.5	11.636 µg/L	11.636 ppb	03:36:35
2	Ni 231.604†	1912.8	1544.2	78.453 µg/L	78.453 ppb	03:36:35
2	P 214.914†	1053.6	1007.2	1347.3 µg/L	1347.3 ppb	03:36:35
2	Pb 220.353†	10693.6	10287.9	2486.2 µg/L	2486.2 ppb	03:36:14

2	S 181.975 Axial†	125.7	103.1	427.42 µg/L	427.42 ppb	03:36:35
2	Sb 206.836†	95.4	70.1	60.509 µg/L	60.509 ppb	03:36:35
2	Se 196.026†	-49.9	-67.7	203.23 µg/L	203.23 ppb	03:36:35
2	SiO2†	275707.2	266198.5	52544 µg/L	52544 ppb	03:36:08
2	Si 251.611†	330645.3	320600.0	24373 µg/L	24373 ppb	03:36:08
2	Sn 189.927†	121.8	117.9	38.748 µg/L	38.748 ppb	03:36:35
2	Ti 334.940†	988005.8	958742.6	2120.3 µg/L	2120.3 ppb	03:36:08
2	Tl 190.801†	-57.7	-33.6	8.7497 µg/L	8.7497 ppb	03:36:35
2	U 409.014†	70911.3	68900.7	5706.4 µg/L	5706.4 ppb	03:36:08
2	V 292.402†	19005.9	18491.1	200.23 µg/L	200.23 ppb	03:36:14
2	Zn 213.857†	36539.8	34929.6	803.98 µg/L	803.98 ppb	03:36:14
3	Sc RADIAL	58812.2	58812.2	104 %		03:35:00
3	Al 396.153Radial†	133088.1	127838.5	88931 µg/L	88931 ppb	03:35:00
3	Ca 317.933Radial†	37557.0	35866.4	30636 µg/L	30636 ppb	03:35:20
3	Fe 238.204 Radial†	15372.7	14750.6	116340 µg/L	116340 ppb	03:35:20
3	K 766.490 Radial†	15092.8	14333.3	9361.3 µg/L	9361.3 ppb	03:35:00
3	Mg 279.077 IEC†	1657.5	1579.4	13994 µg/L	13994 ppb	03:35:20
3	Na 589.592 Radial†	2347.4	1782.7	547.54 µg/L	547.54 ppb	03:35:20
3	Sr 421.552†	20072.6	19253.1	177.61 µg/L	177.61 ppb	03:35:00
3	Sc 361.383	2023702.1	2023702.1	103.09 %		03:36:43
3	Y 371.029	1410769.4	1410769.4	104.29 %		03:36:43
3	Ag 328.068†	-964.7	-534.2	4.4950 µg/L	4.4950 ppb	03:36:49
3	As 188.979†	16.4	16.3	34.403 µg/L	34.403 ppb	03:37:09
3	B 249.677†	1504.9	1075.7	-16.687 µg/L	-16.687 ppb	03:36:49
3	Ba 233.527†	43483.5	42198.9	1013.4 µg/L	1013.4 ppb	03:36:49
3	Be 313.107†	293716.0	287778.9	170.03 µg/L	170.03 ppb	03:36:43
3	Cd 226.502†	284.1	417.3	-2.6704 µg/L	-2.6704 ppb	03:37:09
3	Co 228.616†	714.7	691.4	27.102 µg/L	27.102 ppb	03:37:09
3	Cr 267.716†	5524.6	5409.6	108.76 µg/L	108.76 ppb	03:36:49
3	Cu 324.752†	830559.4	803151.8	5258.7 µg/L	5258.7 ppb	03:36:43
3	Mn 257.610†	474412.1	460465.9	1456.9 µg/L	1456.9 ppb	03:36:43
3	Mo 202.031†	68.9	72.2	11.492 µg/L	11.492 ppb	03:37:09
3	Ni 231.604†	1736.2	1371.9	69.862 µg/L	69.862 ppb	03:37:09
3	P 214.914†	977.2	932.6	1224.7 µg/L	1224.7 ppb	03:37:09
3	Pb 220.353†	10299.2	9899.9	2392.6 µg/L	2392.6 ppb	03:36:49
3	S 181.975 Axial†	117.9	95.4	395.79 µg/L	395.79 ppb	03:37:09
3	Sb 206.836†	83.5	58.5	49.939 µg/L	49.939 ppb	03:37:09
3	Se 196.026†	-36.9	-55.1	219.55 µg/L	219.55 ppb	03:37:09
3	SiO2†	266383.3	257017.2	50732 µg/L	50732 ppb	03:36:43
3	Si 251.611†	319560.1	309683.0	23543 µg/L	23543 ppb	03:36:43
3	Sn 189.927†	109.5	105.8	33.723 µg/L	33.723 ppb	03:37:09
3	Ti 334.940†	941295.1	912941.1	2019.0 µg/L	2019.0 ppb	03:36:43
3	Tl 190.801†	-45.2	-21.4	22.987 µg/L	22.987 ppb	03:37:09
3	U 409.014†	67545.0	65600.1	5432.3 µg/L	5432.3 ppb	03:36:43
3	V 292.402†	17961.7	17468.7	189.90 µg/L	189.90 ppb	03:36:49
3	Zn 213.857†	34946.7	33366.1	767.74 µg/L	767.74 ppb	03:36:49

Mean Data: 245979002|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2012684.8	102.52 %	0.927			0.90%
Sc RADIAL	58403.7	103 %	0.6			0.61%
Y 371.029	1404000.3	103.79 %	0.925			0.89%
Ag 328.068†	-635.2	3.8189 µg/L	0.58595	3.8189 ppb	0.58595	15.34%
Al 396.153Radial†	127471.0	88675 µg/L	411.0	88675 ppb	411.0	0.46%
As 188.979†	17.8	37.009 µg/L	2.3266	37.009 ppb	2.3266	6.29%
B 249.677†	1107.4	-15.578 µg/L	1.3643	-15.578 ppb	1.3643	8.76%
Ba 233.527†	43770.7	1051.1 µg/L	33.18	1051.1 ppb	33.18	3.16%
Be 313.107†	296953.8	175.45 µg/L	4.693	175.45 ppb	4.693	2.68%
Ca 317.933Radial†	35968.6	30724 µg/L	76.3	30724 ppb	76.3	0.25%
Cd 226.502†	454.6	-1.7744 µg/L	0.78069	-1.7744 ppb	0.78069	44.00%
Co 228.616†	749.6	29.594 µg/L	2.1589	29.594 ppb	2.1589	7.29%
Cr 267.716†	5656.3	113.72 µg/L	4.379	113.72 ppb	4.379	3.85%
Cu 324.752†	827307.3	5416.5 µg/L	136.62	5416.5 ppb	136.62	2.52%
Fe 238.204 Radial†	14796.4	116700 µg/L	314.4	116700 ppb	314.4	0.27%
K 766.490 Radial†	14268.8	9319.2 µg/L	44.26	9319.2 ppb	44.26	0.47%
Mg 279.077 IEC†	1583.0	14025 µg/L	52.9	14025 ppb	52.9	0.38%
Mn 257.610†	474062.0	1499.5 µg/L	36.91	1499.5 ppb	36.91	2.46%
Mo 202.031†	69.1	11.202 µg/L	0.6304	11.202 ppb	0.6304	5.63%
Na 589.592 Radial†	1804.8	554.34 µg/L	7.253	554.34 ppb	7.253	1.31%

Ni 231.604†	1496.7	76.084 µg/L	5.4395	76.084 ppb	5.4395	7.15%
P 214.914†	991.7	1324.7 µg/L	90.83	1324.7 ppb	90.83	6.86%
Pb 220.353†	10204.0	2466.0 µg/L	65.70	2466.0 ppb	65.70	2.66%
S 181.975 Axial†	104.0	431.30 µg/L	37.591	431.30 ppb	37.591	8.72%
Sb 206.836†	68.5	59.011 µg/L	8.4240	59.011 ppb	8.4240	14.28%
Se 196.026†	-64.5	207.24 µg/L	10.876	207.24 ppb	10.876	5.25%
SiO2†	263247.3	51962 µg/L	1065.5	51962 ppb	1065.5	2.05%
Si 251.611†	317029.8	24101 µg/L	483.7	24101 ppb	483.7	2.01%
Sn 189.927†	113.4	36.886 µg/L	2.7535	36.886 ppb	2.7535	7.46%
Sr 421.552†	19198.7	177.11 µg/L	0.723	177.11 ppb	0.723	0.41%
Ti 334.940†	943797.3	2087.3 µg/L	59.12	2087.3 ppb	59.12	2.83%
Tl 190.801†	-26.6	17.237 µg/L	7.5032	17.237 ppb	7.5032	43.53%
U 409.014†	67840.6	5618.4 µg/L	161.24	5618.4 ppb	161.24	2.87%
V 292.402†	18236.3	197.62 µg/L	6.807	197.62 ppb	6.807	3.44%
Zn 213.857†	34565.3	795.58 µg/L	24.729	795.58 ppb	24.729	3.11%

Sequence No.: 11

Sample ID: 245979003|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 235

Date Collected: 2/20/2010 03:37:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979003|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57848.0	57848.0	102 %		03:37:51
1	Al 396.153Radial†	37824.2	36932.5	25692 µg/L	25692 ppb	03:37:51
1	Ca 317.933Radial†	12129.0	11634.2	9937.7 µg/L	9937.7 ppb	03:38:11
1	Fe 238.204 Radial†	14082.6	13736.8	108340 µg/L	108340 ppb	03:37:51
1	K 766.490 Radial†	7013.6	6684.7	4365.9 µg/L	4365.9 ppb	03:37:51
1	Mg 279.077 IEC†	546.0	520.4	4535.9 µg/L	4535.9 ppb	03:38:11
1	Na 589.592 Radial†	5265.6	4670.3	1434.5 µg/L	1434.5 ppb	03:37:51
1	Sr 421.552†	7275.3	7076.4	65.281 µg/L	65.281 ppb	03:37:51
1	Sc 361.383	2029116.7	2029116.7	103.36 %		03:39:16
1	Y 371.029	1466049.5	1466049.5	108.38 %		03:39:16
1	Ag 328.068†	-1331.8	-886.9	0.6470 µg/L	0.6470 ppb	03:39:22
1	As 188.979†	13.3	13.3	29.670 µg/L	29.670 ppb	03:39:42
1	B 249.677†	1239.2	814.8	-23.133 µg/L	-23.133 ppb	03:39:22
1	Ba 233.527†	19808.6	19181.4	460.60 µg/L	460.60 ppb	03:39:22
1	Be 313.107†	30247.2	32119.1	18.069 µg/L	18.069 ppb	03:39:22
1	Cd 226.502†	220.9	355.4	-3.3038 µg/L	-3.3038 ppb	03:39:42
1	Co 228.616†	4043.5	3910.1	171.65 µg/L	171.65 ppb	03:39:42
1	Cr 267.716†	6074.5	5927.3	119.09 µg/L	119.09 ppb	03:39:22
1	Cu 324.752†	302156.4	289785.1	1906.6 µg/L	1906.6 ppb	03:39:16
1	Mn 257.610†	832649.4	805823.6	2537.7 µg/L	2537.7 ppb	03:39:16
1	Mo 202.031†	87.6	90.1	12.936 µg/L	12.936 ppb	03:39:42
1	Ni 231.604†	1887.0	1513.3	76.636 µg/L	76.636 ppb	03:39:42
1	P 214.914†	407.6	379.0	470.35 µg/L	470.35 ppb	03:39:42
1	Pb 220.353†	11282.6	10824.7	2624.1 µg/L	2624.1 ppb	03:39:22
1	S 181.975 Axial†	69.0	47.8	198.22 µg/L	198.22 ppb	03:39:42
1	Sb 206.836†	77.0	52.0	45.684 µg/L	45.684 ppb	03:39:42
1	Se 196.026†	-33.2	-51.4	217.04 µg/L	217.04 ppb	03:39:42
1	SiO2†	224018.8	215341.1	42506 µg/L	42506 ppb	03:39:16
1	Si 251.611†	268274.0	259237.8	19708 µg/L	19708 ppb	03:39:16
1	Sn 189.927†	41.9	40.2	5.8872 µg/L	5.8872 ppb	03:39:42
1	Ti 334.940†	1218400.2	1178596.7	2607.1 µg/L	2607.1 ppb	03:39:16
1	Tl 190.801†	-55.4	-31.2	10.075 µg/L	10.075 ppb	03:39:42
1	U 409.014†	17108.6	16629.2	1366.0 µg/L	1366.0 ppb	03:39:16
1	V 292.402†	6241.7	6083.4	73.814 µg/L	73.814 ppb	03:39:22
1	Zn 213.857†	24955.8	23609.7	545.13 µg/L	545.13 ppb	03:39:22
2	Sc RADIAL	57183.0	57183.0	101 %		03:38:17
2	Al 396.153Radial†	37619.3	37159.7	25850 µg/L	25850 ppb	03:38:17
2	Ca 317.933Radial†	12156.9	11799.5	10079 µg/L	10079 ppb	03:38:37
2	Fe 238.204 Radial†	13970.6	13786.1	108730 µg/L	108730 ppb	03:38:17
2	K 766.490 Radial†	6982.6	6733.6	4397.8 µg/L	4397.8 ppb	03:38:17
2	Mg 279.077 IEC†	547.0	527.6	4599.4 µg/L	4599.4 ppb	03:38:37
2	Na 589.592 Radial†	5221.6	4686.6	1439.5 µg/L	1439.5 ppb	03:38:17
2	Sr 421.552†	7219.1	7103.5	65.531 µg/L	65.531 ppb	03:38:17
2	Sc 361.383	2023703.1	2023703.1	103.09 %		03:39:50
2	Y 371.029	1462729.8	1462729.8	108.13 %		03:39:50
2	Ag 328.068†	-1300.0	-859.5	0.8664 µg/L	0.8664 ppb	03:39:56
2	As 188.979†	5.0	5.3	15.261 µg/L	15.261 ppb	03:40:16
2	B 249.677†	1197.8	777.8	-24.843 µg/L	-24.843 ppb	03:39:56
2	Ba 233.527†	19704.1	19131.3	459.39 µg/L	459.39 ppb	03:39:56
2	Be 313.107†	29885.3	31846.4	17.903 µg/L	17.903 ppb	03:39:56
2	Cd 226.502†	236.4	371.1	-2.9563 µg/L	-2.9563 ppb	03:40:16
2	Co 228.616†	4015.8	3893.6	170.87 µg/L	170.87 ppb	03:40:16
2	Cr 267.716†	6044.4	5913.8	118.82 µg/L	118.82 ppb	03:39:56
2	Cu 324.752†	302610.9	291007.9	1914.7 µg/L	1914.7 ppb	03:39:50
2	Mn 257.610†	835527.8	810770.8	2553.2 µg/L	2553.2 ppb	03:39:50
2	Mo 202.031†	87.5	90.2	12.966 µg/L	12.966 ppb	03:40:16
2	Ni 231.604†	1889.5	1520.6	77.004 µg/L	77.004 ppb	03:40:16
2	P 214.914†	401.6	374.3	459.82 µg/L	459.82 ppb	03:40:16
2	Pb 220.353†	11244.1	10816.5	2622.1 µg/L	2622.1 ppb	03:39:56

2	S 181.975 Axial†	64.4	43.6	180.72 µg/L	180.72 ppb	03:40:16
2	Sb 206.836†	73.1	48.4	42.373 µg/L	42.373 ppb	03:40:16
2	Se 196.026†	-36.8	-55.0	212.94 µg/L	212.94 ppb	03:40:16
2	SiO2†	224402.9	216293.4	42693 µg/L	42693 ppb	03:39:50
2	Si 251.611†	268680.7	260326.7	19791 µg/L	19791 ppb	03:39:50
2	Sn 189.927†	41.8	40.2	5.8663 µg/L	5.8663 ppb	03:40:16
2	Ti 334.940†	1221055.1	1184325.5	2619.8 µg/L	2619.8 ppb	03:39:50
2	Tl 190.801†	-51.1	-27.2	15.492 µg/L	15.492 ppb	03:40:16
2	U 409.014†	17121.3	16685.9	1370.6 µg/L	1370.6 ppb	03:39:50
2	V 292.402†	6095.9	5958.2	72.644 µg/L	72.644 ppb	03:39:56
2	Zn 213.857†	24911.2	23631.0	545.59 µg/L	545.59 ppb	03:39:56
3	Sc RADIAL	57807.8	57807.8	102 %		03:38:43
3	Al 396.153Radial†	38095.8	37223.7	25895 µg/L	25895 ppb	03:38:43
3	Ca 317.933Radial†	12131.3	11644.6	9946.6 µg/L	9946.6 ppb	03:39:03
3	Fe 238.204 Radial†	14159.7	13821.7	109010 µg/L	109010 ppb	03:38:43
3	K 766.490 Radial†	7123.1	6796.4	4438.9 µg/L	4438.9 ppb	03:38:43
3	Mg 279.077 IEC†	547.0	521.8	4547.4 µg/L	4547.4 ppb	03:39:03
3	Na 589.592 Radial†	5284.7	4692.5	1441.3 µg/L	1441.3 ppb	03:38:43
3	Sr 421.552†	7366.9	7170.8	66.152 µg/L	66.152 ppb	03:38:43
3	Sc 361.383	2013239.5	2013239.5	102.55 %		03:40:24
3	Y 371.029	1451404.4	1451404.4	107.29 %		03:40:24
3	Ag 328.068†	-1227.0	-794.8	1.3433 µg/L	1.3433 ppb	03:40:30
3	As 188.979†	10.7	10.9	25.353 µg/L	25.353 ppb	03:40:50
3	B 249.677†	1146.9	734.2	-26.779 µg/L	-26.779 ppb	03:40:30
3	Ba 233.527†	18703.8	18255.2	438.36 µg/L	438.36 ppb	03:40:30
3	Be 313.107†	27944.9	30104.9	16.910 µg/L	16.910 ppb	03:40:30
3	Cd 226.502†	196.5	333.3	-3.9374 µg/L	-3.9374 ppb	03:40:50
3	Co 228.616†	3652.3	3559.4	155.96 µg/L	155.96 ppb	03:40:50
3	Cr 267.716†	5636.8	5546.9	111.44 µg/L	111.44 ppb	03:40:30
3	Cu 324.752†	290591.1	280813.1	1848.2 µg/L	1848.2 ppb	03:40:24
3	Mn 257.610†	800517.5	780844.6	2459.5 µg/L	2459.5 ppb	03:40:24
3	Mo 202.031†	78.1	81.5	12.126 µg/L	12.126 ppb	03:40:50
3	Ni 231.604†	1726.6	1371.3	69.585 µg/L	69.585 ppb	03:40:50
3	P 214.914†	359.4	335.2	389.15 µg/L	389.15 ppb	03:40:50
3	Pb 220.353†	10801.0	10441.2	2531.0 µg/L	2531.0 ppb	03:40:30
3	S 181.975 Axial†	63.0	42.4	176.03 µg/L	176.03 ppb	03:40:50
3	Sb 206.836†	65.7	41.6	36.178 µg/L	36.178 ppb	03:40:50
3	Se 196.026†	-34.6	-53.0	216.59 µg/L	216.59 ppb	03:40:50
3	SiO2†	217283.1	210482.2	41546 µg/L	41546 ppb	03:40:24
3	Si 251.611†	260168.4	253380.9	19263 µg/L	19263 ppb	03:40:24
3	Sn 189.927†	34.4	33.1	2.8440 µg/L	2.8440 ppb	03:40:50
3	Ti 334.940†	1164502.6	1135337.3	2511.4 µg/L	2511.4 ppb	03:40:24
3	Tl 190.801†	-51.1	-27.5	13.869 µg/L	13.869 ppb	03:40:50
3	U 409.014†	16327.1	15997.7	1313.4 µg/L	1313.4 ppb	03:40:24
3	V 292.402†	5748.8	5650.4	69.595 µg/L	69.595 ppb	03:40:30
3	Zn 213.857†	23641.7	22518.8	519.63 µg/L	519.63 ppb	03:40:30

Mean Data: 245979003|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2022019.7	103.00 %	0.411			0.40%
Sc RADIAL	57613.0	102 %	0.7			0.65%
Y 371.029	1460061.2	107.93 %	0.568			0.53%
Ag 328.068†	-847.1	0.9522 µg/L	0.35603	0.9522 ppb	0.35603	37.39%
Al 396.153Radial†	37105.3	25812 µg/L	106.5	25812 ppb	106.5	0.41%
As 188.979†	9.9	23.428 µg/L	7.3950	23.428 ppb	7.3950	31.56%
B 249.677†	775.6	-24.918 µg/L	1.8238	-24.918 ppb	1.8238	7.32%
Ba 233.527†	18856.0	452.78 µg/L	12.508	452.78 ppb	12.508	2.76%
Be 313.107†	31356.8	17.628 µg/L	0.6266	17.628 ppb	0.6266	3.55%
Ca 317.933Radial†	11692.8	9987.7 µg/L	79.08	9987.7 ppb	79.08	0.79%
Cd 226.502†	353.2	-3.3992 µg/L	0.49748	-3.3992 ppb	0.49748	14.64%
Co 228.616†	3787.7	166.16 µg/L	8.839	166.16 ppb	8.839	5.32%
Cr 267.716†	5796.0	116.45 µg/L	4.337	116.45 ppb	4.337	3.72%
Cu 324.752†	287202.0	1889.8 µg/L	36.30	1889.8 ppb	36.30	1.92%
Fe 238.204 Radial†	13781.5	108700 µg/L	336.1	108700 ppb	336.1	0.31%
K 766.490 Radial†	6738.2	4400.9 µg/L	36.59	4400.9 ppb	36.59	0.83%
Mg 279.077 IEC†	523.2	4560.9 µg/L	33.85	4560.9 ppb	33.85	0.74%
Mn 257.610†	799146.3	2516.8 µg/L	50.20	2516.8 ppb	50.20	1.99%
Mo 202.031†	87.3	12.676 µg/L	0.4768	12.676 ppb	0.4768	3.76%
Na 589.592 Radial†	4683.2	1438.4 µg/L	3.53	1438.4 ppb	3.53	0.25%

Ni 231.604†	1468.4	74.408 µg/L	4.1811	74.408 ppb	4.1811	5.62%
P 214.914†	362.8	439.77 µg/L	44.159	439.77 ppb	44.159	10.04%
Pb 220.353†	10694.2	2592.4 µg/L	53.17	2592.4 ppb	53.17	2.05%
S 181.975 Axial†	44.6	184.99 µg/L	11.693	184.99 ppb	11.693	6.32%
Sb 206.836†	47.3	41.411 µg/L	4.8253	41.411 ppb	4.8253	11.65%
Se 196.026†	-53.2	215.52 µg/L	2.247	215.52 ppb	2.247	1.04%
SiO2†	214038.9	42248 µg/L	615.2	42248 ppb	615.2	1.46%
Si 251.611†	257648.4	19587 µg/L	284.0	19587 ppb	284.0	1.45%
Sn 189.927†	37.9	4.8658 µg/L	1.75098	4.8658 ppb	1.75098	35.99%
Sr 421.552†	7116.9	65.655 µg/L	0.4486	65.655 ppb	0.4486	0.68%
Ti 334.940†	1166086.5	2579.4 µg/L	59.25	2579.4 ppb	59.25	2.30%
Tl 190.801†	-28.6	13.146 µg/L	2.7803	13.146 ppb	2.7803	21.15%
U 409.014†	16437.6	1350.0 µg/L	31.77	1350.0 ppb	31.77	2.35%
V 292.402†	5897.4	72.018 µg/L	2.1784	72.018 ppb	2.1784	3.02%
Zn 213.857†	23253.2	536.78 µg/L	14.859	536.78 ppb	14.859	2.77%

Sequence No.: 12

Sample ID: 245979004|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 236

Date Collected: 2/20/2010 03:41:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979004|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58483.6	58483.6	104 %		03:41:32
1	Al 396.153Radial†	60408.7	58347.9	40590 µg/L	40590 ppb	03:41:32
1	Ca 317.933Radial†	11627.6	11021.1	9414.0 µg/L	9414.0 ppb	03:41:52
1	Fe 238.204 Radial†	12239.6	11806.9	93121 µg/L	93121 ppb	03:41:52
1	K 766.490 Radial†	14864.0	14193.8	9270.2 µg/L	9270.2 ppb	03:41:32
1	Mg 279.077 IEC†	1033.7	985.8	8711.8 µg/L	8711.8 ppb	03:41:52
1	Na 589.592 Radial†	1860.6	1325.1	407.01 µg/L	407.01 ppb	03:41:32
1	Sr 421.552†	12859.2	12393.3	114.33 µg/L	114.33 ppb	03:41:32
1	Sc 361.383	2006929.5	2006929.5	102.23 %		03:42:56
1	Y 371.029	1403429.3	1403429.3	103.75 %		03:42:56
1	Ag 328.068†	-1539.6	-1104.4	-1.1303 µg/L	-1.1303 ppb	03:43:02
1	As 188.979†	15.0	15.1	32.031 µg/L	32.031 ppb	03:43:22
1	B 249.677†	957.1	552.1	-25.841 µg/L	-25.841 ppb	03:43:02
1	Ba 233.527†	25723.6	25179.2	604.80 µg/L	604.80 ppb	03:43:02
1	Be 313.107†	13598.3	16157.2	8.2703 µg/L	8.2703 ppb	03:43:02
1	Cd 226.502†	270.8	406.5	-0.3030 µg/L	-0.3030 ppb	03:43:22
1	Co 228.616†	1097.3	1071.4	41.295 µg/L	41.295 ppb	03:43:22
1	Cr 267.716†	7875.5	7754.0	155.85 µg/L	155.85 ppb	03:43:02
1	Cu 324.752†	27305.4	24165.6	170.68 µg/L	170.68 ppb	03:43:02
1	Mn 257.610†	736938.9	721108.1	2270.2 µg/L	2270.2 ppb	03:42:56
1	Mo 202.031†	-10.2	-4.6	3.0884 µg/L	3.0884 ppb	03:43:22
1	Ni 231.604†	1963.7	1608.5	81.335 µg/L	81.335 ppb	03:43:22
1	P 214.914†	401.0	376.9	665.56 µg/L	665.56 ppb	03:43:22
1	Pb 220.353†	2435.0	2291.0	555.29 µg/L	555.29 ppb	03:43:22
1	S 181.975 Axial†	133.1	111.3	461.35 µg/L	461.35 ppb	03:43:22
1	Sb 206.836†	33.2	9.9	6.5302 µg/L	6.5302 ppb	03:43:22
1	Se 196.026†	-33.5	-52.1	170.88 µg/L	170.88 ppb	03:43:22
1	SiO2†	272716.8	265372.0	52381 µg/L	52381 ppb	03:42:56
1	Si 251.611†	326847.4	319401.9	24282 µg/L	24282 ppb	03:42:56
1	Sn 189.927†	-21.2	-21.1	-17.861 µg/L	-17.861 ppb	03:43:22
1	Ti 334.940†	1600075.5	1564972.1	3461.5 µg/L	3461.5 ppb	03:42:56
1	Tl 190.801†	-58.5	-34.9	9.5622 µg/L	9.5622 ppb	03:43:22
1	U 409.014†	362.6	431.8	22.359 µg/L	22.359 ppb	03:43:02
1	V 292.402†	18778.4	18413.2	190.79 µg/L	190.79 ppb	03:43:02
1	Zn 213.857†	11073.4	10297.2	236.06 µg/L	236.06 ppb	03:43:02
2	Sc RADIAL	57971.6	57971.6	103 %		03:41:58
2	Al 396.153Radial†	60462.1	58915.4	40985 µg/L	40985 ppb	03:41:58
2	Ca 317.933Radial†	11719.6	11209.9	9575.3 µg/L	9575.3 ppb	03:42:18
2	Fe 238.204 Radial†	12334.2	12003.6	94672 µg/L	94672 ppb	03:42:18
2	K 766.490 Radial†	14926.2	14381.2	9392.6 µg/L	9392.6 ppb	03:41:58
2	Mg 279.077 IEC†	1043.2	1003.8	8871.6 µg/L	8871.6 ppb	03:42:18
2	Na 589.592 Radial†	1781.2	1263.6	388.12 µg/L	388.12 ppb	03:41:58
2	Sr 421.552†	12882.6	12525.8	115.55 µg/L	115.55 ppb	03:41:58
2	Sc 361.383	2012069.2	2012069.2	102.49 %		03:43:29
2	Y 371.029	1406632.9	1406632.9	103.98 %		03:43:29
2	Ag 328.068†	-1578.2	-1138.2	-1.2837 µg/L	-1.2837 ppb	03:43:35
2	As 188.979†	14.3	14.4	30.823 µg/L	30.823 ppb	03:43:55
2	B 249.677†	945.1	537.9	-27.224 µg/L	-27.224 ppb	03:43:35
2	Ba 233.527†	25948.5	25334.3	608.53 µg/L	608.53 ppb	03:43:35
2	Be 313.107†	13644.7	16168.5	8.2684 µg/L	8.2684 ppb	03:43:35
2	Cd 226.502†	265.7	400.9	-0.6202 µg/L	-0.6202 ppb	03:43:55
2	Co 228.616†	1079.9	1051.7	40.356 µg/L	40.356 ppb	03:43:55
2	Cr 267.716†	7962.1	7818.8	157.16 µg/L	157.16 ppb	03:43:35
2	Cu 324.752†	27443.4	24232.0	171.33 µg/L	171.33 ppb	03:43:35
2	Mn 257.610†	743574.2	725740.6	2284.9 µg/L	2284.9 ppb	03:43:29
2	Mo 202.031†	1.8	7.1	4.2900 µg/L	4.2900 ppb	03:43:55
2	Ni 231.604†	1955.9	1596.0	80.733 µg/L	80.733 ppb	03:43:55
2	P 214.914†	395.1	370.2	650.98 µg/L	650.98 ppb	03:43:55
2	Pb 220.353†	2410.3	2260.7	547.91 µg/L	547.91 ppb	03:43:55

2	S 181.975 Axial†	131.3	109.1	452.55 µg/L	452.55 ppb	03:43:55
2	Sb 206.836†	36.7	13.3	9.6544 µg/L	9.6544 ppb	03:43:55
2	Se 196.026†	-41.0	-59.3	164.88 µg/L	164.88 ppb	03:43:55
2	SiO2†	275166.2	267080.4	52718 µg/L	52718 ppb	03:43:29
2	Si 251.611†	329852.4	321517.2	24442 µg/L	24442 ppb	03:43:29
2	Sn 189.927†	-17.8	-17.8	-16.578 µg/L	-16.578 ppb	03:43:55
2	Ti 334.940†	1614642.0	1575186.1	3484.1 µg/L	3484.1 ppb	03:43:29
2	Tl 190.801†	-61.3	-37.5	6.6885 µg/L	6.6885 ppb	03:43:55
2	U 409.014†	373.5	441.5	22.937 µg/L	22.937 ppb	03:43:35
2	V 292.402†	18812.8	18399.8	190.86 µg/L	190.86 ppb	03:43:35
2	Zn 213.857†	11127.3	10322.2	236.56 µg/L	236.56 ppb	03:43:35
3	Sc RADIAL	57961.2	57961.2	103 %		03:42:24
3	Al 396.153Radial†	60616.4	59076.3	41097 µg/L	41097 ppb	03:42:24
3	Ca 317.933Radial†	11588.1	11083.8	9467.5 µg/L	9467.5 ppb	03:42:44
3	Fe 238.204 Radial†	12196.4	11871.4	93630 µg/L	93630 ppb	03:42:44
3	K 766.490 Radial†	14936.4	14393.7	9400.8 µg/L	9400.8 ppb	03:42:24
3	Mg 279.077 IEC†	1037.9	998.8	8828.3 µg/L	8828.3 ppb	03:42:44
3	Na 589.592 Radial†	1859.6	1340.4	411.69 µg/L	411.69 ppb	03:42:24
3	Sr 421.552†	12952.1	12595.7	116.20 µg/L	116.20 ppb	03:42:24
3	Sc 361.383	2008712.8	2008712.8	102.32 %		03:44:03
3	Y 371.029	1403869.7	1403869.7	103.78 %		03:44:03
3	Ag 328.068†	-1501.1	-1065.4	-0.8651 µg/L	-0.8651 ppb	03:44:08
3	As 188.979†	10.9	11.1	24.807 µg/L	24.807 ppb	03:44:29
3	B 249.677†	928.1	522.9	-27.307 µg/L	-27.307 ppb	03:44:08
3	Ba 233.527†	24864.4	24317.1	584.09 µg/L	584.09 ppb	03:44:08
3	Be 313.107†	12854.0	15417.9	7.8660 µg/L	7.8660 ppb	03:44:08
3	Cd 226.502†	238.4	374.7	-1.1624 µg/L	-1.1624 ppb	03:44:29
3	Co 228.616†	998.0	973.4	37.049 µg/L	37.049 ppb	03:44:29
3	Cr 267.716†	7488.6	7369.0	148.12 µg/L	148.12 ppb	03:44:08
3	Cu 324.752†	26358.2	23216.2	164.56 µg/L	164.56 ppb	03:44:08
3	Mn 257.610†	720275.4	704182.9	2217.3 µg/L	2217.3 ppb	03:44:03
3	Mo 202.031†	-3.0	2.4	3.7957 µg/L	3.7957 ppb	03:44:29
3	Ni 231.604†	1801.9	1448.7	73.381 µg/L	73.381 ppb	03:44:29
3	P 214.914†	364.8	341.2	595.30 µg/L	595.30 ppb	03:44:29
3	Pb 220.353†	2269.0	2126.6	515.37 µg/L	515.37 ppb	03:44:29
3	S 181.975 Axial†	125.7	103.9	431.06 µg/L	431.06 ppb	03:44:29
3	Sb 206.836†	29.7	6.5	3.4743 µg/L	3.4743 ppb	03:44:29
3	Se 196.026†	-46.2	-64.5	154.77 µg/L	154.77 ppb	03:44:29
3	SiO2†	268935.4	261439.6	51605 µg/L	51605 ppb	03:44:03
3	Si 251.611†	322627.5	314993.9	23946 µg/L	23946 ppb	03:44:03
3	Sn 189.927†	-10.8	-10.9	-13.602 µg/L	-13.602 ppb	03:44:29
3	Ti 334.940†	1559672.5	1524096.6	3371.1 µg/L	3371.1 ppb	03:44:03
3	Tl 190.801†	-54.6	-30.9	13.797 µg/L	13.797 ppb	03:44:29
3	U 409.014†	306.8	376.9	17.724 µg/L	17.724 ppb	03:44:08
3	V 292.402†	17915.9	17554.0	182.46 µg/L	182.46 ppb	03:44:08
3	Zn 213.857†	10638.1	9862.2	225.87 µg/L	225.87 ppb	03:44:08

Mean Data: 245979004|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2009237.2	102.35 %	0.133			0.13%
Sc RADIAL	58138.8	103 %	0.5			0.51%
Y 371.029	1404644.0	103.84 %	0.128			0.12%
Ag 328.068†	-1102.7	-1.0930 µg/L	0.21179	-1.0930 ppb	0.21179	19.38%
Al 396.153Radial†	58779.9	40890 µg/L	266.2	40890 ppb	266.2	0.65%
As 188.979†	13.5	29.220 µg/L	3.8693	29.220 ppb	3.8693	13.24%
B 249.677†	537.6	-26.790 µg/L	0.8237	-26.790 ppb	0.8237	3.07%
Ba 233.527†	24943.5	599.14 µg/L	13.165	599.14 ppb	13.165	2.20%
Be 313.107†	15914.5	8.1349 µg/L	0.23289	8.1349 ppb	0.23289	2.86%
Ca 317.933Radial†	11104.9	9485.6 µg/L	82.14	9485.6 ppb	82.14	0.87%
Cd 226.502†	394.0	-0.6952 µg/L	0.43460	-0.6952 ppb	0.43460	62.51%
Co 228.616†	1032.2	39.567 µg/L	2.2305	39.567 ppb	2.2305	5.64%
Cr 267.716†	7647.3	153.71 µg/L	4.886	153.71 ppb	4.886	3.18%
Cu 324.752†	23871.3	168.86 µg/L	3.739	168.86 ppb	3.739	2.21%
Fe 238.204 Radial†	11894.0	93808 µg/L	790.6	93808 ppb	790.6	0.84%
K 766.490 Radial†	14322.9	9354.5 µg/L	73.16	9354.5 ppb	73.16	0.78%
Mg 279.077 IEC†	996.1	8803.9 µg/L	82.69	8803.9 ppb	82.69	0.94%
Mn 257.610†	717010.5	2257.5 µg/L	35.58	2257.5 ppb	35.58	1.58%
Mo 202.031†	1.6	3.7247 µg/L	0.60396	3.7247 ppb	0.60396	16.22%
Na 589.592 Radial†	1309.7	402.27 µg/L	12.477	402.27 ppb	12.477	3.10%

Ni 231.604†	1551.1	78.483 µg/L	4.4289	78.483 ppb	4.4289	5.64%
P 214.914†	362.8	637.28 µg/L	37.081	637.28 ppb	37.081	5.82%
Pb 220.353†	2226.1	539.52 µg/L	21.244	539.52 ppb	21.244	3.94%
S 181.975 Axial†	108.1	448.32 µg/L	15.582	448.32 ppb	15.582	3.48%
Sb 206.836†	9.9	6.5530 µg/L	3.09010	6.5530 ppb	3.09010	47.16%
Se 196.026†	-58.6	163.51 µg/L	8.142	163.51 ppb	8.142	4.98%
SiO2†	264630.7	52235 µg/L	571.0	52235 ppb	571.0	1.09%
Si 251.611†	318637.7	24223 µg/L	253.0	24223 ppb	253.0	1.04%
Sn 189.927†	-16.6	-16.014 µg/L	2.1851	-16.014 ppb	2.1851	13.65%
Sr 421.552†	12505.0	115.36 µg/L	0.949	115.36 ppb	0.949	0.82%
Ti 334.940†	1554751.6	3438.9 µg/L	59.81	3438.9 ppb	59.81	1.74%
Tl 190.801†	-34.4	10.016 µg/L	3.5760	10.016 ppb	3.5760	35.70%
U 409.014†	416.7	21.007 µg/L	2.8574	21.007 ppb	2.8574	13.60%
V 292.402†	18122.3	188.04 µg/L	4.829	188.04 ppb	4.829	2.57%
Zn 213.857†	10160.5	232.83 µg/L	6.035	232.83 ppb	6.035	2.59%

Sequence No.: 13

Sample ID: 245979005|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 237

Date Collected: 2/20/2010 03:44:38

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979005|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57072.3	57072.3	101 %		03:45:11
1	Al 396.153Radial†	62112.3	61477.3	42767 µg/L	42767 ppb	03:45:11
1	Ca 317.933Radial†	10973.0	10650.8	9097.7 µg/L	9097.7 ppb	03:45:31
1	Fe 238.204 Radial†	12514.1	12371.1	97571 µg/L	97571 ppb	03:45:31
1	K 766.490 Radial†	8226.4	7978.3	5210.8 µg/L	5210.8 ppb	03:45:11
1	Mg 279.077 IEC†	771.3	750.6	6605.5 µg/L	6605.5 ppb	03:45:31
1	Na 589.592 Radial†	5449.0	4921.8	1511.7 µg/L	1511.7 ppb	03:45:11
1	Sr 421.552†	9199.0	9077.2	83.739 µg/L	83.739 ppb	03:45:11
1	Sc 361.383	2016909.2	2016909.2	102.74 %		03:46:36
1	Y 371.029	1457847.5	1457847.5	107.77 %		03:46:36
1	Ag 328.068†	-1598.1	-1153.9	-2.0518 µg/L	-2.0518 ppb	03:46:41
1	As 188.979†	11.8	11.9	26.539 µg/L	26.539 ppb	03:47:02
1	B 249.677†	850.4	443.6	-32.691 µg/L	-32.691 ppb	03:46:41
1	Ba 233.527†	21675.6	21114.6	507.00 µg/L	507.00 ppb	03:46:41
1	Be 313.107†	9054.9	11669.1	6.3763 µg/L	6.3763 ppb	03:46:41
1	Cd 226.502†	187.6	324.3	-2.8744 µg/L	-2.8744 ppb	03:47:02
1	Co 228.616†	1684.2	1637.4	71.149 µg/L	71.149 ppb	03:47:02
1	Cr 267.716†	4479.0	4409.9	88.608 µg/L	88.608 ppb	03:46:41
1	Cu 324.752†	10599.7	7773.3	64.302 µg/L	64.302 ppb	03:46:41
1	Mn 257.610†	642223.4	625351.8	1971.0 µg/L	1971.0 ppb	03:46:36
1	Mo 202.031†	62.4	66.1	10.178 µg/L	10.178 ppb	03:47:02
1	Ni 231.604†	1607.1	1251.9	63.588 µg/L	63.588 ppb	03:47:02
1	P 214.914†	315.6	291.8	505.69 µg/L	505.69 ppb	03:47:02
1	Pb 220.353†	407.8	306.0	73.039 µg/L	73.039 ppb	03:47:02
1	S 181.975 Axial†	44.9	24.8	102.73 µg/L	102.73 ppb	03:47:02
1	Sb 206.836†	31.9	8.5	6.1416 µg/L	6.1416 ppb	03:47:02
1	Se 196.026†	-41.7	-59.9	174.04 µg/L	174.04 ppb	03:47:02
1	SiO2†	299949.8	290558.8	57353 µg/L	57353 ppb	03:46:36
1	Si 251.611†	359694.4	349791.1	26592 µg/L	26592 ppb	03:46:36
1	Sn 189.927†	36.6	35.3	5.2012 µg/L	5.2012 ppb	03:47:02
1	Ti 334.940†	669886.2	651845.8	1441.6 µg/L	1441.6 ppb	03:46:36
1	Tl 190.801†	-44.0	-20.5	10.080 µg/L	10.080 ppb	03:47:02
1	U 409.014†	-970.9	-868.0	-86.232 µg/L	-86.232 ppb	03:46:36
1	V 292.402†	5523.7	5421.2	64.494 µg/L	64.494 ppb	03:46:41
1	Zn 213.857†	13353.2	12462.7	287.02 µg/L	287.02 ppb	03:46:41
2	Sc RADIAL	57534.9	57534.9	102 %		03:45:37
2	Al 396.153Radial†	61645.0	60524.1	42104 µg/L	42104 ppb	03:45:37
2	Ca 317.933Radial†	10950.6	10541.5	9004.4 µg/L	9004.4 ppb	03:45:57
2	Fe 238.204 Radial†	12525.6	12282.8	96875 µg/L	96875 ppb	03:45:57
2	K 766.490 Radial†	8167.5	7855.0	5130.2 µg/L	5130.2 ppb	03:45:37
2	Mg 279.077 IEC†	763.3	736.6	6481.1 µg/L	6481.1 ppb	03:45:57
2	Na 589.592 Radial†	5454.9	4884.2	1500.1 µg/L	1500.1 ppb	03:45:37
2	Sr 421.552†	9121.0	8927.5	82.357 µg/L	82.357 ppb	03:45:37
2	Sc 361.383	2022120.2	2022120.2	103.01 %		03:47:10
2	Y 371.029	1461972.4	1461972.4	108.07 %		03:47:10
2	Ag 328.068†	-1615.8	-1167.1	-2.1887 µg/L	-2.1887 ppb	03:47:15
2	As 188.979†	16.1	16.1	33.974 µg/L	33.974 ppb	03:47:36
2	B 249.677†	867.0	457.6	-31.757 µg/L	-31.757 ppb	03:47:15
2	Ba 233.527†	21710.5	21094.1	506.51 µg/L	506.51 ppb	03:47:15
2	Be 313.107†	9012.4	11605.1	6.3410 µg/L	6.3410 ppb	03:47:15
2	Cd 226.502†	172.2	308.9	-3.1824 µg/L	-3.1824 ppb	03:47:36
2	Co 228.616†	1654.5	1604.3	69.666 µg/L	69.666 ppb	03:47:36
2	Cr 267.716†	4473.7	4393.5	88.279 µg/L	88.279 ppb	03:47:15
2	Cu 324.752†	10563.0	7711.0	63.799 µg/L	63.799 ppb	03:47:15
2	Mn 257.610†	640417.6	621987.8	1960.4 µg/L	1960.4 ppb	03:47:10
2	Mo 202.031†	55.4	59.1	9.4716 µg/L	9.4716 ppb	03:47:36
2	Ni 231.604†	1572.1	1213.9	61.685 µg/L	61.685 ppb	03:47:36
2	P 214.914†	306.3	282.0	486.76 µg/L	486.76 ppb	03:47:36
2	Pb 220.353†	411.2	308.3	73.577 µg/L	73.577 ppb	03:47:36

2	S 181.975 Axial†	42.6	22.4	92.811 µg/L	92.811 ppb	03:47:36
2	Sb 206.836†	27.6	4.3	2.2478 µg/L	2.2478 ppb	03:47:36
2	Se 196.026†	-44.5	-62.5	168.70 µg/L	168.70 ppb	03:47:36
2	SiO2†	299407.9	289280.4	57100 µg/L	57100 ppb	03:47:10
2	Si 251.611†	359108.2	348319.7	26480 µg/L	26480 ppb	03:47:10
2	Sn 189.927†	37.2	35.7	5.4604 µg/L	5.4604 ppb	03:47:36
2	Ti 334.940†	668318.2	648643.3	1434.6 µg/L	1434.6 ppb	03:47:10
2	Tl 190.801†	-46.2	-22.4	7.3232 µg/L	7.3232 ppb	03:47:36
2	U 409.014†	-927.3	-823.2	-82.408 µg/L	-82.408 ppb	03:47:10
2	V 292.402†	5615.1	5496.0	65.139 µg/L	65.139 ppb	03:47:15
2	Zn 213.857†	13306.9	12384.2	285.23 µg/L	285.23 ppb	03:47:15
3	Sc RADIAL	58050.0	58050.0	103 %		03:46:03
3	Al 396.153Radial†	62413.3	60734.8	42250 µg/L	42250 ppb	03:46:03
3	Ca 317.933Radial†	10966.0	10461.1	8935.6 µg/L	8935.6 ppb	03:46:23
3	Fe 238.204 Radial†	12590.3	12236.6	96510 µg/L	96510 ppb	03:46:23
3	K 766.490 Radial†	8225.7	7840.5	5120.7 µg/L	5120.7 ppb	03:46:03
3	Mg 279.077 IEC†	776.3	742.7	6535.8 µg/L	6535.8 ppb	03:46:23
3	Na 589.592 Radial†	5478.3	4859.4	1492.5 µg/L	1492.5 ppb	03:46:03
3	Sr 421.552†	9197.8	8922.7	82.313 µg/L	82.313 ppb	03:46:03
3	Sc 361.383	2011624.6	2011624.6	102.47 %		03:47:44
3	Y 371.029	1450802.6	1450802.6	107.25 %		03:47:44
3	Ag 328.068†	-1508.1	-1070.2	-1.5182 µg/L	-1.5182 ppb	03:47:49
3	As 188.979†	10.0	10.2	23.424 µg/L	23.424 ppb	03:48:10
3	B 249.677†	859.8	454.9	-31.686 µg/L	-31.686 ppb	03:47:49
3	Ba 233.527†	20550.7	20072.3	481.97 µg/L	481.97 ppb	03:47:49
3	Be 313.107†	8232.7	10889.9	5.9366 µg/L	5.9366 ppb	03:47:49
3	Cd 226.502†	144.1	282.3	-3.8094 µg/L	-3.8094 ppb	03:48:10
3	Co 228.616†	1509.6	1471.3	63.753 µg/L	63.753 ppb	03:48:10
3	Cr 267.716†	4137.2	4087.8	82.136 µg/L	82.136 ppb	03:47:49
3	Cu 324.752†	10120.6	7332.8	61.280 µg/L	61.280 ppb	03:47:49
3	Mn 257.610†	617170.5	602545.1	1899.5 µg/L	1899.5 ppb	03:47:44
3	Mo 202.031†	57.6	61.5	9.6931 µg/L	9.6931 ppb	03:48:10
3	Ni 231.604†	1470.6	1122.8	57.146 µg/L	57.146 ppb	03:48:10
3	P 214.914†	288.2	265.9	455.50 µg/L	455.50 ppb	03:48:10
3	Pb 220.353†	387.3	287.0	68.428 µg/L	68.428 ppb	03:48:10
3	S 181.975 Axial†	37.8	17.9	74.373 µg/L	74.373 ppb	03:48:10
3	Sb 206.836†	26.2	3.0	1.1649 µg/L	1.1649 ppb	03:48:10
3	Se 196.026†	-32.7	-51.3	183.42 µg/L	183.42 ppb	03:48:10
3	SiO2†	291423.7	283005.2	55862 µg/L	55862 ppb	03:47:44
3	Si 251.611†	349079.5	340351.7	25874 µg/L	25874 ppb	03:47:44
3	Sn 189.927†	35.9	34.7	5.0533 µg/L	5.0533 ppb	03:48:10
3	Ti 334.940†	640437.7	624820.3	1381.9 µg/L	1381.9 ppb	03:47:44
3	Tl 190.801†	-46.6	-23.1	5.7574 µg/L	5.7574 ppb	03:48:10
3	U 409.014†	-857.8	-760.0	-77.103 µg/L	-77.103 ppb	03:47:44
3	V 292.402†	5199.7	5119.1	61.416 µg/L	61.416 ppb	03:47:49
3	Zn 213.857†	12654.2	11814.7	271.91 µg/L	271.91 ppb	03:47:49

Mean Data: 245979005|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2016884.7	102.74 %	0.267			0.26%
Sc RADIAL	57552.4	102 %	0.9			0.85%
Y 371.029	1456874.1	107.70 %	0.418			0.39%
Ag 328.068†	-1130.4	-1.9195 µg/L	0.35427	-1.9195 ppb	0.35427	18.46%
Al 396.153Radial†	60912.1	42374 µg/L	348.3	42374 ppb	348.3	0.82%
As 188.979†	12.7	27.979 µg/L	5.4208	27.979 ppb	5.4208	19.37%
B 249.677†	452.0	-32.045 µg/L	0.5611	-32.045 ppb	0.5611	1.75%
Ba 233.527†	20760.3	498.49 µg/L	14.311	498.49 ppb	14.311	2.87%
Be 313.107†	11388.1	6.2180 µg/L	0.24431	6.2180 ppb	0.24431	3.93%
Ca 317.933Radial†	10551.2	9012.6 µg/L	81.36	9012.6 ppb	81.36	0.90%
Cd 226.502†	305.2	-3.2887 µg/L	0.47647	-3.2887 ppb	0.47647	14.49%
Co 228.616†	1571.0	68.190 µg/L	3.9128	68.190 ppb	3.9128	5.74%
Cr 267.716†	4297.1	86.341 µg/L	3.6456	86.341 ppb	3.6456	4.22%
Cu 324.752†	7605.7	63.127 µg/L	1.6195	63.127 ppb	1.6195	2.57%
Fe 238.204 Radial†	12296.8	96985 µg/L	539.0	96985 ppb	539.0	0.56%
K 766.490 Radial†	7891.2	5153.9 µg/L	49.47	5153.9 ppb	49.47	0.96%
Mg 279.077 IEC†	743.3	6540.8 µg/L	62.33	6540.8 ppb	62.33	0.95%
Mn 257.610†	616628.3	1943.6 µg/L	38.61	1943.6 ppb	38.61	1.99%
Mo 202.031†	62.2	9.7809 µg/L	0.36129	9.7809 ppb	0.36129	3.69%
Na 589.592 Radial†	4888.4	1501.5 µg/L	9.65	1501.5 ppb	9.65	0.64%

Ni 231.604†	1196.2	60.806 µg/L	3.3092	60.806 ppb	3.3092	5.44%
P 214.914†	279.9	482.65 µg/L	25.348	482.65 ppb	25.348	5.25%
Pb 220.353†	300.4	71.681 µg/L	2.8303	71.681 ppb	2.8303	3.95%
S 181.975 Axial†	21.7	89.973 µg/L	14.3919	89.973 ppb	14.3919	16.00%
Sb 206.836†	5.3	3.1848 µg/L	2.61731	3.1848 ppb	2.61731	82.18%
Se 196.026†	-57.9	175.39 µg/L	7.452	175.39 ppb	7.452	4.25%
SiO2†	287614.8	56771 µg/L	798.0	56771 ppb	798.0	1.41%
Si 251.611†	346154.2	26315 µg/L	386.1	26315 ppb	386.1	1.47%
Sn 189.927†	35.2	5.2383 µg/L	0.20605	5.2383 ppb	0.20605	3.93%
Sr 421.552†	8975.8	82.803 µg/L	0.8106	82.803 ppb	0.8106	0.98%
Ti 334.940†	641769.8	1419.4 µg/L	32.67	1419.4 ppb	32.67	2.30%
Tl 190.801†	-22.0	7.7202 µg/L	2.18841	7.7202 ppb	2.18841	28.35%
U 409.014†	-817.0	-81.914 µg/L	4.5842	-81.914 ppb	4.5842	5.60%
V 292.402†	5345.4	63.683 µg/L	1.9895	63.683 ppb	1.9895	3.12%
Zn 213.857†	12220.6	281.39 µg/L	8.258	281.39 ppb	8.258	2.93%

Sequence No.: 14

Sample ID: 245979006|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 238

Date Collected: 2/20/2010 03:48:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979006|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56405.0	56405.0	99.8 %		03:48:52
1	Al 396.153Radial†	28660.5	28699.2	19965 µg/L	19965 ppb	03:48:52
1	Ca 317.933Radial†	17494.7	17311.5	14787 µg/L	14787 ppb	03:48:52
1	Fe 238.204 Radial†	8349.2	8346.0	65825 µg/L	65825 ppb	03:49:12
1	K 766.490 Radial†	6073.7	5918.5	3865.5 µg/L	3865.5 ppb	03:48:52
1	Mg 279.077 IEC†	642.8	631.0	5570.1 µg/L	5570.1 ppb	03:49:12
1	Na 589.592 Radial†	3450.7	2984.1	916.53 µg/L	916.53 ppb	03:48:52
1	Sr 421.552†	8335.5	8320.1	76.754 µg/L	76.754 ppb	03:48:52
1	Sc 361.383	2007660.9	2007660.9	102.27 %		03:50:27
1	Y 371.029	1398505.2	1398505.2	103.38 %		03:50:27
1	Ag 328.068†	6887.7	7136.5	57.762 µg/L	57.762 ppb	03:50:32
1	As 188.979†	12.0	12.2	24.981 µg/L	24.981 ppb	03:50:53
1	B 249.677†	859.0	455.8	-15.610 µg/L	-15.610 ppb	03:50:32
1	Ba 233.527†	34975.3	34216.4	821.64 µg/L	821.64 ppb	03:50:32
1	Be 313.107†	235777.6	233402.4	137.87 µg/L	137.87 ppb	03:50:27
1	Cd 226.502†	191.8	329.3	0.8602 µg/L	0.8602 ppb	03:50:53
1	Co 228.616†	631.0	615.1	24.271 µg/L	24.271 ppb	03:50:53
1	Cr 267.716†	5020.7	4959.7	99.689 µg/L	99.689 ppb	03:50:32
1	Cu 324.752†	39115038.2	38244706.0	249650 µg/L	249650 ppb	03:50:19
1	Mn 257.610†	326038.1	319060.8	1007.7 µg/L	1007.7 ppb	03:50:27
1	Mo 202.031†	19.0	23.9	4.8394 µg/L	4.8394 ppb	03:50:53
1	Ni 231.604†	2087.6	1728.9	87.008 µg/L	87.008 ppb	03:50:53
1	P 214.914†	3822.7	3722.6	-19027 µg/L	-19027 ppb	03:50:27
1	Pb 220.353†	18631.6	18127.3	3982.7 µg/L	3982.7 ppb	03:50:32
1	S 181.975 Axial†	80.0	59.3	245.73 µg/L	245.73 ppb	03:50:53
1	Sb 206.836†	102.7	78.0	69.204 µg/L	69.204 ppb	03:50:53
1	Se 196.026†	-12.3	-31.3	126.80 µg/L	126.80 ppb	03:50:53
1	SiO2†	145263.9	140649.6	27762 µg/L	27762 ppb	03:50:32
1	Si 251.611†	176196.6	171977.0	13074 µg/L	13074 ppb	03:50:27
1	Sn 189.927†	1764.9	1725.4	721.19 µg/L	721.19 ppb	03:50:53
1	Ti 334.940†	794561.0	776758.2	1718.2 µg/L	1718.2 ppb	03:50:27
1	Tl 190.801†	-38.2	-14.9	11.431 µg/L	11.431 ppb	03:50:53
1	U 409.014†	24210.6	23750.6	1963.2 µg/L	1963.2 ppb	03:50:32
1	V 292.402†	11893.9	11674.8	123.82 µg/L	123.82 ppb	03:50:32
1	Zn 213.857†	3225449.2	3153356.4	73576 µg/L	73576 ppb	03:50:27
2	Sc RADIAL	56941.2	56941.2	101 %		03:49:18
2	Al 396.153Radial†	28983.7	28749.5	20000 µg/L	20000 ppb	03:49:18
2	Ca 317.933Radial†	17692.8	17343.1	14814 µg/L	14814 ppb	03:49:18
2	Fe 238.204 Radial†	8360.0	8278.0	65288 µg/L	65288 ppb	03:49:38
2	K 766.490 Radial†	6122.9	5910.1	3860.0 µg/L	3860.0 ppb	03:49:18
2	Mg 279.077 IEC†	643.6	625.7	5523.6 µg/L	5523.6 ppb	03:49:38
2	Na 589.592 Radial†	3551.6	3051.6	937.27 µg/L	937.27 ppb	03:49:18
2	Sr 421.552†	8471.2	8376.1	77.271 µg/L	77.271 ppb	03:49:18
2	Sc 361.383	1994207.2	1994207.2	101.58 %		03:51:10
2	Y 371.029	1390053.2	1390053.2	102.76 %		03:51:10
2	Ag 328.068†	6719.4	7016.3	56.823 µg/L	56.823 ppb	03:51:16
2	As 188.979†	8.4	8.7	18.594 µg/L	18.594 ppb	03:51:36
2	B 249.677†	884.1	486.2	-14.095 µg/L	-14.095 ppb	03:51:16
2	Ba 233.527†	34333.6	33815.4	812.01 µg/L	812.01 ppb	03:51:16
2	Be 313.107†	233862.4	233072.5	137.68 µg/L	137.68 ppb	03:51:10
2	Cd 226.502†	173.1	312.1	0.4905 µg/L	0.4905 ppb	03:51:36
2	Co 228.616†	616.1	604.5	23.800 µg/L	23.800 ppb	03:51:36
2	Cr 267.716†	4905.7	4879.6	98.079 µg/L	98.079 ppb	03:51:16
2	Cu 324.752†	39367818.7	38751576.9	252960 µg/L	252960 ppb	03:51:02
2	Mn 257.610†	323437.6	318651.6	1006.3 µg/L	1006.3 ppb	03:51:10
2	Mo 202.031†	16.3	21.4	4.5784 µg/L	4.5784 ppb	03:51:36
2	Ni 231.604†	2014.0	1670.3	84.078 µg/L	84.078 ppb	03:51:36
2	P 214.914†	3730.7	3657.2	-19506 µg/L	-19506 ppb	03:51:10
2	Pb 220.353†	18313.4	17937.0	3930.9 µg/L	3930.9 ppb	03:51:16

2	S 181.975 Axial†	79.4	59.3	245.79 µg/L	245.79 ppb	03:51:36
2	Sb 206.836†	100.8	76.7	68.090 µg/L	68.090 ppb	03:51:36
2	Se 196.026†	-15.8	-34.9	120.35 µg/L	120.35 ppb	03:51:36
2	SiO2†	143249.5	139624.9	27560 µg/L	27560 ppb	03:51:16
2	Si 251.611†	174869.4	171832.7	13063 µg/L	13063 ppb	03:51:10
2	Sn 189.927†	1699.4	1672.5	698.93 µg/L	698.93 ppb	03:51:36
2	Ti 334.940†	787741.7	775286.7	1714.9 µg/L	1714.9 ppb	03:51:10
2	Tl 190.801†	-37.9	-15.0	11.250 µg/L	11.250 ppb	03:51:36
2	U 409.014†	23655.0	23363.3	1931.1 µg/L	1931.1 ppb	03:51:16
2	V 292.402†	11579.9	11444.1	121.47 µg/L	121.47 ppb	03:51:16
2	Zn 213.857†	3208730.8	3158176.0	73684 µg/L	73684 ppb	03:51:10
3	Sc RADIAL	56555.3	56555.3	100 %		03:49:43
3	Al 396.153Radial†	28853.0	28815.2	20045 µg/L	20045 ppb	03:49:43
3	Ca 317.933Radial†	17569.2	17339.4	14811 µg/L	14811 ppb	03:49:43
3	Fe 238.204 Radial†	8340.0	8314.6	65577 µg/L	65577 ppb	03:50:04
3	K 766.490 Radial†	6121.3	5949.8	3885.9 µg/L	3885.9 ppb	03:49:43
3	Mg 279.077 IEC†	646.4	632.8	5586.7 µg/L	5586.7 ppb	03:50:04
3	Na 589.592 Radial†	3492.2	3016.4	926.46 µg/L	926.46 ppb	03:49:43
3	Sr 421.552†	8409.3	8371.6	77.229 µg/L	77.229 ppb	03:49:43
3	Sc 361.383	2016093.1	2016093.1	102.70 %		03:51:53
3	Y 371.029	1402122.4	1402122.4	103.65 %		03:51:53
3	Ag 328.068†	5769.2	6019.2	49.322 µg/L	49.322 ppb	03:51:59
3	As 188.979†	10.9	11.1	22.909 µg/L	22.909 ppb	03:52:19
3	B 249.677†	748.5	344.7	-20.043 µg/L	-20.043 ppb	03:51:59
3	Ba 233.527†	28849.7	28108.7	674.98 µg/L	674.98 ppb	03:51:59
3	Be 313.107†	201841.8	199394.1	117.78 µg/L	117.78 ppb	03:51:53
3	Cd 226.502†	79.3	218.9	-1.8940 µg/L	-1.8940 ppb	03:52:19
3	Co 228.616†	421.9	408.9	15.468 µg/L	15.468 ppb	03:52:19
3	Cr 267.716†	4003.6	3948.8	79.370 µg/L	79.370 ppb	03:51:59
3	Cu 324.752†	36011306.5	35062557.1	228880 µg/L	228880 ppb	03:51:45
3	Mn 257.610†	281695.9	274550.3	868.26 µg/L	868.26 ppb	03:51:53
3	Mo 202.031†	8.3	13.4	3.8031 µg/L	3.8031 ppb	03:52:19
3	Ni 231.604†	1505.1	1153.2	58.315 µg/L	58.315 ppb	03:52:19
3	P 214.914†	3261.1	3160.1	-17951 µg/L	-17951 ppb	03:51:53
3	Pb 220.353†	15814.7	15308.2	3332.8 µg/L	3332.8 ppb	03:51:59
3	S 181.975 Axial†	61.2	40.7	168.79 µg/L	168.79 ppb	03:52:19
3	Sb 206.836†	80.4	55.8	49.060 µg/L	49.060 ppb	03:52:19
3	Se 196.026†	5.7	-13.7	150.83 µg/L	150.83 ppb	03:52:19
3	SiO2†	122272.3	117667.9	23226 µg/L	23226 ppb	03:51:59
3	Si 251.611†	155116.9	150730.5	11459 µg/L	11459 ppb	03:51:53
3	Sn 189.927†	1183.5	1152.0	479.43 µg/L	479.43 ppb	03:52:19
3	Ti 334.940†	678573.7	660569.0	1461.1 µg/L	1461.1 ppb	03:51:53
3	Tl 190.801†	-31.0	-7.8	17.404 µg/L	17.404 ppb	03:52:19
3	U 409.014†	19597.3	19159.5	1581.8 µg/L	1581.8 ppb	03:51:59
3	V 292.402†	9587.2	9380.1	100.98 µg/L	100.98 ppb	03:51:59
3	Zn 213.857†	2940183.3	2862394.9	66784 µg/L	66784 ppb	03:51:53

Mean Data: 245979006|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2005987.1	102.18 %	0.562			0.55%
Sc RADIAL	56633.8	100 %	0.5			0.49%
Y 371.029	1396893.6	103.26 %	0.458			0.44%
Ag 328.068†	6724.0	54.636 µg/L	4.6257	54.636 ppb	4.6257	8.47%
Al 396.153Radial†	28754.6	20003 µg/L	40.5	20003 ppb	40.5	0.20%
As 188.979†	10.7	22.162 µg/L	3.2584	22.162 ppb	3.2584	14.70%
B 249.677†	428.9	-16.582 µg/L	3.0908	-16.582 ppb	3.0908	18.64%
Ba 233.527†	32046.9	769.54 µg/L	82.041	769.54 ppb	82.041	10.66%
Be 313.107†	221956.3	131.11 µg/L	11.541	131.11 ppb	11.541	8.80%
Ca 317.933Radial†	17331.3	14804 µg/L	14.7	14804 ppb	14.7	0.10%
Cd 226.502†	286.8	-0.1811 µg/L	1.49488	-0.1811 ppb	1.49488	825.36%
Co 228.616†	542.8	21.180 µg/L	4.9522	21.180 ppb	4.9522	23.38%
Cr 267.716†	4596.0	92.379 µg/L	11.2951	92.379 ppb	11.2951	12.23%
Cu 324.752†	37352946.7	243830 µg/L	13052.8	243830 ppb	13052.8	5.35%
Fe 238.204 Radial†	8312.9	65563 µg/L	268.6	65563 ppb	268.6	0.41%
K 766.490 Radial†	5926.1	3870.5 µg/L	13.69	3870.5 ppb	13.69	0.35%
Mg 279.077 IEC†	629.9	5560.1 µg/L	32.73	5560.1 ppb	32.73	0.59%
Mn 257.610†	304087.6	960.75 µg/L	80.107	960.75 ppb	80.107	8.34%
Mo 202.031†	19.6	4.4070 µg/L	0.53901	4.4070 ppb	0.53901	12.23%
Na 589.592 Radial†	3017.3	926.75 µg/L	10.372	926.75 ppb	10.372	1.12%

Ni 231.604†	1517.4	76.467 µg/L	15.7881	76.467 ppb	15.7881	20.65%
P 214.914†	3513.3	-18828 µg/L	796.4	-18828 ppb	796.4	4.23%
Pb 220.353†	17124.1	3748.8 µg/L	361.20	3748.8 ppb	361.20	9.64%
S 181.975 Axial†	53.1	220.10 µg/L	44.436	220.10 ppb	44.436	20.19%
Sb 206.836†	70.2	62.118 µg/L	11.3228	62.118 ppb	11.3228	18.23%
Se 196.026†	-26.6	132.66 µg/L	16.062	132.66 ppb	16.062	12.11%
SiO2†	132647.5	26183 µg/L	2562.6	26183 ppb	2562.6	9.79%
Si 251.611†	164846.7	12532 µg/L	929.4	12532 ppb	929.4	7.42%
Sn 189.927†	1516.6	633.18 µg/L	133.620	633.18 ppb	133.620	21.10%
Sr 421.552†	8356.0	77.085 µg/L	0.2870	77.085 ppb	0.2870	0.37%
Ti 334.940†	737538.0	1631.4 µg/L	147.47	1631.4 ppb	147.47	9.04%
Tl 190.801†	-12.6	13.362 µg/L	3.5022	13.362 ppb	3.5022	26.21%
U 409.014†	22091.1	1825.4 µg/L	211.55	1825.4 ppb	211.55	11.59%
V 292.402†	10833.0	115.42 µg/L	12.565	115.42 ppb	12.565	10.89%
Zn 213.857†	3057975.8	71348 µg/L	3953.3	71348 ppb	3953.3	5.54%

Sequence No.: 15

Sample ID: 245979007|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 239

Date Collected: 2/20/2010 03:52:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979007|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58121.8	58121.8	103 %		03:53:01
1	Al 396.153Radial†	48634.9	47266.8	32881 µg/L	32881 ppb	03:53:01
1	Ca 317.933Radial†	9803.7	9318.2	7959.4 µg/L	7959.4 ppb	03:53:21
1	Fe 238.204 Radial†	10295.2	9990.6	78796 µg/L	78796 ppb	03:53:21
1	K 766.490 Radial†	7377.7	7006.3	4575.9 µg/L	4575.9 ppb	03:53:01
1	Mg 279.077 IEC†	688.5	656.4	5783.4 µg/L	5783.4 ppb	03:53:21
1	Na 589.592 Radial†	4557.6	3957.9	1215.6 µg/L	1215.6 ppb	03:53:01
1	Sr 421.552†	7413.6	7177.4	66.213 µg/L	66.213 ppb	03:53:01
1	Sc 361.383	2028152.6	2028152.6	103.31 %		03:54:26
1	Y 371.029	1476538.9	1476538.9	109.15 %		03:54:26
1	Ag 328.068†	-1445.0	-997.0	-2.0381 µg/L	-2.0381 ppb	03:54:31
1	As 188.979†	20.6	20.4	40.662 µg/L	40.662 ppb	03:54:52
1	B 249.677†	707.5	300.6	-28.613 µg/L	-28.613 ppb	03:54:31
1	Ba 233.527†	12429.3	12047.8	289.34 µg/L	289.34 ppb	03:54:31
1	Be 313.107†	7488.0	10103.6	5.4952 µg/L	5.4952 ppb	03:54:31
1	Cd 226.502†	135.7	273.1	-2.0057 µg/L	-2.0057 ppb	03:54:52
1	Co 228.616†	873.7	843.8	35.469 µg/L	35.469 ppb	03:54:52
1	Cr 267.716†	7966.3	7761.2	155.92 µg/L	155.92 ppb	03:54:31
1	Cu 324.752†	14678.8	11664.4	87.092 µg/L	87.092 ppb	03:54:31
1	Mn 257.610†	756375.9	732378.7	2303.7 µg/L	2303.7 ppb	03:54:26
1	Mo 202.031†	32.3	36.6	6.5756 µg/L	6.5756 ppb	03:54:52
1	Ni 231.604†	2141.9	1760.9	88.760 µg/L	88.760 ppb	03:54:52
1	P 214.914†	230.2	207.5	348.34 µg/L	348.34 ppb	03:54:52
1	Pb 220.353†	277.9	178.0	42.151 µg/L	42.151 ppb	03:54:52
1	S 181.975 Axial†	41.1	20.8	86.277 µg/L	86.277 ppb	03:54:52
1	Sb 206.836†	34.5	10.9	7.6287 µg/L	7.6287 ppb	03:54:52
1	Se 196.026†	-23.4	-41.9	149.06 µg/L	149.06 ppb	03:54:52
1	SiO2†	268607.7	258603.2	51045 µg/L	51045 ppb	03:54:26
1	Si 251.611†	321970.9	311336.3	23668 µg/L	23668 ppb	03:54:26
1	Sn 189.927†	6.9	6.3	-5.0896 µg/L	-5.0896 ppb	03:54:52
1	Ti 334.940†	614656.3	594772.2	1315.4 µg/L	1315.4 ppb	03:54:26
1	Tl 190.801†	-40.1	-16.4	12.283 µg/L	12.283 ppb	03:54:52
1	U 409.014†	-2175.7	-2028.8	-180.00 µg/L	-180.00 ppb	03:54:26
1	V 292.402†	6111.4	5960.2	67.569 µg/L	67.569 ppb	03:54:31
1	Zn 213.857†	10264.1	9400.6	215.97 µg/L	215.97 ppb	03:54:31
2	Sc RADIAL	58462.5	58462.5	103 %		03:53:27
2	Al 396.153Radial†	48973.2	47318.3	32917 µg/L	32917 ppb	03:53:27
2	Ca 317.933Radial†	9812.9	9271.5	7919.5 µg/L	7919.5 ppb	03:53:47
2	Fe 238.204 Radial†	10282.5	9919.9	78239 µg/L	78239 ppb	03:53:47
2	K 766.490 Radial†	7475.6	7059.1	4610.4 µg/L	4610.4 ppb	03:53:27
2	Mg 279.077 IEC†	682.3	646.6	5695.7 µg/L	5695.7 ppb	03:53:47
2	Na 589.592 Radial†	4547.6	3922.4	1204.7 µg/L	1204.7 ppb	03:53:27
2	Sr 421.552†	7404.6	7126.7	65.744 µg/L	65.744 ppb	03:53:27
2	Sc 361.383	2018754.7	2018754.7	102.83 %		03:55:00
2	Y 371.029	1469203.2	1469203.2	108.61 %		03:55:00
2	Ag 328.068†	-1442.4	-1001.1	-2.1052 µg/L	-2.1052 ppb	03:55:05
2	As 188.979†	14.5	14.6	30.283 µg/L	30.283 ppb	03:55:26
2	B 249.677†	701.3	297.9	-28.433 µg/L	-28.433 ppb	03:55:05
2	Ba 233.527†	12432.3	12106.8	290.75 µg/L	290.75 ppb	03:55:05
2	Be 313.107†	7601.5	10247.7	5.5793 µg/L	5.5793 ppb	03:55:05
2	Cd 226.502†	140.7	278.5	-1.8079 µg/L	-1.8079 ppb	03:55:26
2	Co 228.616†	858.0	832.4	34.948 µg/L	34.948 ppb	03:55:26
2	Cr 267.716†	8006.5	7836.2	157.43 µg/L	157.43 ppb	03:55:05
2	Cu 324.752†	14059.0	11127.8	83.512 µg/L	83.512 ppb	03:55:05
2	Mn 257.610†	754244.9	733714.6	2307.8 µg/L	2307.8 ppb	03:55:00
2	Mo 202.031†	31.1	35.6	6.4599 µg/L	6.4599 ppb	03:55:26
2	Ni 231.604†	2112.3	1741.8	87.800 µg/L	87.800 ppb	03:55:26
2	P 214.914†	238.5	216.6	367.22 µg/L	367.22 ppb	03:55:26
2	Pb 220.353†	281.8	183.1	43.403 µg/L	43.403 ppb	03:55:26

2	S 181.975 Axial†	46.6	26.4	109.47 µg/L	109.47 ppb	03:55:26
2	Sb 206.836†	28.8	5.5	2.6260 µg/L	2.6260 ppb	03:55:26
2	Se 196.026†	-32.1	-50.5	135.61 µg/L	135.61 ppb	03:55:26
2	SiO2†	268096.9	259316.9	51186 µg/L	51186 ppb	03:55:00
2	Si 251.611†	321416.0	312247.5	23738 µg/L	23738 ppb	03:55:00
2	Sn 189.927†	8.1	7.5	-4.5613 µg/L	-4.5613 ppb	03:55:26
2	Ti 334.940†	613530.1	596446.8	1319.1 µg/L	1319.1 ppb	03:55:00
2	Tl 190.801†	-43.3	-19.7	7.9555 µg/L	7.9555 ppb	03:55:26
2	U 409.014†	-2120.7	-1985.2	-176.29 µg/L	-176.29 ppb	03:55:00
2	V 292.402†	6054.0	5932.0	67.235 µg/L	67.235 ppb	03:55:05
2	Zn 213.857†	9971.3	9162.1	210.41 µg/L	210.41 ppb	03:55:05
3	Sc RADIAL	58144.7	58144.7	103 %		03:53:53
3	Al 396.153Radial†	48843.7	47451.1	33009 µg/L	33009 ppb	03:53:53
3	Ca 317.933Radial†	9809.6	9320.1	7961.0 µg/L	7961.0 ppb	03:54:13
3	Fe 238.204 Radial†	10300.0	9991.3	78801 µg/L	78801 ppb	03:54:13
3	K 766.490 Radial†	7452.7	7076.4	4621.7 µg/L	4621.7 ppb	03:53:53
3	Mg 279.077 IEC†	685.7	653.5	5756.8 µg/L	5756.8 ppb	03:54:13
3	Na 589.592 Radial†	4597.8	3995.2	1227.1 µg/L	1227.1 ppb	03:53:53
3	Sr 421.552†	7388.1	7149.8	65.958 µg/L	65.958 ppb	03:53:53
3	Sc 361.383	2034150.8	2034150.8	103.62 %		03:55:33
3	Y 371.029	1476749.9	1476749.9	109.17 %		03:55:33
3	Ag 328.068†	-1345.3	-896.8	-1.3272 µg/L	-1.3272 ppb	03:55:39
3	As 188.979†	12.7	12.7	26.909 µg/L	26.909 ppb	03:56:00
3	B 249.677†	688.7	280.5	-29.459 µg/L	-29.459 ppb	03:55:39
3	Ba 233.527†	11649.9	11260.1	270.42 µg/L	270.42 ppb	03:55:39
3	Be 313.107†	6657.0	9280.2	5.0303 µg/L	5.0303 ppb	03:55:39
3	Cd 226.502†	110.9	248.8	-2.6236 µg/L	-2.6236 ppb	03:56:00
3	Co 228.616†	765.4	736.7	30.750 µg/L	30.750 ppb	03:56:00
3	Cr 267.716†	7297.0	7092.6	142.49 µg/L	142.49 ppb	03:55:39
3	Cu 324.752†	12944.0	9948.3	75.891 µg/L	75.891 ppb	03:55:39
3	Mn 257.610†	726466.3	701354.6	2206.6 µg/L	2206.6 ppb	03:55:33
3	Mo 202.031†	25.6	30.1	5.9385 µg/L	5.9385 ppb	03:56:00
3	Ni 231.604†	1921.5	1542.0	77.854 µg/L	77.854 ppb	03:56:00
3	P 214.914†	211.7	188.9	312.76 µg/L	312.76 ppb	03:56:00
3	Pb 220.353†	268.2	167.9	39.709 µg/L	39.709 ppb	03:56:00
3	S 181.975 Axial†	42.2	21.8	90.206 µg/L	90.206 ppb	03:56:00
3	Sb 206.836†	23.8	0.5	-1.7882 µg/L	-1.7882 ppb	03:56:00
3	Se 196.026†	-19.7	-38.4	154.13 µg/L	154.13 ppb	03:56:00
3	SiO2†	261490.6	250968.0	49538 µg/L	49538 ppb	03:55:33
3	Si 251.611†	313162.7	301916.7	22952 µg/L	22952 ppb	03:55:33
3	Sn 189.927†	9.3	8.6	-4.1498 µg/L	-4.1498 ppb	03:56:00
3	Ti 334.940†	587348.3	566663.5	1253.3 µg/L	1253.3 ppb	03:55:33
3	Tl 190.801†	-33.5	-9.9	19.837 µg/L	19.837 ppb	03:56:00
3	U 409.014†	-2076.8	-1927.2	-171.56 µg/L	-171.56 ppb	03:55:33
3	V 292.402†	5612.8	5461.5	62.683 µg/L	62.683 ppb	03:55:39
3	Zn 213.857†	9172.9	8318.2	190.64 µg/L	190.64 ppb	03:55:39

Mean Data: 245979007|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2027019.4	103.26 %	0.395			0.38%
Sc RADIAL	58243.0	103 %	0.3			0.33%
Y 371.029	1474164.0	108.97 %	0.318			0.29%
Ag 328.068†	-964.9	-1.8235 µg/L	0.43111	-1.8235 ppb	0.43111	23.64%
Al 396.153Radial†	47345.4	32936 µg/L	66.2	32936 ppb	66.2	0.20%
As 188.979†	15.9	32.618 µg/L	7.1679	32.618 ppb	7.1679	21.98%
B 249.677†	293.0	-28.835 µg/L	0.5480	-28.835 ppb	0.5480	1.90%
Ba 233.527†	11804.9	283.50 µg/L	11.353	283.50 ppb	11.353	4.00%
Be 313.107†	9877.2	5.3683 µg/L	0.29574	5.3683 ppb	0.29574	5.51%
Ca 317.933Radial†	9303.3	7946.6 µg/L	23.50	7946.6 ppb	23.50	0.30%
Cd 226.502†	266.8	-2.1457 µg/L	0.42549	-2.1457 ppb	0.42549	19.83%
Co 228.616†	804.3	33.722 µg/L	2.5875	33.722 ppb	2.5875	7.67%
Cr 267.716†	7563.3	151.95 µg/L	8.225	151.95 ppb	8.225	5.41%
Cu 324.752†	10913.5	82.165 µg/L	5.7208	82.165 ppb	5.7208	6.96%
Fe 238.204 Radial†	9967.3	78612 µg/L	323.3	78612 ppb	323.3	0.41%
K 766.490 Radial†	7047.3	4602.7 µg/L	23.83	4602.7 ppb	23.83	0.52%
Mg 279.077 IEC†	652.1	5745.3 µg/L	44.96	5745.3 ppb	44.96	0.78%
Mn 257.610†	722482.7	2272.7 µg/L	57.31	2272.7 ppb	57.31	2.52%
Mo 202.031†	34.1	6.3247 µg/L	0.33938	6.3247 ppb	0.33938	5.37%
Na 589.592 Radial†	3958.5	1215.8 µg/L	11.18	1215.8 ppb	11.18	0.92%

Ni 231.604†	1681.6	84.804 µg/L	6.0383	84.804 ppb	6.0383	7.12%
P 214.914†	204.4	342.77 µg/L	27.653	342.77 ppb	27.653	8.07%
Pb 220.353†	176.4	41.755 µg/L	1.8787	41.755 ppb	1.8787	4.50%
S 181.975 Axial†	23.0	95.317 µg/L	12.4111	95.317 ppb	12.4111	13.02%
Sb 206.836†	5.6	2.8222 µg/L	4.71149	2.8222 ppb	4.71149	166.94%
Se 196.026†	-43.6	146.27 µg/L	9.573	146.27 ppb	9.573	6.55%
SiO2†	256296.0	50589 µg/L	913.5	50589 ppb	913.5	1.81%
Si 251.611†	308500.1	23453 µg/L	434.8	23453 ppb	434.8	1.85%
Sn 189.927†	7.4	-4.6002 µg/L	0.47111	-4.6002 ppb	0.47111	10.24%
Sr 421.552†	7151.3	65.972 µg/L	0.2344	65.972 ppb	0.2344	0.36%
Ti 334.940†	585960.8	1295.9 µg/L	37.02	1295.9 ppb	37.02	2.86%
Tl 190.801†	-15.4	13.358 µg/L	6.0135	13.358 ppb	6.0135	45.02%
U 409.014†	-1980.4	-175.95 µg/L	4.232	-175.95 ppb	4.232	2.41%
V 292.402†	5784.6	65.829 µg/L	2.7295	65.829 ppb	2.7295	4.15%
Zn 213.857†	8960.3	205.67 µg/L	13.312	205.67 ppb	13.312	6.47%

Sequence No.: 16

Sample ID: 245979008|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 240

Date Collected: 2/20/2010 03:56:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979008|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57070.8	57070.8	101 %		03:56:42
1	Al 396.153Radial†	50139.9	49627.2	34523 µg/L	34523 ppb	03:56:42
1	Ca 317.933Radial†	11521.1	11193.7	9561.4 µg/L	9561.4 ppb	03:57:03
1	Fe 238.204 Radial†	11292.7	11162.3	88037 µg/L	88037 ppb	03:57:03
1	K 766.490 Radial†	10231.7	9963.6	6507.4 µg/L	6507.4 ppb	03:56:42
1	Mg 279.077 IEC†	750.4	730.0	6431.2 µg/L	6431.2 ppb	03:57:03
1	Na 589.592 Radial†	1777.6	1287.5	395.44 µg/L	395.44 ppb	03:56:42
1	Sr 421.552†	9117.2	8996.6	82.995 µg/L	82.995 ppb	03:56:42
1	Sc 361.383	2002442.8	2002442.8	102.00 %		03:58:07
1	Y 371.029	1400680.0	1400680.0	103.54 %		03:58:07
1	Ag 328.068†	-1126.4	-702.7	1.1793 µg/L	1.1793 ppb	03:58:13
1	As 188.979†	7.2	7.5	18.123 µg/L	18.123 ppb	03:58:33
1	B 249.677†	1037.0	632.5	-20.029 µg/L	-20.029 ppb	03:58:13
1	Ba 233.527†	18576.5	18228.8	437.85 µg/L	437.85 ppb	03:58:13
1	Be 313.107†	39858.4	41931.4	24.060 µg/L	24.060 ppb	03:58:13
1	Cd 226.502†	260.1	396.6	-0.0045 µg/L	-0.0045 ppb	03:58:33
1	Co 228.616†	1192.4	1167.0	48.326 µg/L	48.326 ppb	03:58:33
1	Cr 267.716†	4073.9	4044.3	81.311 µg/L	81.311 ppb	03:58:13
1	Cu 324.752†	782238.5	764333.6	5001.4 µg/L	5001.4 ppb	03:58:07
1	Mn 257.610†	609171.4	597464.8	1882.4 µg/L	1882.4 ppb	03:58:07
1	Mo 202.031†	27.3	32.1	6.4894 µg/L	6.4894 ppb	03:58:33
1	Ni 231.604†	1366.9	1027.7	52.310 µg/L	52.310 ppb	03:58:33
1	P 214.914†	429.2	405.4	214.50 µg/L	214.50 ppb	03:58:33
1	Pb 220.353†	6671.4	6449.5	1557.2 µg/L	1557.2 ppb	03:58:13
1	S 181.975 Axial†	140.4	118.7	492.34 µg/L	492.34 ppb	03:58:33
1	Sb 206.836†	46.5	23.1	19.521 µg/L	19.521 ppb	03:58:33
1	Se 196.026†	-31.4	-50.1	161.78 µg/L	161.78 ppb	03:58:33
1	SiO2†	267490.6	260846.2	51488 µg/L	51488 ppb	03:58:07
1	Si 251.611†	320451.0	313847.5	23859 µg/L	23859 ppb	03:58:07
1	Sn 189.927†	44.2	42.9	9.4266 µg/L	9.4266 ppb	03:58:33
1	Ti 334.940†	1000975.2	981143.5	2170.1 µg/L	2170.1 ppb	03:58:07
1	Tl 190.801†	-51.5	-28.1	5.1726 µg/L	5.1726 ppb	03:58:33
1	U 409.014†	9360.7	9254.0	756.04 µg/L	756.04 ppb	03:58:13
1	V 292.402†	13252.1	13036.6	138.42 µg/L	138.42 ppb	03:58:13
1	Zn 213.857†	19025.5	18117.5	412.25 µg/L	412.25 ppb	03:58:13
2	Sc RADIAL	56913.0	56913.0	101 %		03:57:08
2	Al 396.153Radial†	50067.5	49693.0	34569 µg/L	34569 ppb	03:57:08
2	Ca 317.933Radial†	11536.6	11240.8	9601.6 µg/L	9601.6 ppb	03:57:29
2	Fe 238.204 Radial†	11304.5	11205.0	88374 µg/L	88374 ppb	03:57:29
2	K 766.490 Radial†	10231.3	9991.3	6525.5 µg/L	6525.5 ppb	03:57:08
2	Mg 279.077 IEC†	749.7	731.3	6442.8 µg/L	6442.8 ppb	03:57:29
2	Na 589.592 Radial†	1748.9	1263.9	388.20 µg/L	388.20 ppb	03:57:08
2	Sr 421.552†	9059.3	8964.0	82.694 µg/L	82.694 ppb	03:57:08
2	Sc 361.383	1993522.8	1993522.8	101.55 %		03:58:41
2	Y 371.029	1394436.7	1394436.7	103.08 %		03:58:41
2	Ag 328.068†	-1146.3	-727.2	1.0191 µg/L	1.0191 ppb	03:58:46
2	As 188.979†	4.9	5.3	14.043 µg/L	14.043 ppb	03:59:07
2	B 249.677†	1010.4	610.9	-21.085 µg/L	-21.085 ppb	03:58:46
2	Ba 233.527†	18575.8	18309.6	439.79 µg/L	439.79 ppb	03:58:46
2	Be 313.107†	39755.6	42005.0	24.109 µg/L	24.109 ppb	03:58:46
2	Cd 226.502†	256.2	394.0	-0.1084 µg/L	-0.1084 ppb	03:59:07
2	Co 228.616†	1171.8	1152.0	47.677 µg/L	47.677 ppb	03:59:07
2	Cr 267.716†	4052.3	4040.8	81.241 µg/L	81.241 ppb	03:58:46
2	Cu 324.752†	773767.4	759423.0	4969.4 µg/L	4969.4 ppb	03:58:41
2	Mn 257.610†	601908.7	592985.0	1868.4 µg/L	1868.4 ppb	03:58:41
2	Mo 202.031†	34.4	39.2	7.1943 µg/L	7.1943 ppb	03:59:07
2	Ni 231.604†	1363.0	1029.8	52.424 µg/L	52.424 ppb	03:59:07
2	P 214.914†	414.5	392.9	192.87 µg/L	192.87 ppb	03:59:07
2	Pb 220.353†	6657.7	6465.3	1561.0 µg/L	1561.0 ppb	03:58:46

2	S 181.975 Axial†	142.0	120.9	501.52 µg/L	501.52 ppb	03:59:07
2	Sb 206.836†	45.4	22.2	18.700 µg/L	18.700 ppb	03:59:07
2	Se 196.026†	-35.3	-54.1	157.08 µg/L	157.08 ppb	03:59:07
2	SiO2†	264575.6	259149.0	51153 µg/L	51153 ppb	03:58:41
2	Si 251.611†	316781.6	311639.8	23691 µg/L	23691 ppb	03:58:41
2	Sn 189.927†	47.3	46.2	10.781 µg/L	10.781 ppb	03:59:07
2	Ti 334.940†	989439.9	974175.0	2154.7 µg/L	2154.7 ppb	03:58:41
2	Tl 190.801†	-55.5	-32.3	-0.4181 µg/L	-0.4181 ppb	03:59:07
2	U 409.014†	9495.4	9427.6	770.42 µg/L	770.42 ppb	03:58:46
2	V 292.402†	13198.6	13042.0	138.53 µg/L	138.53 ppb	03:58:46
2	Zn 213.857†	18935.6	18112.4	412.16 µg/L	412.16 ppb	03:58:46
3	Sc RADIAL	57135.7	57135.7	101 %		03:57:34
3	Al 396.153Radial†	50173.4	49604.0	34507 µg/L	34507 ppb	03:57:34
3	Ca 317.933Radial†	11520.3	11180.0	9549.7 µg/L	9549.7 ppb	03:57:55
3	Fe 238.204 Radial†	11263.1	11120.3	87706 µg/L	87706 ppb	03:57:55
3	K 766.490 Radial†	10246.7	9966.9	6509.6 µg/L	6509.6 ppb	03:57:34
3	Mg 279.077 IEC†	749.7	728.5	6417.8 µg/L	6417.8 ppb	03:57:55
3	Na 589.592 Radial†	1765.7	1273.7	391.22 µg/L	391.22 ppb	03:57:34
3	Sr 421.552†	9082.0	8951.4	82.578 µg/L	82.578 ppb	03:57:34
3	Sc 361.383	1991224.3	1991224.3	101.43 %		03:59:14
3	Y 371.029	1391669.6	1391669.6	102.88 %		03:59:14
3	Ag 328.068†	-1080.3	-663.4	1.4060 µg/L	1.4060 ppb	03:59:20
3	As 188.979†	5.1	5.5	14.380 µg/L	14.380 ppb	03:59:41
3	B 249.677†	973.7	575.8	-22.173 µg/L	-22.173 ppb	03:59:20
3	Ba 233.527†	17668.2	17435.9	418.80 µg/L	418.80 ppb	03:59:20
3	Be 313.107†	37376.5	39704.6	22.772 µg/L	22.772 ppb	03:59:20
3	Cd 226.502†	208.5	347.2	-1.2050 µg/L	-1.2050 ppb	03:59:41
3	Co 228.616†	1067.8	1050.8	43.249 µg/L	43.249 ppb	03:59:41
3	Cr 267.716†	3813.2	3809.8	76.596 µg/L	76.596 ppb	03:59:20
3	Cu 324.752†	751123.8	737978.6	4829.3 µg/L	4829.3 ppb	03:59:14
3	Mn 257.610†	582596.0	574629.2	1810.9 µg/L	1810.9 ppb	03:59:14
3	Mo 202.031†	22.2	27.2	5.9992 µg/L	5.9992 ppb	03:59:41
3	Ni 231.604†	1243.6	913.7	46.633 µg/L	46.633 ppb	03:59:41
3	P 214.914†	385.8	365.0	153.00 µg/L	153.00 ppb	03:59:41
3	Pb 220.353†	6425.5	6243.8	1507.5 µg/L	1507.5 ppb	03:59:20
3	S 181.975 Axial†	128.8	108.0	447.93 µg/L	447.93 ppb	03:59:41
3	Sb 206.836†	41.3	18.2	15.065 µg/L	15.065 ppb	03:59:41
3	Se 196.026†	-27.8	-46.7	165.66 µg/L	165.66 ppb	03:59:41
3	SiO2†	258688.1	253645.4	50066 µg/L	50066 ppb	03:59:14
3	Si 251.611†	309693.2	305011.5	23188 µg/L	23188 ppb	03:59:14
3	Sn 189.927†	42.9	41.9	9.0326 µg/L	9.0326 ppb	03:59:41
3	Ti 334.940†	954354.0	940709.0	2080.7 µg/L	2080.7 ppb	03:59:14
3	Tl 190.801†	-42.9	-19.9	14.727 µg/L	14.727 ppb	03:59:41
3	U 409.014†	8846.5	8798.7	718.26 µg/L	718.26 ppb	03:59:20
3	V 292.402†	12492.0	12360.5	131.73 µg/L	131.73 ppb	03:59:20
3	Zn 213.857†	18070.0	17280.6	392.93 µg/L	392.93 ppb	03:59:20

Mean Data: 245979008|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1995730.0	101.66 %	0.302			0.30%
Sc RADIAL	57039.8	101 %	0.2			0.20%
Y 371.029	1395595.4	103.17 %	0.341			0.33%
Ag 328.068†	-697.8	1.2014 µg/L	0.19440	1.2014 ppb	0.19440	16.18%
Al 396.153Radial†	49641.4	34533 µg/L	32.1	34533 ppb	32.1	0.09%
As 188.979†	6.1	15.515 µg/L	2.2645	15.515 ppb	2.2645	14.60%
B 249.677†	606.4	-21.096 µg/L	1.0718	-21.096 ppb	1.0718	5.08%
Ba 233.527†	17991.4	432.15 µg/L	11.597	432.15 ppb	11.597	2.68%
Be 313.107†	41213.7	23.647 µg/L	0.7581	23.647 ppb	0.7581	3.21%
Ca 317.933Radial†	11204.8	9570.9 µg/L	27.23	9570.9 ppb	27.23	0.28%
Cd 226.502†	379.3	-0.4393 µg/L	0.66516	-0.4393 ppb	0.66516	151.42%
Co 228.616†	1123.3	46.417 µg/L	2.7631	46.417 ppb	2.7631	5.95%
Cr 267.716†	3965.0	79.716 µg/L	2.7022	79.716 ppb	2.7022	3.39%
Cu 324.752†	753911.7	4933.4 µg/L	91.52	4933.4 ppb	91.52	1.86%
Fe 238.204 Radial†	11162.5	88039 µg/L	334.1	88039 ppb	334.1	0.38%
K 766.490 Radial†	9973.9	6514.1 µg/L	9.86	6514.1 ppb	9.86	0.15%
Mg 279.077 IEC†	729.9	6430.6 µg/L	12.49	6430.6 ppb	12.49	0.19%
Mn 257.610†	588359.7	1853.9 µg/L	37.92	1853.9 ppb	37.92	2.05%
Mo 202.031†	32.8	6.5610 µg/L	0.60075	6.5610 ppb	0.60075	9.16%
Na 589.592 Radial†	1275.0	391.62 µg/L	3.635	391.62 ppb	3.635	0.93%

Ni 231.604†	990.4	50.456 µg/L	3.3112	50.456 ppb	3.3112	6.56%
P 214.914†	387.8	186.79 µg/L	31.197	186.79 ppb	31.197	16.70%
Pb 220.353†	6386.2	1541.9 µg/L	29.85	1541.9 ppb	29.85	1.94%
S 181.975 Axial†	115.9	480.59 µg/L	28.663	480.59 ppb	28.663	5.96%
Sb 206.836†	21.2	17.762 µg/L	2.3713	17.762 ppb	2.3713	13.35%
Se 196.026†	-50.3	161.51 µg/L	4.294	161.51 ppb	4.294	2.66%
SiO2†	257880.2	50902 µg/L	743.0	50902 ppb	743.0	1.46%
Si 251.611†	310166.3	23579 µg/L	349.6	23579 ppb	349.6	1.48%
Sn 189.927†	43.7	9.7468 µg/L	0.91723	9.7468 ppb	0.91723	9.41%
Sr 421.552†	8970.7	82.756 µg/L	0.2149	82.756 ppb	0.2149	0.26%
Ti 334.940†	965342.5	2135.2 µg/L	47.82	2135.2 ppb	47.82	2.24%
Tl 190.801†	-26.8	6.4939 µg/L	7.65866	6.4939 ppb	7.65866	117.94%
U 409.014†	9160.1	748.24 µg/L	26.940	748.24 ppb	26.940	3.60%
V 292.402†	12813.0	136.23 µg/L	3.891	136.23 ppb	3.891	2.86%
Zn 213.857†	17836.8	405.78 µg/L	11.128	405.78 ppb	11.128	2.74%

Sequence No.: 17

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 03:59:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57426.7	57426.7	102 %		04:00:29
1	Al 396.153Radial†	7218.5	7094.1	4924.3 µg/L	4924.3 ppb	04:00:29
1	Ca 317.933Radial†	6083.3	5773.4	4931.5 µg/L	4931.5 ppb	04:00:49
1	Fe 238.204 Radial†	671.4	643.9	5089.5 µg/L	5089.5 ppb	04:00:49
1	K 766.490 Radial†	7883.6	7590.8	4957.7 µg/L	4957.7 ppb	04:00:29
1	Mg 279.077 IEC†	587.7	565.3	5056.8 µg/L	5056.8 ppb	04:00:49
1	Na 589.592 Radial†	33426.8	32412.7	9955.3 µg/L	9955.3 ppb	04:00:29
1	Sr 421.552†	53052.5	52163.5	481.22 µg/L	481.22 ppb	04:00:29
1	Sc 361.383	1985493.4	1985493.4	101.14 %		04:01:52
1	Y 371.029	1363768.3	1363768.3	100.81 %		04:01:52
1	Ag 328.068†	68349.1	67980.5	507.26 µg/L	507.26 ppb	04:01:58
1	As 188.979†	293.5	290.6	519.93 µg/L	519.93 ppb	04:02:18
1	B 249.677†	12768.0	12240.0	497.04 µg/L	497.04 ppb	04:01:58
1	Ba 233.527†	21442.9	21218.4	510.31 µg/L	510.31 ppb	04:01:58
1	Be 313.107†	858847.4	852025.1	505.49 µg/L	505.49 ppb	04:01:52
1	Cd 226.502†	20617.9	20527.2	511.91 µg/L	511.91 ppb	04:01:58
1	Co 228.616†	11486.6	11355.3	513.67 µg/L	513.67 ppb	04:01:58
1	Cr 267.716†	25858.4	25617.4	514.85 µg/L	514.85 ppb	04:01:58
1	Cu 324.752†	84659.4	81161.7	530.49 µg/L	530.49 ppb	04:01:58
1	Mn 257.610†	165795.5	164183.3	514.62 µg/L	514.62 ppb	04:01:52
1	Mo 202.031†	5396.3	5340.9	523.20 µg/L	523.20 ppb	04:02:18
1	Ni 231.604†	10805.2	10371.1	516.45 µg/L	516.45 ppb	04:01:58
1	P 214.914†	1325.8	1295.5	2514.1 µg/L	2514.1 ppb	04:02:18
1	Pb 220.353†	2249.2	2132.9	518.63 µg/L	518.63 ppb	04:02:18
1	S 181.975 Axial†	274.2	252.1	1045.6 µg/L	1045.6 ppb	04:02:18
1	Sb 206.836†	595.5	566.3	522.18 µg/L	522.18 ppb	04:02:18
1	Se 196.026†	385.8	362.2	516.65 µg/L	516.65 ppb	04:02:18
1	SiO2†	29520.0	27795.8	5486.5 µg/L	5486.5 ppb	04:01:58
1	Si 251.611†	34379.0	33681.0	2560.5 µg/L	2560.5 ppb	04:01:58
1	Sn 189.927†	1266.3	1251.6	527.86 µg/L	527.86 ppb	04:02:18
1	Ti 334.940†	232157.7	229366.6	507.09 µg/L	507.09 ppb	04:01:52
1	Tl 190.801†	372.0	390.2	512.85 µg/L	512.85 ppb	04:02:18
1	U 409.014†	6238.1	6244.9	517.85 µg/L	517.85 ppb	04:01:58
1	V 292.402†	52927.7	52376.0	516.77 µg/L	516.77 ppb	04:01:58
1	Zn 213.857†	23107.1	22312.3	519.81 µg/L	519.81 ppb	04:01:58
2	Sc RADIAL	57318.5	57318.5	101 %		04:00:55
2	Al 396.153Radial†	7265.9	7154.2	4966.4 µg/L	4966.4 ppb	04:00:55
2	Ca 317.933Radial†	6070.5	5772.1	4930.4 µg/L	4930.4 ppb	04:01:15
2	Fe 238.204 Radial†	667.2	641.0	5066.3 µg/L	5066.3 ppb	04:01:15
2	K 766.490 Radial†	7850.7	7573.1	4946.1 µg/L	4946.1 ppb	04:00:55
2	Mg 279.077 IEC†	585.3	564.1	5045.6 µg/L	5045.6 ppb	04:01:15
2	Na 589.592 Radial†	33548.6	32594.8	10011 µg/L	10011 ppb	04:00:55
2	Sr 421.552†	53531.7	52734.4	486.48 µg/L	486.48 ppb	04:00:55
2	Sc 361.383	1991232.4	1991232.4	101.43 %		04:02:26
2	Y 371.029	1369046.9	1369046.9	101.20 %		04:02:26
2	Ag 328.068†	68408.0	67843.8	506.22 µg/L	506.22 ppb	04:02:31
2	As 188.979†	284.9	281.3	503.26 µg/L	503.26 ppb	04:02:52
2	B 249.677†	12771.6	12207.2	495.71 µg/L	495.71 ppb	04:02:31
2	Ba 233.527†	21353.0	21068.6	506.71 µg/L	506.71 ppb	04:02:31
2	Be 313.107†	850864.9	841707.9	499.37 µg/L	499.37 ppb	04:02:26
2	Cd 226.502†	20593.0	20443.9	509.83 µg/L	509.83 ppb	04:02:31
2	Co 228.616†	11431.2	11267.8	509.71 µg/L	509.71 ppb	04:02:31
2	Cr 267.716†	25835.1	25520.8	512.91 µg/L	512.91 ppb	04:02:31
2	Cu 324.752†	84326.3	80592.1	526.77 µg/L	526.77 ppb	04:02:31
2	Mn 257.610†	164333.3	162269.3	508.62 µg/L	508.62 ppb	04:02:26
2	Mo 202.031†	5272.6	5203.5	509.75 µg/L	509.75 ppb	04:02:52
2	Ni 231.604†	10690.2	10226.9	509.26 µg/L	509.26 ppb	04:02:31
2	P 214.914†	1303.2	1269.5	2462.8 µg/L	2462.8 ppb	04:02:52
2	Pb 220.353†	2209.7	2087.5	507.58 µg/L	507.58 ppb	04:02:52

2	S 181.975 Axial†	260.6	238.0	986.98 µg/L	986.98 ppb	04:02:52
2	Sb 206.836†	582.7	552.0	508.84 µg/L	508.84 ppb	04:02:52
2	Se 196.026†	380.6	356.0	507.87 µg/L	507.87 ppb	04:02:52
2	SiO2†	29428.6	27621.5	5452.1 µg/L	5452.1 ppb	04:02:31
2	Si 251.611†	34321.9	33526.7	2548.8 µg/L	2548.8 ppb	04:02:31
2	Sn 189.927†	1229.6	1211.9	511.09 µg/L	511.09 ppb	04:02:52
2	Ti 334.940†	229786.1	226366.9	500.45 µg/L	500.45 ppb	04:02:26
2	Tl 190.801†	370.1	387.2	508.94 µg/L	508.94 ppb	04:02:52
2	U 409.014†	6161.5	6151.6	510.10 µg/L	510.10 ppb	04:02:31
2	V 292.402†	52715.6	52016.1	513.15 µg/L	513.15 ppb	04:02:31
2	Zn 213.857†	23047.8	22188.0	516.94 µg/L	516.94 ppb	04:02:31
3	Sc RADIAL	56945.3	56945.3	101 %		04:01:20
3	Al 396.153Radial†	7238.8	7174.3	4982.3 µg/L	4982.3 ppb	04:01:20
3	Ca 317.933Radial†	6073.3	5814.0	4966.2 µg/L	4966.2 ppb	04:01:41
3	Fe 238.204 Radial†	662.1	640.3	5059.8 µg/L	5059.8 ppb	04:01:41
3	K 766.490 Radial†	7826.8	7600.1	4963.7 µg/L	4963.7 ppb	04:01:20
3	Mg 279.077 IEC†	586.4	569.0	5087.6 µg/L	5087.6 ppb	04:01:41
3	Na 589.592 Radial†	33485.4	32748.8	10059 µg/L	10059 ppb	04:01:20
3	Sr 421.552†	53575.1	53123.2	490.07 µg/L	490.07 ppb	04:01:20
3	Sc 361.383	1996433.2	1996433.2	101.70 %		04:02:59
3	Y 371.029	1372867.0	1372867.0	101.49 %		04:02:59
3	Ag 328.068†	63362.6	62706.9	467.73 µg/L	467.73 ppb	04:03:04
3	As 188.979†	241.2	237.7	425.16 µg/L	425.16 ppb	04:03:25
3	B 249.677†	11707.2	11127.7	451.60 µg/L	451.60 ppb	04:03:04
3	Ba 233.527†	19089.5	18788.0	451.84 µg/L	451.84 ppb	04:03:04
3	Be 313.107†	782632.2	772428.6	458.27 µg/L	458.27 ppb	04:02:59
3	Cd 226.502†	18237.1	18074.5	450.67 µg/L	450.67 ppb	04:03:04
3	Co 228.616†	10050.7	9881.0	446.91 µg/L	446.91 ppb	04:03:04
3	Cr 267.716†	22079.8	21761.7	437.37 µg/L	437.37 ppb	04:03:04
3	Cu 324.752†	75048.3	71252.3	465.80 µg/L	465.80 ppb	04:03:04
3	Mn 257.610†	151648.5	149374.0	468.24 µg/L	468.24 ppb	04:02:59
3	Mo 202.031†	4322.6	4255.8	416.95 µg/L	416.95 ppb	04:03:25
3	Ni 231.604†	9413.4	8944.0	445.39 µg/L	445.39 ppb	04:03:04
3	P 214.914†	1089.1	1055.6	2044.3 µg/L	2044.3 ppb	04:03:25
3	Pb 220.353†	1882.4	1760.0	427.87 µg/L	427.87 ppb	04:03:25
3	S 181.975 Axial†	234.6	211.8	878.23 µg/L	878.23 ppb	04:03:25
3	Sb 206.836†	486.5	455.9	419.96 µg/L	419.96 ppb	04:03:25
3	Se 196.026†	336.7	311.8	445.77 µg/L	445.77 ppb	04:03:25
3	SiO2†	26846.9	25007.4	4936.1 µg/L	4936.1 ppb	04:03:04
3	Si 251.611†	31144.8	30314.5	2304.6 µg/L	2304.6 ppb	04:03:04
3	Sn 189.927†	997.0	980.0	413.32 µg/L	413.32 ppb	04:03:25
3	Ti 334.940†	209947.1	206268.8	455.99 µg/L	455.99 ppb	04:02:59
3	Tl 190.801†	327.4	344.4	452.86 µg/L	452.86 ppb	04:03:25
3	U 409.014†	5388.8	5376.0	445.65 µg/L	445.65 ppb	04:03:04
3	V 292.402†	45944.6	45222.7	445.99 µg/L	445.99 ppb	04:03:04
3	Zn 213.857†	20419.0	19543.8	455.28 µg/L	455.28 ppb	04:03:04

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1991053.0	101.42 %	0.279			0.27%
Sc RADIAL	57230.1	101 %	0.4			0.44%
Y 371.029	1368560.7	101.17 %	0.338			0.33%
Ag 328.068†	66177.1	493.74 µg/L	22.527	493.74 ppb	22.527	4.56%
QC value within limits for Ag 328.068 Recovery = 98.75%						
Al 396.153Radial†	7140.9	4957.6 µg/L	29.97	4957.6 ppb	29.97	0.60%
QC value within limits for Al 396.153Radial Recovery = 99.15%						
As 188.979†	269.9	482.78 µg/L	50.595	482.78 ppb	50.595	10.48%
QC value within limits for As 188.979 Recovery = 96.56%						
B 249.677†	11858.3	481.45 µg/L	25.861	481.45 ppb	25.861	5.37%
QC value within limits for B 249.677 Recovery = 96.29%						
Ba 233.527†	20358.3	489.62 µg/L	32.768	489.62 ppb	32.768	6.69%
QC value within limits for Ba 233.527 Recovery = 97.92%						
Be 313.107†	822053.9	487.71 µg/L	25.679	487.71 ppb	25.679	5.27%
QC value within limits for Be 313.107 Recovery = 97.54%						
Ca 317.933Radial†	5786.5	4942.7 µg/L	20.36	4942.7 ppb	20.36	0.41%
QC value within limits for Ca 317.933Radial Recovery = 98.85%						
Cd 226.502†	19681.9	490.80 µg/L	34.773	490.80 ppb	34.773	7.08%
QC value within limits for Cd 226.502 Recovery = 98.16%						
Co 228.616†	10834.7	490.10 µg/L	37.451	490.10 ppb	37.451	7.64%

Cr	267.716†	24300.0	488.38 µg/L	44.187	488.38 ppb	44.187	9.05%
Cu	324.752†	77668.7	507.69 µg/L	36.321	507.69 ppb	36.321	7.15%
Fe	238.204 Radial†	641.8	5071.9 µg/L	15.62	5071.9 ppb	15.62	0.31%
K	766.490 Radial†	7588.0	4955.8 µg/L	8.96	4955.8 ppb	8.96	0.18%
Mg	279.077 IEC†	566.1	5063.3 µg/L	21.75	5063.3 ppb	21.75	0.43%
Mn	257.610†	158608.9	497.16 µg/L	25.226	497.16 ppb	25.226	5.07%
Mo	202.031†	4933.4	483.30 µg/L	57.854	483.30 ppb	57.854	11.97%
Na	589.592 Radial†	32585.4	10008 µg/L	51.7	10008 ppb	51.7	0.52%
Ni	231.604†	9847.3	490.37 µg/L	39.119	490.37 ppb	39.119	7.98%
P	214.914†	1206.9	2340.4 µg/L	257.73	2340.4 ppb	257.73	11.01%
Pb	220.353†	1993.5	484.70 µg/L	49.519	484.70 ppb	49.519	10.22%
S	181.975 Axial†	234.0	970.28 µg/L	84.934	970.28 ppb	84.934	8.75%
Sb	206.836†	524.7	483.66 µg/L	55.566	483.66 ppb	55.566	11.49%
Se	196.026†	343.3	490.09 µg/L	38.639	490.09 ppb	38.639	7.88%
SiO2†		26808.2	5291.6 µg/L	308.32	5291.6 ppb	308.32	5.83%
Si	251.611†	32507.4	2471.3 µg/L	144.49	2471.3 ppb	144.49	5.85%
Sn	189.927†	1147.8	484.09 µg/L	61.859	484.09 ppb	61.859	12.78%
Sr	421.552†	52673.7	485.92 µg/L	4.453	485.92 ppb	4.453	0.92%
Ti	334.940†	220667.4	487.84 µg/L	27.786	487.84 ppb	27.786	5.70%
Tl	190.801†	373.9	491.55 µg/L	33.565	491.55 ppb	33.565	6.83%
U	409.014†	5924.2	491.20 µg/L	39.635	491.20 ppb	39.635	8.07%
V	292.402†	49871.6	491.97 µg/L	39.863	491.97 ppb	39.863	8.10%
Zn	213.857†	21348.0	497.34 µg/L	36.457	497.34 ppb	36.457	7.33%

QC value within limits for Co 228.616 Recovery = 98.02%

QC value within limits for Cr 267.716 Recovery = 97.68%

QC value within limits for Cu 324.752 Recovery = 101.54%

QC value within limits for Fe 238.204 Radial Recovery = 101.44%

QC value within limits for K 766.490 Radial Recovery = 99.12%

QC value within limits for Mg 279.077 IEC Recovery = 101.27%

QC value within limits for Mn 257.610 Recovery = 99.43%

QC value within limits for Mo 202.031 Recovery = 96.66%

QC value within limits for Na 589.592 Radial Recovery = 100.08%

QC value within limits for Ni 231.604 Recovery = 98.07%

QC value within limits for P 214.914 Recovery = 93.62%

QC value within limits for Pb 220.353 Recovery = 96.94%

QC value within limits for S 181.975 Axial Recovery = 97.03%

QC value within limits for Sb 206.836 Recovery = 96.73%

QC value within limits for Se 196.026 Recovery = 98.02%

QC value within limits for SiO2 Recovery = 98.95%

QC value within limits for Si 251.611 Recovery = 98.85%

QC value within limits for Sn 189.927 Recovery = 96.82%

QC value within limits for Sr 421.552 Recovery = 97.18%

QC value within limits for Ti 334.940 Recovery = 97.57%

QC value within limits for Tl 190.801 Recovery = 98.31%

QC value within limits for U 409.014 Recovery = 98.24%

QC value within limits for V 292.402 Recovery = 98.39%

QC value within limits for Zn 213.857 Recovery = 99.47%

All analyte(s) passed QC.

Sequence No.: 18

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 04:03:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56500.8	56500.8	100 %		04:04:07
1	Al 396.153Radial†	-15.8	-23.2	-16.144 µg/L	-16.144 ppb	04:04:07
1	Ca 317.933Radial†	190.5	-20.8	-17.771 µg/L	-17.771 ppb	04:04:28
1	Fe 238.204 Radial†	21.5	5.0	39.073 µg/L	39.073 ppb	04:04:28
1	K 766.490 Radial†	236.4	71.4	46.649 µg/L	46.649 ppb	04:04:07
1	Mg 279.077 IEC†	11.1	-1.7	-15.181 µg/L	-15.181 ppb	04:04:28
1	Na 589.592 Radial†	426.1	-46.1	-14.162 µg/L	-14.162 ppb	04:04:07
1	Sr 421.552†	33.0	4.2	0.0385 µg/L	0.0385 ppb	04:04:07
1	Sc 361.383	2010137.0	2010137.0	102.40 %		04:05:29
1	Y 371.029	1387621.1	1387621.1	102.58 %		04:05:29
1	Ag 328.068†	-435.9	-24.1	-0.1744 µg/L	-0.1744 ppb	04:05:35
1	As 188.979†	4.4	4.8	8.5816 µg/L	8.5816 ppb	04:05:56
1	B 249.677†	358.1	-34.4	-1.4217 µg/L	-1.4217 ppb	04:05:56
1	Ba 233.527†	-6.3	10.9	0.2619 µg/L	0.2619 ppb	04:05:56
1	Be 313.107†	-2732.9	186.8	0.1107 µg/L	0.1107 ppb	04:05:35
1	Cd 226.502†	-140.3	4.7	0.1129 µg/L	0.1129 ppb	04:05:56
1	Co 228.616†	3.4	1.4	0.0634 µg/L	0.0634 ppb	04:05:56
1	Cr 267.716†	-67.7	-15.8	-0.3168 µg/L	-0.3168 ppb	04:05:35
1	Cu 324.752†	5546.8	2873.3	18.761 µg/L	18.761 ppb	04:05:35
1	Mn 257.610†	-143.2	116.2	0.3696 µg/L	0.3696 ppb	04:05:56
1	Mo 202.031†	3.3	8.5	0.8381 µg/L	0.8381 ppb	04:05:56
1	Ni 231.604†	313.7	-6.0	-0.2988 µg/L	-0.2988 ppb	04:05:56
1	P 214.914†	12.4	-3.3	-8.4267 µg/L	-8.4267 ppb	04:05:56
1	Pb 220.353†	98.7	5.4	1.2891 µg/L	1.2891 ppb	04:05:56
1	S 181.975 Axial†	18.5	-0.8	-3.4151 µg/L	-3.4151 ppb	04:05:56
1	Sb 206.836†	18.8	-4.2	-3.8116 µg/L	-3.8116 ppb	04:05:56
1	Se 196.026†	9.7	-9.8	-13.663 µg/L	-13.663 ppb	04:05:56
1	SiO2†	1459.3	33.6	6.6406 µg/L	6.6406 ppb	04:05:35
1	Si 251.611†	383.4	63.8	4.8509 µg/L	4.8509 ppb	04:05:56
1	Sn 189.927†	6.2	5.6	2.3731 µg/L	2.3731 ppb	04:05:56
1	Ti 334.940†	372.4	188.7	0.4183 µg/L	0.4183 ppb	04:05:35
1	Tl 190.801†	-17.9	4.9	6.3684 µg/L	6.3684 ppb	04:05:56
1	U 409.014†	-66.4	12.2	1.0097 µg/L	1.0097 ppb	04:05:35
1	V 292.402†	-16.0	29.1	0.2952 µg/L	0.2952 ppb	04:05:35
1	Zn 213.857†	836.4	282.4	6.5959 µg/L	6.5959 ppb	04:05:56
2	Sc RADIAL	56703.0	56703.0	100 %		04:04:33
2	Al 396.153Radial†	-13.8	-21.1	-14.689 µg/L	-14.689 ppb	04:04:33
2	Ca 317.933Radial†	198.3	-13.7	-11.661 µg/L	-11.661 ppb	04:04:53
2	Fe 238.204 Radial†	20.5	3.9	30.733 µg/L	30.733 ppb	04:04:53
2	K 766.490 Radial†	227.3	61.5	40.177 µg/L	40.177 ppb	04:04:33
2	Mg 279.077 IEC†	12.6	-0.3	-2.8170 µg/L	-2.8170 ppb	04:04:53
2	Na 589.592 Radial†	474.7	0.7	0.2225 µg/L	0.2225 ppb	04:04:33
2	Sr 421.552†	34.8	5.9	0.0543 µg/L	0.0543 ppb	04:04:33
2	Sc 361.383	1997360.2	1997360.2	101.74 %		04:06:02
2	Y 371.029	1378194.4	1378194.4	101.88 %		04:06:02
2	Ag 328.068†	-429.2	-20.3	-0.1474 µg/L	-0.1474 ppb	04:06:07
2	As 188.979†	-2.5	-2.0	-3.5650 µg/L	-3.5650 ppb	04:06:28
2	B 249.677†	338.9	-51.1	-2.0986 µg/L	-2.0986 ppb	04:06:28
2	Ba 233.527†	-8.7	8.5	0.2041 µg/L	0.2041 ppb	04:06:28
2	Be 313.107†	-2649.3	251.8	0.1494 µg/L	0.1494 ppb	04:06:07
2	Cd 226.502†	-130.2	13.7	0.3388 µg/L	0.3388 ppb	04:06:28
2	Co 228.616†	-2.9	-4.8	-0.2152 µg/L	-0.2152 ppb	04:06:28
2	Cr 267.716†	-55.7	-4.4	-0.0878 µg/L	-0.0878 ppb	04:06:07
2	Cu 324.752†	5400.5	2764.2	18.047 µg/L	18.047 ppb	04:06:07
2	Mn 257.610†	-168.8	90.1	0.2864 µg/L	0.2864 ppb	04:06:28
2	Mo 202.031†	2.8	8.1	0.7924 µg/L	0.7924 ppb	04:06:28
2	Ni 231.604†	305.0	-12.6	-0.6270 µg/L	-0.6270 ppb	04:06:28
2	P 214.914†	15.7	0.1	-1.7078 µg/L	-1.7078 ppb	04:06:28
2	Pb 220.353†	93.9	1.3	0.2927 µg/L	0.2927 ppb	04:06:28

2	S 181.975 Axial†	18.9	-0.4	-1.6490 µg/L	-1.6490 ppb	04:06:28
2	Sb 206.836†	23.2	0.3	0.2543 µg/L	0.2543 ppb	04:06:28
2	Se 196.026†	11.6	-7.9	-10.992 µg/L	-10.992 ppb	04:06:28
2	SiO2†	1481.5	64.5	12.736 µg/L	12.736 ppb	04:06:07
2	Si 251.611†	402.7	85.2	6.4771 µg/L	6.4771 ppb	04:06:28
2	Sn 189.927†	2.6	2.2	0.9332 µg/L	0.9332 ppb	04:06:28
2	Ti 334.940†	300.4	120.2	0.2659 µg/L	0.2659 ppb	04:06:07
2	Tl 190.801†	-20.8	1.9	2.5161 µg/L	2.5161 ppb	04:06:28
2	U 409.014†	-61.5	16.6	1.3776 µg/L	1.3776 ppb	04:06:07
2	V 292.402†	-34.5	10.8	0.1162 µg/L	0.1162 ppb	04:06:07
2	Zn 213.857†	833.7	285.0	6.6600 µg/L	6.6600 ppb	04:06:28
3	Sc RADIAL	57227.9	57227.9	101 %		04:04:59
3	Al 396.153Radial†	-2.5	-9.8	-6.8631 µg/L	-6.8631 ppb	04:04:59
3	Ca 317.933Radial†	194.5	-19.3	-16.459 µg/L	-16.459 ppb	04:05:19
3	Fe 238.204 Radial†	17.6	0.8	5.9762 µg/L	5.9762 ppb	04:05:19
3	K 766.490 Radial†	294.3	125.5	81.983 µg/L	81.983 ppb	04:04:59
3	Mg 279.077 IEC†	10.7	-2.3	-20.489 µg/L	-20.489 ppb	04:05:19
3	Na 589.592 Radial†	407.9	-69.5	-21.356 µg/L	-21.356 ppb	04:04:59
3	Sr 421.552†	56.5	27.0	0.2491 µg/L	0.2491 ppb	04:04:59
3	Sc 361.383	1996749.8	1996749.8	101.71 %		04:06:34
3	Y 371.029	1377817.7	1377817.7	101.85 %		04:06:34
3	Ag 328.068†	-403.9	4.5	0.0346 µg/L	0.0346 ppb	04:06:39
3	As 188.979†	0.7	1.1	1.9927 µg/L	1.9927 ppb	04:07:00
3	B 249.677†	344.6	-45.3	-1.8503 µg/L	-1.8503 ppb	04:07:00
3	Ba 233.527†	-12.1	5.1	0.1237 µg/L	0.1237 ppb	04:07:00
3	Be 313.107†	-2797.2	105.6	0.0626 µg/L	0.0626 ppb	04:06:39
3	Cd 226.502†	-138.4	5.6	0.1387 µg/L	0.1387 ppb	04:07:00
3	Co 228.616†	3.7	1.7	0.0776 µg/L	0.0776 ppb	04:07:00
3	Cr 267.716†	-21.3	29.4	0.5909 µg/L	0.5909 ppb	04:06:39
3	Cu 324.752†	5401.3	2766.6	18.060 µg/L	18.060 ppb	04:06:39
3	Mn 257.610†	-166.2	92.6	0.2917 µg/L	0.2917 ppb	04:07:00
3	Mo 202.031†	1.8	7.1	0.6970 µg/L	0.6970 ppb	04:07:00
3	Ni 231.604†	318.5	0.8	0.0396 µg/L	0.0396 ppb	04:07:00
3	P 214.914†	19.9	4.2	6.3706 µg/L	6.3706 ppb	04:07:00
3	Pb 220.353†	93.5	1.0	0.2041 µg/L	0.2041 ppb	04:07:00
3	S 181.975 Axial†	13.6	-5.5	-22.904 µg/L	-22.904 ppb	04:07:00
3	Sb 206.836†	19.9	-2.9	-2.6813 µg/L	-2.6813 ppb	04:07:00
3	Se 196.026†	15.4	-4.1	-5.7675 µg/L	-5.7675 ppb	04:07:00
3	SiO2†	1474.2	57.8	11.412 µg/L	11.412 ppb	04:06:39
3	Si 251.611†	381.8	64.7	4.9209 µg/L	4.9209 ppb	04:07:00
3	Sn 189.927†	-0.0	-0.4	-0.1715 µg/L	-0.1715 ppb	04:07:00
3	Ti 334.940†	282.7	102.9	0.2290 µg/L	0.2290 ppb	04:06:39
3	Tl 190.801†	-25.7	-2.9	-3.7622 µg/L	-3.7622 ppb	04:07:00
3	U 409.014†	7.8	84.8	7.0457 µg/L	7.0457 ppb	04:06:39
3	V 292.402†	-36.5	8.8	0.1009 µg/L	0.1009 ppb	04:06:39
3	Zn 213.857†	813.7	265.6	6.2024 µg/L	6.2024 ppb	04:07:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2001415.7	101.95 %		0.385			0.38%
Sc RADIAL	56810.6	101 %		0.7			0.66%
Y 371.029	1381211.0	102.10 %		0.411			0.40%
Ag 328.068†	-13.3	-0.0957 µg/L		0.11368	-0.0957 ppb	0.11368	118.77%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-18.0	-12.566 µg/L		4.9918	-12.566 ppb	4.9918	39.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	1.3	2.3364 µg/L		6.08056	2.3364 ppb	6.08056	260.25%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-43.6	-1.7902 µg/L		0.34242	-1.7902 ppb	0.34242	19.13%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	8.2	0.1965 µg/L		0.06937	0.1965 ppb	0.06937	35.30%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	181.4	0.1075 µg/L		0.04347	0.1075 ppb	0.04347	40.42%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-17.9	-15.297 µg/L		3.2165	-15.297 ppb	3.2165	21.03%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	8.0	0.1968 µg/L		0.12366	0.1968 ppb	0.12366	62.85%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-0.5	-0.0247 µg/L		0.16506	-0.0247 ppb	0.16506	667.21%

QC value within limits for Co 228.616 Recovery = Not calculated
 Cr 267.716† 3.1 0.0621 µg/L 0.47204 0.0621 ppb 0.47204 760.45%
 QC value within limits for Cr 267.716 Recovery = Not calculated
 Cu 324.752† 2801.4 18.289 µg/L 0.4086 18.289 ppb 0.4086 2.23%
 QC value greater than the upper limit for Cu 324.752 Recovery = Not calculated
 Fe 238.204 Radial† 3.2 25.261 µg/L 17.2137 25.261 ppb 17.2137 68.14%
 QC value within limits for Fe 238.204 Radial Recovery = Not calculated
 K 766.490 Radial† 86.2 56.269 µg/L 22.5026 56.269 ppb 22.5026 39.99%
 QC value within limits for K 766.490 Radial Recovery = Not calculated
 Mg 279.077 IEC† -1.4 -12.829 µg/L 9.0679 -12.829 ppb 9.0679 70.68%
 QC value within limits for Mg 279.077 IEC Recovery = Not calculated
 Mn 257.610† 99.6 0.3159 µg/L 0.04660 0.3159 ppb 0.04660 14.75%
 QC value within limits for Mn 257.610 Recovery = Not calculated
 Mo 202.031† 7.9 0.7759 µg/L 0.07199 0.7759 ppb 0.07199 9.28%
 QC value within limits for Mo 202.031 Recovery = Not calculated
 Na 589.592 Radial† -38.3 -11.765 µg/L 10.9874 -11.765 ppb 10.9874 93.39%
 QC value within limits for Na 589.592 Radial Recovery = Not calculated
 Ni 231.604† -5.9 -0.2954 µg/L 0.33330 -0.2954 ppb 0.33330 112.84%
 QC value within limits for Ni 231.604 Recovery = Not calculated
 P 214.914† 0.3 -1.2546 µg/L 7.40904 -1.2546 ppb 7.40904 590.53%
 QC value within limits for P 214.914 Recovery = Not calculated
 Pb 220.353† 2.6 0.5953 µg/L 0.60248 0.5953 ppb 0.60248 101.21%
 QC value within limits for Pb 220.353 Recovery = Not calculated
 S 181.975 Axial† -2.2 -9.3228 µg/L 11.79497 -9.3228 ppb 11.79497 126.52%
 QC value within limits for S 181.975 Axial Recovery = Not calculated
 Sb 206.836† -2.3 -2.0796 µg/L 2.09869 -2.0796 ppb 2.09869 100.92%
 QC value within limits for Sb 206.836 Recovery = Not calculated
 Se 196.026† -7.3 -10.141 µg/L 4.0159 -10.141 ppb 4.0159 39.60%
 QC value within limits for Se 196.026 Recovery = Not calculated
 SiO2† 52.0 10.263 µg/L 3.2060 10.263 ppb 3.2060 31.24%
 QC value within limits for SiO2 Recovery = Not calculated
 Si 251.611† 71.2 5.4163 µg/L 0.91934 5.4163 ppb 0.91934 16.97%
 QC value within limits for Si 251.611 Recovery = Not calculated
 Sn 189.927† 2.5 1.0449 µg/L 1.27600 1.0449 ppb 1.27600 122.11%
 QC value within limits for Sn 189.927 Recovery = Not calculated
 Sr 421.552† 12.4 0.1140 µg/L 0.11729 0.1140 ppb 0.11729 102.92%
 QC value within limits for Sr 421.552 Recovery = Not calculated
 Ti 334.940† 137.3 0.3044 µg/L 0.10036 0.3044 ppb 0.10036 32.97%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Tl 190.801† 1.3 1.7074 µg/L 5.11349 1.7074 ppb 5.11349 299.49%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 U 409.014† 37.9 3.1443 µg/L 3.38366 3.1443 ppb 3.38366 107.61%
 QC value within limits for U 409.014 Recovery = Not calculated
 V 292.402† 16.3 0.1707 µg/L 0.10804 0.1707 ppb 0.10804 63.27%
 QC value within limits for V 292.402 Recovery = Not calculated
 Zn 213.857† 277.7 6.4861 µg/L 0.24779 6.4861 ppb 0.24779 3.82%
 QC value within limits for Zn 213.857 Recovery = Not calculated
 QC Failed. Continue with analysis.

Sequence No.: 19

Sample ID: 245979009|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 241

Date Collected: 2/20/2010 04:07:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979009|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57698.6	57698.6	102 %		04:07:48
1	Al 396.153Radial†	63158.7	61834.5	43015 µg/L	43015 ppb	04:07:48
1	Ca 317.933Radial†	18745.7	18143.6	15498 µg/L	15498 ppb	04:07:48
1	Fe 238.204 Radial†	10017.9	9792.4	77233 µg/L	77233 ppb	04:08:08
1	K 766.490 Radial†	10071.6	9696.7	6333.1 µg/L	6333.1 ppb	04:07:48
1	Mg 279.077 IEC†	866.5	835.6	7386.8 µg/L	7386.8 ppb	04:08:08
1	Na 589.592 Radial†	2110.4	1594.2	489.66 µg/L	489.66 ppb	04:07:48
1	Sr 421.552†	10379.9	10134.6	93.494 µg/L	93.494 ppb	04:07:48
1	Sc 361.383	2010912.1	2010912.1	102.43 %		04:09:13
1	Y 371.029	1436259.9	1436259.9	106.17 %		04:09:13
1	Ag 328.068†	-898.7	-475.7	2.2568 µg/L	2.2568 ppb	04:09:19
1	As 188.979†	20.9	20.9	41.119 µg/L	41.119 ppb	04:09:40
1	B 249.677†	822.6	418.9	-23.109 µg/L	-23.109 ppb	04:09:19
1	Ba 233.527†	23751.0	23203.6	557.30 µg/L	557.30 ppb	04:09:19
1	Be 313.107†	14221.0	16738.8	9.2112 µg/L	9.2112 ppb	04:09:19
1	Cd 226.502†	73.0	213.0	-3.3688 µg/L	-3.3688 ppb	04:09:40
1	Co 228.616†	869.3	846.7	34.384 µg/L	34.384 ppb	04:09:40
1	Cr 267.716†	3634.8	3598.8	72.370 µg/L	72.370 ppb	04:09:19
1	Cu 324.752†	1242489.3	1210416.0	7911.7 µg/L	7911.7 ppb	04:09:13
1	Mn 257.610†	625013.6	610415.2	1921.5 µg/L	1921.5 ppb	04:09:13
1	Mo 202.031†	16.4	21.3	5.0215 µg/L	5.0215 ppb	04:09:40
1	Ni 231.604†	1270.6	928.1	47.223 µg/L	47.223 ppb	04:09:40
1	P 214.914†	1428.1	1378.9	1847.0 µg/L	1847.0 ppb	04:09:19
1	Pb 220.353†	5314.3	5097.1	1219.6 µg/L	1219.6 ppb	04:09:19
1	S 181.975 Axial†	70.0	49.4	204.92 µg/L	204.92 ppb	04:09:40
1	Sb 206.836†	44.1	20.6	16.751 µg/L	16.751 ppb	04:09:40
1	Se 196.026†	-32.8	-51.3	128.11 µg/L	128.11 ppb	04:09:40
1	SiO2†	273304.0	265417.0	52390 µg/L	52390 ppb	04:09:13
1	Si 251.611†	327620.7	319523.7	24291 µg/L	24291 ppb	04:09:13
1	Sn 189.927†	276.2	269.2	106.10 µg/L	106.10 ppb	04:09:40
1	Ti 334.940†	879297.1	858224.3	1898.2 µg/L	1898.2 ppb	04:09:13
1	Tl 190.801†	-53.1	-29.5	5.4854 µg/L	5.4854 ppb	04:09:40
1	U 409.014†	66506.9	65003.3	5389.1 µg/L	5389.1 ppb	04:09:13
1	V 292.402†	14536.1	14235.3	153.61 µg/L	153.61 ppb	04:09:19
1	Zn 213.857†	15968.0	15054.1	336.17 µg/L	336.17 ppb	04:09:19
2	Sc RADIAL	57884.4	57884.4	102 %		04:08:14
2	Al 396.153Radial†	64002.8	62459.9	43450 µg/L	43450 ppb	04:08:14
2	Ca 317.933Radial†	18903.0	18238.3	15579 µg/L	15579 ppb	04:08:14
2	Fe 238.204 Radial†	10035.1	9777.8	77117 µg/L	77117 ppb	04:08:34
2	K 766.490 Radial†	10137.3	9729.1	6354.2 µg/L	6354.2 ppb	04:08:14
2	Mg 279.077 IEC†	861.7	828.2	7320.6 µg/L	7320.6 ppb	04:08:34
2	Na 589.592 Radial†	2163.2	1639.1	503.43 µg/L	503.43 ppb	04:08:14
2	Sr 421.552†	10527.3	10245.9	94.520 µg/L	94.520 ppb	04:08:14
2	Sc 361.383	2013624.4	2013624.4	102.57 %		04:09:48
2	Y 371.029	1439716.0	1439716.0	106.43 %		04:09:48
2	Ag 328.068†	-898.2	-474.1	2.2576 µg/L	2.2576 ppb	04:09:53
2	As 188.979†	17.9	17.9	35.718 µg/L	35.718 ppb	04:10:14
2	B 249.677†	782.6	378.9	-24.683 µg/L	-24.683 ppb	04:09:53
2	Ba 233.527†	23559.1	22985.3	552.06 µg/L	552.06 ppb	04:09:53
2	Be 313.107†	14048.6	16551.9	9.0970 µg/L	9.0970 ppb	04:09:53
2	Cd 226.502†	81.3	221.0	-3.1563 µg/L	-3.1563 ppb	04:10:14
2	Co 228.616†	859.4	835.9	33.878 µg/L	33.878 ppb	04:10:14
2	Cr 267.716†	3630.3	3589.6	72.186 µg/L	72.186 ppb	04:09:53
2	Cu 324.752†	1250007.5	1216111.8	7948.9 µg/L	7948.9 ppb	04:09:48
2	Mn 257.610†	628050.2	612553.8	1928.2 µg/L	1928.2 ppb	04:09:48
2	Mo 202.031†	20.8	25.7	5.4430 µg/L	5.4430 ppb	04:10:14
2	Ni 231.604†	1271.6	927.4	47.187 µg/L	47.187 ppb	04:10:14
2	P 214.914†	1429.9	1378.7	1843.0 µg/L	1843.0 ppb	04:09:53
2	Pb 220.353†	5270.8	5047.7	1207.5 µg/L	1207.5 ppb	04:09:53

2	S 181.975 Axial†	72.1	51.4	212.98	µg/L	212.98	ppb	04:10:14
2	Sb 206.836†	34.0	10.7	7.6662	µg/L	7.6662	ppb	04:10:14
2	Se 196.026†	-27.0	-45.6	135.78	µg/L	135.78	ppb	04:10:14
2	SiO2†	275058.4	266767.9	52657	µg/L	52657	ppb	04:09:48
2	Si 251.611†	329682.3	321102.8	24411	µg/L	24411	ppb	04:09:48
2	Sn 189.927†	266.3	259.2	101.88	µg/L	101.88	ppb	04:10:14
2	Ti 334.940†	884483.8	862124.7	1906.9	µg/L	1906.9	ppb	04:09:48
2	Tl 190.801†	-52.0	-28.3	7.1153	µg/L	7.1153	ppb	04:10:14
2	U 409.014†	66928.1	65326.5	5415.9	µg/L	5415.9	ppb	04:09:48
2	V 292.402†	14487.8	14169.1	152.98	µg/L	152.98	ppb	04:09:53
2	Zn 213.857†	15871.2	14938.7	333.41	µg/L	333.41	ppb	04:09:53
3	Sc RADIAL	57677.3	57677.3	102	%			04:08:40
3	Al 396.153Radial†	63708.1	62395.5	43406	µg/L	43406	ppb	04:08:40
3	Ca 317.933Radial†	18789.8	18193.6	15541	µg/L	15541	ppb	04:08:40
3	Fe 238.204 Radial†	9983.5	9762.4	76996	µg/L	76996	ppb	04:09:00
3	K 766.490 Radial†	10082.8	9711.2	6342.5	µg/L	6342.5	ppb	04:08:40
3	Mg 279.077 IEC†	864.2	833.7	7369.6	µg/L	7369.6	ppb	04:09:00
3	Na 589.592 Radial†	2140.9	1624.8	499.06	µg/L	499.06	ppb	04:08:40
3	Sr 421.552†	10475.1	10231.7	94.389	µg/L	94.389	ppb	04:08:40
3	Sc 361.383	2002081.6	2002081.6	101.98	%			04:10:22
3	Y 371.029	1428656.7	1428656.7	105.61	%			04:10:22
3	Ag 328.068†	-818.7	-401.2	2.7354	µg/L	2.7354	ppb	04:10:27
3	As 188.979†	20.2	20.3	40.020	µg/L	40.020	ppb	04:10:48
3	B 249.677†	781.3	382.0	-24.500	µg/L	-24.500	ppb	04:10:27
3	Ba 233.527†	22337.3	21919.6	526.46	µg/L	526.46	ppb	04:10:27
3	Be 313.107†	13106.3	15706.9	8.6283	µg/L	8.6283	ppb	04:10:27
3	Cd 226.502†	46.2	187.0	-3.9951	µg/L	-3.9951	ppb	04:10:48
3	Co 228.616†	777.9	760.8	30.657	µg/L	30.657	ppb	04:10:48
3	Cr 267.716†	3378.1	3362.8	67.624	µg/L	67.624	ppb	04:10:27
3	Cu 324.752†	1195932.8	1170115.4	7648.6	µg/L	7648.6	ppb	04:10:22
3	Mn 257.610†	600502.9	589072.7	1854.6	µg/L	1854.6	ppb	04:10:22
3	Mo 202.031†	16.4	21.4	5.0248	µg/L	5.0248	ppb	04:10:48
3	Ni 231.604†	1166.9	831.9	42.427	µg/L	42.427	ppb	04:10:48
3	P 214.914†	1344.1	1302.6	1724.1	µg/L	1724.1	ppb	04:10:27
3	Pb 220.353†	5085.1	4895.2	1171.2	µg/L	1171.2	ppb	04:10:27
3	S 181.975 Axial†	65.0	44.8	185.64	µg/L	185.64	ppb	04:10:48
3	Sb 206.836†	36.5	13.3	10.137	µg/L	10.137	ppb	04:10:48
3	Se 196.026†	-23.0	-41.8	140.78	µg/L	140.78	ppb	04:10:48
3	SiO2†	265048.1	258498.5	51024	µg/L	51024	ppb	04:10:22
3	Si 251.611†	317660.9	311168.4	23656	µg/L	23656	ppb	04:10:22
3	Sn 189.927†	251.4	246.1	96.364	µg/L	96.364	ppb	04:10:48
3	Ti 334.940†	839673.1	823157.5	1820.7	µg/L	1820.7	ppb	04:10:22
3	Tl 190.801†	-45.2	-21.9	14.123	µg/L	14.123	ppb	04:10:48
3	U 409.014†	63696.4	62533.9	5183.9	µg/L	5183.9	ppb	04:10:22
3	V 292.402†	13539.1	13320.3	144.44	µg/L	144.44	ppb	04:10:27
3	Zn 213.857†	15089.6	14261.6	318.03	µg/L	318.03	ppb	04:10:27

Mean Data: 245979009|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008872.7	102.33 %	0.307			0.30%
Sc RADIAL	57753.5	102 %	0.2			0.20%
Y 371.029	1434877.5	106.07 %	0.418			0.39%
Ag 328.068†	-450.3	2.4166 µg/L	0.27608	2.4166 ppb	0.27608	11.42%
Al 396.153Radial†	62230.0	43290 µg/L	239.3	43290 ppb	239.3	0.55%
As 188.979†	19.7	38.953 µg/L	2.8541	38.953 ppb	2.8541	7.33%
B 249.677†	393.3	-24.098 µg/L	0.8606	-24.098 ppb	0.8606	3.57%
Ba 233.527†	22702.9	545.28 µg/L	16.502	545.28 ppb	16.502	3.03%
Be 313.107†	16332.5	8.9788 µg/L	0.30886	8.9788 ppb	0.30886	3.44%
Ca 317.933Radial†	18191.8	15539 µg/L	40.5	15539 ppb	40.5	0.26%
Cd 226.502†	207.0	-3.5067 µg/L	0.43607	-3.5067 ppb	0.43607	12.44%
Co 228.616†	814.5	32.973 µg/L	2.0218	32.973 ppb	2.0218	6.13%
Cr 267.716†	3517.1	70.726 µg/L	2.6887	70.726 ppb	2.6887	3.80%
Cu 324.752†	1198881.1	7836.4 µg/L	163.68	7836.4 ppb	163.68	2.09%
Fe 238.204 Radial†	9777.5	77115 µg/L	118.5	77115 ppb	118.5	0.15%
K 766.490 Radial†	9712.3	6343.3 µg/L	10.61	6343.3 ppb	10.61	0.17%
Mg 279.077 IEC†	832.5	7359.0 µg/L	34.35	7359.0 ppb	34.35	0.47%
Mn 257.610†	604013.9	1901.4 µg/L	40.67	1901.4 ppb	40.67	2.14%
Mo 202.031†	22.8	5.1631 µg/L	0.24242	5.1631 ppb	0.24242	4.70%
Na 589.592 Radial†	1619.4	497.38 µg/L	7.036	497.38 ppb	7.036	1.41%

Ni 231.604†	895.8	45.612 µg/L	2.7583	45.612 ppb	2.7583	6.05%
P 214.914†	1353.4	1804.7 µg/L	69.85	1804.7 ppb	69.85	3.87%
Pb 220.353†	5013.3	1199.4 µg/L	25.18	1199.4 ppb	25.18	2.10%
S 181.975 Axial†	48.5	201.18 µg/L	14.048	201.18 ppb	14.048	6.98%
Sb 206.836†	14.9	11.518 µg/L	4.6970	11.518 ppb	4.6970	40.78%
Se 196.026†	-46.3	134.89 µg/L	6.379	134.89 ppb	6.379	4.73%
SiO2†	263561.1	52024 µg/L	875.6	52024 ppb	875.6	1.68%
Si 251.611†	317265.0	24119 µg/L	405.8	24119 ppb	405.8	1.68%
Sn 189.927†	258.2	101.45 µg/L	4.884	101.45 ppb	4.884	4.81%
Sr 421.552†	10204.1	94.134 µg/L	0.5586	94.134 ppb	0.5586	0.59%
Ti 334.940†	847835.5	1875.3 µg/L	47.48	1875.3 ppb	47.48	2.53%
Tl 190.801†	-26.6	8.9080 µg/L	4.58955	8.9080 ppb	4.58955	51.52%
U 409.014†	64287.9	5329.7 µg/L	126.90	5329.7 ppb	126.90	2.38%
V 292.402†	13908.3	150.35 µg/L	5.122	150.35 ppb	5.122	3.41%
Zn 213.857†	14751.5	329.20 µg/L	9.773	329.20 ppb	9.773	2.97%

Sequence No.: 20

Sample ID: 245979010|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 242

Date Collected: 2/20/2010 04:10:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979010|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57504.5	57504.5	102 %		04:11:30
1	Al 396.153Radial†	16376.1	16081.4	11187 µg/L	11187 ppb	04:11:30
1	Ca 317.933Radial†	4675.8	4382.5	3743.4 µg/L	3743.4 ppb	04:11:52
1	Fe 238.204 Radial†	9029.0	8854.0	69832 µg/L	69832 ppb	04:11:30
1	K 766.490 Radial†	4398.6	4156.5	2714.7 µg/L	2714.7 ppb	04:11:30
1	Mg 279.077 IEC†	243.7	226.6	1950.4 µg/L	1950.4 ppb	04:11:52
1	Na 589.592 Radial†	5686.4	5114.4	1570.9 µg/L	1570.9 ppb	04:11:30
1	Sr 421.552†	3125.9	3042.2	28.065 µg/L	28.065 ppb	04:11:30
1	Sc 361.383	2017481.3	2017481.3	102.77 %		04:12:57
1	Y 371.029	1478864.1	1478864.1	109.32 %		04:12:57
1	Ag 328.068†	-1102.1	-670.8	-0.4190 µg/L	-0.4190 ppb	04:13:03
1	As 188.979†	6.5	6.7	15.920 µg/L	15.920 ppb	04:13:23
1	B 249.677†	663.6	261.6	-25.643 µg/L	-25.643 ppb	04:13:03
1	Ba 233.527†	8438.2	8227.9	197.57 µg/L	197.57 ppb	04:13:03
1	Be 313.107†	5476.1	8184.3	4.3382 µg/L	4.3382 ppb	04:13:03
1	Cd 226.502†	124.1	262.5	-1.2896 µg/L	-1.2896 ppb	04:13:03
1	Co 228.616†	1164.4	1131.1	48.385 µg/L	48.385 ppb	04:13:23
1	Cr 267.716†	4165.2	4103.4	82.432 µg/L	82.432 ppb	04:13:03
1	Cu 324.752†	2145671.5	2085312.3	13622 µg/L	13622 ppb	04:12:57
1	Mn 257.610†	646305.8	629146.9	1979.4 µg/L	1979.4 ppb	04:12:57
1	Mo 202.031†	44.8	49.0	7.4475 µg/L	7.4475 ppb	04:13:23
1	Ni 231.604†	1463.9	1112.1	56.287 µg/L	56.287 ppb	04:13:23
1	P 214.914†	477.3	449.1	-601.58 µg/L	-601.58 ppb	04:13:03
1	Pb 220.353†	482.9	378.9	67.264 µg/L	67.264 ppb	04:13:23
1	S 181.975 Axial†	17.5	-1.9	-7.9377 µg/L	-7.9377 ppb	04:13:23
1	Sb 206.836†	28.2	5.0	3.3708 µg/L	3.3708 ppb	04:13:23
1	Se 196.026†	-35.2	-53.5	112.85 µg/L	112.85 ppb	04:13:23
1	SiO2†	158808.1	153137.4	30227 µg/L	30227 ppb	04:13:03
1	Si 251.611†	193844.8	188311.0	14316 µg/L	14316 ppb	04:12:57
1	Sn 189.927†	12.2	11.5	-2.3922 µg/L	-2.3922 ppb	04:13:23
1	Ti 334.940†	633306.9	616067.3	1362.8 µg/L	1362.8 ppb	04:12:57
1	Tl 190.801†	-41.5	-18.0	6.7586 µg/L	6.7586 ppb	04:13:23
1	U 409.014†	-1188.9	-1079.8	-99.648 µg/L	-99.648 ppb	04:12:57
1	V 292.402†	2359.9	2341.0	31.167 µg/L	31.167 ppb	04:13:03
1	Zn 213.857†	18702.3	17664.0	388.82 µg/L	388.82 ppb	04:13:03
2	Sc RADIAL	57353.0	57353.0	102 %		04:11:58
2	Al 396.153Radial†	16439.9	16186.7	11260 µg/L	11260 ppb	04:11:58
2	Ca 317.933Radial†	4703.9	4422.3	3777.5 µg/L	3777.5 ppb	04:12:18
2	Fe 238.204 Radial†	9030.4	8878.9	70028 µg/L	70028 ppb	04:11:58
2	K 766.490 Radial†	4365.0	4134.8	2700.5 µg/L	2700.5 ppb	04:11:58
2	Mg 279.077 IEC†	257.6	240.9	2078.2 µg/L	2078.2 ppb	04:12:18
2	Na 589.592 Radial†	5695.0	5137.6	1578.0 µg/L	1578.0 ppb	04:11:58
2	Sr 421.552†	3152.8	3076.9	28.385 µg/L	28.385 ppb	04:11:58
2	Sc 361.383	2018126.3	2018126.3	102.80 %		04:13:31
2	Y 371.029	1478731.0	1478731.0	109.31 %		04:13:31
2	Ag 328.068†	-1119.1	-687.0	-0.5275 µg/L	-0.5275 ppb	04:13:37
2	As 188.979†	6.1	6.4	15.344 µg/L	15.344 ppb	04:13:57
2	B 249.677†	657.3	255.2	-26.006 µg/L	-26.006 ppb	04:13:37
2	Ba 233.527†	8402.2	8190.3	196.67 µg/L	196.67 ppb	04:13:37
2	Be 313.107†	5469.8	8176.4	4.3344 µg/L	4.3344 ppb	04:13:37
2	Cd 226.502†	76.0	215.6	-2.4810 µg/L	-2.4810 ppb	04:13:37
2	Co 228.616†	1145.4	1112.3	47.536 µg/L	47.536 ppb	04:13:57
2	Cr 267.716†	4160.1	4097.1	82.306 µg/L	82.306 ppb	04:13:37
2	Cu 324.752†	2143100.5	2082144.0	13601 µg/L	13601 ppb	04:13:31
2	Mn 257.610†	646257.6	628899.1	1978.6 µg/L	1978.6 ppb	04:13:31
2	Mo 202.031†	39.5	43.8	6.9453 µg/L	6.9453 ppb	04:13:57
2	Ni 231.604†	1450.0	1098.1	55.592 µg/L	55.592 ppb	04:13:57
2	P 214.914†	479.4	451.0	-595.75 µg/L	-595.75 ppb	04:13:37
2	Pb 220.353†	469.9	366.1	64.175 µg/L	64.175 ppb	04:13:57

2	S 181.975 Axial†	16.9	-2.5	-10.398 µg/L	-10.398 ppb	04:13:57
2	Sb 206.836†	32.9	9.5	7.5298 µg/L	7.5298 ppb	04:13:57
2	Se 196.026†	-21.8	-40.5	131.61 µg/L	131.61 ppb	04:13:57
2	SiO2†	158669.1	152952.8	30191 µg/L	30191 ppb	04:13:37
2	Si 251.611†	193582.3	187995.4	14292 µg/L	14292 ppb	04:13:31
2	Sn 189.927†	6.7	6.1	-4.6439 µg/L	-4.6439 ppb	04:13:57
2	Ti 334.940†	632442.7	615029.7	1360.5 µg/L	1360.5 ppb	04:13:31
2	Tl 190.801†	-35.3	-12.0	14.509 µg/L	14.509 ppb	04:13:57
2	U 409.014†	-1215.6	-1105.4	-101.80 µg/L	-101.80 ppb	04:13:31
2	V 292.402†	2346.5	2327.3	31.049 µg/L	31.049 ppb	04:13:37
2	Zn 213.857†	18618.3	17576.4	386.78 µg/L	386.78 ppb	04:13:37
3	Sc RADIAL	57549.4	57549.4	102 %		04:12:24
3	Al 396.153Radial†	16495.9	16186.5	11260 µg/L	11260 ppb	04:12:24
3	Ca 317.933Radial†	4701.3	4403.9	3761.7 µg/L	3761.7 ppb	04:12:44
3	Fe 238.204 Radial†	9074.2	8891.4	70127 µg/L	70127 ppb	04:12:24
3	K 766.490 Radial†	4429.0	4182.9	2731.9 µg/L	2731.9 ppb	04:12:24
3	Mg 279.077 IEC†	255.8	238.3	2055.0 µg/L	2055.0 ppb	04:12:44
3	Na 589.592 Radial†	5733.3	5156.1	1583.7 µg/L	1583.7 ppb	04:12:24
3	Sr 421.552†	3189.1	3101.9	28.616 µg/L	28.616 ppb	04:12:24
3	Sc 361.383	2024692.3	2024692.3	103.14 %		04:14:05
3	Y 371.029	1477931.0	1477931.0	109.25 %		04:14:05
3	Ag 328.068†	-1044.0	-610.6	0.0347 µg/L	0.0347 ppb	04:14:11
3	As 188.979†	7.8	8.0	18.235 µg/L	18.235 ppb	04:14:31
3	B 249.677†	596.4	194.1	-28.558 µg/L	-28.558 ppb	04:14:11
3	Ba 233.527†	7951.2	7726.4	185.53 µg/L	185.53 ppb	04:14:11
3	Be 313.107†	4857.8	7565.8	4.0015 µg/L	4.0015 ppb	04:14:11
3	Cd 226.502†	93.0	231.8	-2.0940 µg/L	-2.0940 ppb	04:14:11
3	Co 228.616†	1038.1	1004.6	42.823 µg/L	42.823 ppb	04:14:31
3	Cr 267.716†	3843.0	3776.5	75.866 µg/L	75.866 ppb	04:14:11
3	Cu 324.752†	2045575.7	1980824.3	12940 µg/L	12940 ppb	04:14:05
3	Mn 257.610†	615987.5	597510.8	1880.4 µg/L	1880.4 ppb	04:14:05
3	Mo 202.031†	40.6	44.7	7.0421 µg/L	7.0421 ppb	04:14:31
3	Ni 231.604†	1320.3	967.8	49.101 µg/L	49.101 ppb	04:14:31
3	P 214.914†	431.6	403.1	-620.78 µg/L	-620.78 ppb	04:14:11
3	Pb 220.353†	443.1	338.7	58.611 µg/L	58.611 ppb	04:14:31
3	S 181.975 Axial†	16.7	-2.7	-11.338 µg/L	-11.338 ppb	04:14:31
3	Sb 206.836†	26.1	2.8	1.4894 µg/L	1.4894 ppb	04:14:31
3	Se 196.026†	-21.1	-39.8	132.86 µg/L	132.86 ppb	04:14:31
3	SiO2†	151635.6	145632.7	28746 µg/L	28746 ppb	04:14:11
3	Si 251.611†	186730.5	180741.2	13740 µg/L	13740 ppb	04:14:05
3	Sn 189.927†	18.7	17.8	0.2447 µg/L	0.2447 ppb	04:14:31
3	Ti 334.940†	598294.1	579924.5	1282.8 µg/L	1282.8 ppb	04:14:05
3	Tl 190.801†	-36.6	-13.1	12.036 µg/L	12.036 ppb	04:14:31
3	U 409.014†	-1197.4	-1083.9	-100.03 µg/L	-100.03 ppb	04:14:05
3	V 292.402†	2199.3	2177.2	29.586 µg/L	29.586 ppb	04:14:11
3	Zn 213.857†	17619.1	16548.9	363.77 µg/L	363.77 ppb	04:14:11

Mean Data: 245979010|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2020100.0	102.90 %	0.203			0.20%
Sc RADIAL	57469.0	102 %	0.2			0.18%
Y 371.029	1478508.7	109.30 %	0.037			0.03%
Ag 328.068†	-656.1	-0.3039 µg/L	0.29825	-0.3039 ppb	0.29825	98.14%
Al 396.153Radial†	16151.5	11236 µg/L	42.2	11236 ppb	42.2	0.38%
As 188.979†	7.1	16.499 µg/L	1.5300	16.499 ppb	1.5300	9.27%
B 249.677†	237.0	-26.735 µg/L	1.5885	-26.735 ppb	1.5885	5.94%
Ba 233.527†	8048.2	193.25 µg/L	6.707	193.25 ppb	6.707	3.47%
Be 313.107†	7975.5	4.2247 µg/L	0.19326	4.2247 ppb	0.19326	4.57%
Ca 317.933Radial†	4402.9	3760.9 µg/L	17.03	3760.9 ppb	17.03	0.45%
Cd 226.502†	236.6	-1.9549 µg/L	0.60773	-1.9549 ppb	0.60773	31.09%
Co 228.616†	1082.7	46.248 µg/L	2.9967	46.248 ppb	2.9967	6.48%
Cr 267.716†	3992.3	80.201 µg/L	3.7553	80.201 ppb	3.7553	4.68%
Cu 324.752†	2049426.9	13387 µg/L	387.9	13387 ppb	387.9	2.90%
Fe 238.204 Radial†	8874.8	69995 µg/L	150.0	69995 ppb	150.0	0.21%
K 766.490 Radial†	4158.1	2715.7 µg/L	15.74	2715.7 ppb	15.74	0.58%
Mg 279.077 IEC†	235.2	2027.9 µg/L	68.09	2027.9 ppb	68.09	3.36%
Mn 257.610†	618519.0	1946.1 µg/L	56.96	1946.1 ppb	56.96	2.93%
Mo 202.031†	45.8	7.1450 µg/L	0.26643	7.1450 ppb	0.26643	3.73%
Na 589.592 Radial†	5136.0	1577.5 µg/L	6.42	1577.5 ppb	6.42	0.41%

Ni 231.604†	1059.4	53.660 µg/L	3.9632	53.660 ppb	3.9632	7.39%
P 214.914†	434.4	-606.04 µg/L	13.100	-606.04 ppb	13.100	2.16%
Pb 220.353†	361.2	63.350 µg/L	4.3854	63.350 ppb	4.3854	6.92%
S 181.975 Axial†	-2.4	-9.8911 µg/L	1.75583	-9.8911 ppb	1.75583	17.75%
Sb 206.836†	5.8	4.1300 µg/L	3.09094	4.1300 ppb	3.09094	74.84%
Se 196.026†	-44.6	125.77 µg/L	11.207	125.77 ppb	11.207	8.91%
SiO2†	150574.3	29721 µg/L	844.9	29721 ppb	844.9	2.84%
Si 251.611†	185682.5	14116 µg/L	325.5	14116 ppb	325.5	2.31%
Sn 189.927†	11.8	-2.2638 µg/L	2.44679	-2.2638 ppb	2.44679	108.08%
Sr 421.552†	3073.7	28.355 µg/L	0.2765	28.355 ppb	0.2765	0.98%
Ti 334.940†	603673.8	1335.4 µg/L	45.52	1335.4 ppb	45.52	3.41%
Tl 190.801†	-14.4	11.101 µg/L	3.9589	11.101 ppb	3.9589	35.66%
U 409.014†	-1089.7	-100.50 µg/L	1.150	-100.50 ppb	1.150	1.14%
V 292.402†	2281.8	30.601 µg/L	0.8805	30.601 ppb	0.8805	2.88%
Zn 213.857†	17263.1	379.79 µg/L	13.913	379.79 ppb	13.913	3.66%

Sequence No.: 21

Sample ID: 245979011|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 243

Date Collected: 2/20/2010 04:14:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979011|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57506.9	57506.9	102 %		04:15:13
1	Al 396.153Radial†	55292.3	54312.6	37783 µg/L	37783 ppb	04:15:13
1	Ca 317.933Radial†	12696.1	12261.6	10474 µg/L	10474 ppb	04:15:33
1	Fe 238.204 Radial†	8042.7	7884.7	62187 µg/L	62187 ppb	04:15:33
1	K 766.490 Radial†	6976.2	6688.5	4368.4 µg/L	4368.4 ppb	04:15:13
1	Mg 279.077 IEC†	617.8	594.1	5244.3 µg/L	5244.3 ppb	04:15:33
1	Na 589.592 Radial†	2052.1	1543.9	474.18 µg/L	474.18 ppb	04:15:13
1	Sr 421.552†	6785.6	6637.5	61.232 µg/L	61.232 ppb	04:15:13
1	Sc 361.383	2008952.0	2008952.0	102.33 %		04:16:38
1	Y 371.029	1405752.3	1405752.3	103.92 %		04:16:38
1	Ag 328.068†	212.5	609.3	9.0317 µg/L	9.0317 ppb	04:16:44
1	As 188.979†	20.9	20.9	40.530 µg/L	40.530 ppb	04:17:04
1	B 249.677†	844.0	440.6	-14.322 µg/L	-14.322 ppb	04:16:44
1	Ba 233.527†	21560.3	21085.5	506.37 µg/L	506.37 ppb	04:16:44
1	Be 313.107†	75081.0	76223.8	44.523 µg/L	44.523 ppb	04:16:38
1	Cd 226.502†	148.0	286.3	0.1699 µg/L	0.1699 ppb	04:17:04
1	Co 228.616†	844.1	822.9	33.344 µg/L	33.344 ppb	04:17:04
1	Cr 267.716†	5372.7	5300.5	106.52 µg/L	106.52 ppb	04:16:44
1	Cu 324.752†	860763.0	838581.8	5482.5 µg/L	5482.5 ppb	04:16:38
1	Mn 257.610†	448122.2	438154.8	1380.1 µg/L	1380.1 ppb	04:16:38
1	Mo 202.031†	30.6	35.2	5.8138 µg/L	5.8138 ppb	04:17:04
1	Ni 231.604†	1470.1	1124.3	56.808 µg/L	56.808 ppb	04:17:04
1	P 214.914†	591.1	562.3	496.39 µg/L	496.39 ppb	04:17:04
1	Pb 220.353†	29180.2	28423.6	6897.5 µg/L	6897.5 ppb	04:16:44
1	S 181.975 Axial†	103.7	82.4	341.77 µg/L	341.77 ppb	04:17:04
1	Sb 206.836†	123.7	98.4	88.232 µg/L	88.232 ppb	04:17:04
1	Se 196.026†	-22.7	-41.5	104.05 µg/L	104.05 ppb	04:17:04
1	SiO2†	218873.9	212488.9	41943 µg/L	41943 ppb	04:16:38
1	Si 251.611†	262101.9	255811.7	19447 µg/L	19447 ppb	04:16:38
1	Sn 189.927†	115.5	112.5	41.380 µg/L	41.380 ppb	04:17:04
1	Ti 334.940†	870147.0	850120.4	1880.4 µg/L	1880.4 ppb	04:16:38
1	Tl 190.801†	-49.4	-25.9	2.0043 µg/L	2.0043 ppb	04:17:04
1	U 409.014†	28464.2	27891.9	2308.1 µg/L	2308.1 ppb	04:16:44
1	V 292.402†	9518.6	9346.2	101.08 µg/L	101.08 ppb	04:16:44
1	Zn 213.857†	36281.9	34919.8	806.95 µg/L	806.95 ppb	04:16:44
2	Sc RADIAL	57664.3	57664.3	102 %		04:15:39
2	Al 396.153Radial†	56033.8	54890.7	38185 µg/L	38185 ppb	04:15:39
2	Ca 317.933Radial†	12789.8	12319.3	10523 µg/L	10523 ppb	04:15:59
2	Fe 238.204 Radial†	8094.6	7914.0	62418 µg/L	62418 ppb	04:15:59
2	K 766.490 Radial†	7071.0	6762.7	4416.9 µg/L	4416.9 ppb	04:15:39
2	Mg 279.077 IEC†	626.7	601.2	5306.8 µg/L	5306.8 ppb	04:15:59
2	Na 589.592 Radial†	2083.6	1569.2	481.97 µg/L	481.97 ppb	04:15:39
2	Sr 421.552†	6856.6	6688.8	61.706 µg/L	61.706 ppb	04:15:39
2	Sc 361.383	2008349.8	2008349.8	102.30 %		04:17:12
2	Y 371.029	1407093.7	1407093.7	104.02 %		04:17:12
2	Ag 328.068†	256.5	652.3	9.3651 µg/L	9.3651 ppb	04:17:18
2	As 188.979†	21.7	21.7	41.944 µg/L	41.944 ppb	04:17:38
2	B 249.677†	841.0	437.9	-14.551 µg/L	-14.551 ppb	04:17:18
2	Ba 233.527†	21528.8	21061.1	505.78 µg/L	505.78 ppb	04:17:18
2	Be 313.107†	75633.6	76786.0	44.852 µg/L	44.852 ppb	04:17:12
2	Cd 226.502†	129.3	268.1	-0.3118 µg/L	-0.3118 ppb	04:17:38
2	Co 228.616†	857.7	836.5	33.937 µg/L	33.937 ppb	04:17:38
2	Cr 267.716†	5359.1	5288.7	106.28 µg/L	106.28 ppb	04:17:18
2	Cu 324.752†	866000.1	843953.2	5517.6 µg/L	5517.6 ppb	04:17:12
2	Mn 257.610†	450686.3	440792.4	1388.4 µg/L	1388.4 ppb	04:17:12
2	Mo 202.031†	34.0	38.6	6.1545 µg/L	6.1545 ppb	04:17:38
2	Ni 231.604†	1463.6	1118.3	56.513 µg/L	56.513 ppb	04:17:38
2	P 214.914†	588.4	559.8	487.52 µg/L	487.52 ppb	04:17:38
2	Pb 220.353†	29196.7	28448.2	6903.5 µg/L	6903.5 ppb	04:17:18

2	S 181.975 Axial†	97.8	76.7	317.89 µg/L	317.89 ppb	04:17:38
2	Sb 206.836†	122.6	97.4	87.316 µg/L	87.316 ppb	04:17:38
2	Se 196.026†	-22.5	-41.4	104.84 µg/L	104.84 ppb	04:17:38
2	SiO2†	220231.0	213879.6	42217 µg/L	42217 ppb	04:17:12
2	Si 251.611†	263588.5	257341.6	19564 µg/L	19564 ppb	04:17:12
2	Sn 189.927†	105.9	103.2	37.428 µg/L	37.428 ppb	04:17:38
2	Ti 334.940†	875092.4	855209.4	1891.7 µg/L	1891.7 ppb	04:17:12
2	Tl 190.801†	-48.1	-24.6	3.8435 µg/L	3.8435 ppb	04:17:38
2	U 409.014†	28471.4	27907.3	2309.3 µg/L	2309.3 ppb	04:17:18
2	V 292.402†	9514.0	9344.5	101.09 µg/L	101.09 ppb	04:17:18
2	Zn 213.857†	36367.6	35014.1	809.09 µg/L	809.09 ppb	04:17:18
3	Sc RADIAL	57824.9	57824.9	102 %		04:16:05
3	Al 396.153Radial†	56245.9	54945.5	38223 µg/L	38223 ppb	04:16:05
3	Ca 317.933Radial†	12791.9	12286.6	10495 µg/L	10495 ppb	04:16:25
3	Fe 238.204 Radial†	8112.9	7909.8	62384 µg/L	62384 ppb	04:16:25
3	K 766.490 Radial†	7044.5	6717.6	4387.4 µg/L	4387.4 ppb	04:16:05
3	Mg 279.077 IEC†	631.0	603.7	5329.5 µg/L	5329.5 ppb	04:16:25
3	Na 589.592 Radial†	2019.6	1501.0	461.02 µg/L	461.02 ppb	04:16:05
3	Sr 421.552†	6876.2	6689.3	61.710 µg/L	61.710 ppb	04:16:05
3	Sc 361.383	1992621.1	1992621.1	101.50 %		04:17:46
3	Y 371.029	1395866.0	1395866.0	103.19 %		04:17:46
3	Ag 328.068†	255.1	652.9	9.3341 µg/L	9.3341 ppb	04:17:51
3	As 188.979†	18.8	19.0	37.137 µg/L	37.137 ppb	04:18:12
3	B 249.677†	833.4	436.9	-14.584 µg/L	-14.584 ppb	04:17:51
3	Ba 233.527†	20463.6	20177.8	484.57 µg/L	484.57 ppb	04:17:51
3	Be 313.107†	71907.1	73698.2	43.049 µg/L	43.049 ppb	04:17:46
3	Cd 226.502†	111.8	251.8	-0.7168 µg/L	-0.7168 ppb	04:18:12
3	Co 228.616†	766.8	753.5	30.343 µg/L	30.343 ppb	04:18:12
3	Cr 267.716†	5018.1	4994.1	100.36 µg/L	100.36 ppb	04:17:51
3	Cu 324.752†	829145.1	814325.6	5324.2 µg/L	5324.2 ppb	04:17:46
3	Mn 257.610†	430377.5	424261.6	1336.7 µg/L	1336.7 ppb	04:17:46
3	Mo 202.031†	26.1	31.1	5.4168 µg/L	5.4168 ppb	04:18:12
3	Ni 231.604†	1378.0	1045.3	52.876 µg/L	52.876 ppb	04:18:12
3	P 214.914†	545.3	521.8	432.88 µg/L	432.88 ppb	04:18:12
3	Pb 220.353†	28123.2	27615.9	6701.6 µg/L	6701.6 ppb	04:17:51
3	S 181.975 Axial†	97.2	76.8	318.54 µg/L	318.54 ppb	04:18:12
3	Sb 206.836†	109.8	85.7	76.652 µg/L	76.652 ppb	04:18:12
3	Se 196.026†	-14.8	-33.9	115.26 µg/L	115.26 ppb	04:18:12
3	SiO2†	212490.8	207953.2	41047 µg/L	41047 ppb	04:17:46
3	Si 251.611†	254384.2	250307.3	19029 µg/L	19029 ppb	04:17:46
3	Sn 189.927†	100.9	99.0	35.678 µg/L	35.678 ppb	04:18:12
3	Ti 334.940†	832513.7	820013.1	1813.8 µg/L	1813.8 ppb	04:17:46
3	Tl 190.801†	-40.2	-17.2	12.387 µg/L	12.387 ppb	04:18:12
3	U 409.014†	26756.3	26437.3	2187.2 µg/L	2187.2 ppb	04:17:51
3	V 292.402†	8909.1	8822.0	95.852 µg/L	95.852 ppb	04:17:51
3	Zn 213.857†	34655.4	33607.9	776.43 µg/L	776.43 ppb	04:17:51

Mean Data: 245979011|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2003307.7	102.05 %	0.472			0.46%
Sc RADIAL	57665.4	102 %	0.3			0.28%
Y 371.029	1402904.0	103.71 %	0.453			0.44%
Ag 328.068†	638.2	9.2436 µg/L	0.18414	9.2436 ppb	0.18414	1.99%
Al 396.153Radial†	54716.3	38063 µg/L	243.9	38063 ppb	243.9	0.64%
As 188.979†	20.5	39.870 µg/L	2.4707	39.870 ppb	2.4707	6.20%
B 249.677†	438.5	-14.486 µg/L	0.1429	-14.486 ppb	0.1429	0.99%
Ba 233.527†	20774.8	498.90 µg/L	12.421	498.90 ppb	12.421	2.49%
Be 313.107†	75569.3	44.141 µg/L	0.9601	44.141 ppb	0.9601	2.18%
Ca 317.933Radial†	12289.2	10497 µg/L	24.7	10497 ppb	24.7	0.24%
Cd 226.502†	268.7	-0.2862 µg/L	0.44390	-0.2862 ppb	0.44390	155.10%
Co 228.616†	804.3	32.541 µg/L	1.9267	32.541 ppb	1.9267	5.92%
Cr 267.716†	5194.5	104.39 µg/L	3.488	104.39 ppb	3.488	3.34%
Cu 324.752†	832286.9	5441.4 µg/L	103.03	5441.4 ppb	103.03	1.89%
Fe 238.204 Radial†	7902.8	62330 µg/L	124.9	62330 ppb	124.9	0.20%
K 766.490 Radial†	6722.9	4390.9 µg/L	24.42	4390.9 ppb	24.42	0.56%
Mg 279.077 IEC†	599.7	5293.5 µg/L	44.16	5293.5 ppb	44.16	0.83%
Mn 257.610†	434402.9	1368.4 µg/L	27.81	1368.4 ppb	27.81	2.03%
Mo 202.031†	35.0	5.7950 µg/L	0.36922	5.7950 ppb	0.36922	6.37%
Na 589.592 Radial†	1538.0	472.39 µg/L	10.593	472.39 ppb	10.593	2.24%

Ni 231.604†	1095.9	55.399 µg/L	2.1900	55.399 ppb	2.1900	3.95%
P 214.914†	548.0	472.26 µg/L	34.398	472.26 ppb	34.398	7.28%
Pb 220.353†	28162.6	6834.2 µg/L	114.87	6834.2 ppb	114.87	1.68%
S 181.975 Axial†	78.6	326.07 µg/L	13.606	326.07 ppb	13.606	4.17%
Sb 206.836†	93.8	84.067 µg/L	6.4374	84.067 ppb	6.4374	7.66%
Se 196.026†	-38.9	108.05 µg/L	6.255	108.05 ppb	6.255	5.79%
SiO2†	211440.6	41736 µg/L	611.7	41736 ppb	611.7	1.47%
Si 251.611†	254486.9	19347 µg/L	281.2	19347 ppb	281.2	1.45%
Sn 189.927†	104.9	38.162 µg/L	2.9210	38.162 ppb	2.9210	7.65%
Sr 421.552†	6671.9	61.549 µg/L	0.2747	61.549 ppb	0.2747	0.45%
Ti 334.940†	841781.0	1862.0 µg/L	42.08	1862.0 ppb	42.08	2.26%
Tl 190.801†	-22.6	6.0782 µg/L	5.54033	6.0782 ppb	5.54033	91.15%
U 409.014†	27412.1	2268.2 µg/L	70.15	2268.2 ppb	70.15	3.09%
V 292.402†	9170.9	99.342 µg/L	3.0225	99.342 ppb	3.0225	3.04%
Zn 213.857†	34513.9	797.49 µg/L	18.271	797.49 ppb	18.271	2.29%

Sequence No.: 22

Sample ID: 245979012|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 244

Date Collected: 2/20/2010 04:18:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979012|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57678.3	57678.3	102 %		04:18:54
1	Al 396.153Radial†	70740.4	69282.5	48197 µg/L	48197 ppb	04:18:54
1	Ca 317.933Radial†	18579.2	17986.9	15364 µg/L	15364 ppb	04:18:54
1	Fe 238.204 Radial†	11124.1	10879.4	85806 µg/L	85806 ppb	04:19:14
1	K 766.490 Radial†	11211.6	10816.7	7064.6 µg/L	7064.6 ppb	04:18:54
1	Mg 279.077 IEC†	1352.5	1311.9	11636 µg/L	11636 ppb	04:19:14
1	Na 589.592 Radial†	2263.6	1745.0	535.96 µg/L	535.96 ppb	04:18:54
1	Sr 421.552†	13026.1	12730.2	117.44 µg/L	117.44 ppb	04:18:54
1	Sc 361.383	2001023.3	2001023.3	101.93 %		04:20:18
1	Y 371.029	1411607.1	1411607.1	104.35 %		04:20:18
1	Ag 328.068†	-1048.8	-627.3	1.6506 µg/L	1.6506 ppb	04:20:24
1	As 188.979†	10.0	10.3	22.598 µg/L	22.598 ppb	04:20:44
1	B 249.677†	792.2	393.0	-27.920 µg/L	-27.920 ppb	04:20:24
1	Ba 233.527†	63950.0	62755.8	1506.8 µg/L	1506.8 ppb	04:20:24
1	Be 313.107†	52390.6	54254.0	31.294 µg/L	31.294 ppb	04:20:24
1	Cd 226.502†	283.5	419.8	1.0517 µg/L	1.0517 ppb	04:20:44
1	Co 228.616†	853.4	835.3	32.867 µg/L	32.867 ppb	04:20:44
1	Cr 267.716†	26467.6	26016.6	522.64 µg/L	522.64 ppb	04:20:24
1	Cu 324.752†	151472.4	146059.5	965.33 µg/L	965.33 ppb	04:20:24
1	Mn 257.610†	746317.8	732437.0	2304.6 µg/L	2304.6 ppb	04:20:18
1	Mo 202.031†	15.9	20.9	5.3090 µg/L	5.3090 ppb	04:20:44
1	Ni 231.604†	6008.3	5582.1	279.34 µg/L	279.34 ppb	04:20:24
1	P 214.914†	868.1	836.3	1499.4 µg/L	1499.4 ppb	04:20:44
1	Pb 220.353†	15923.1	15530.6	3772.2 µg/L	3772.2 ppb	04:20:24
1	S 181.975 Axial†	226.3	203.0	841.99 µg/L	841.99 ppb	04:20:44
1	Sb 206.836†	39.3	16.1	7.5620 µg/L	7.5620 ppb	04:20:44
1	Se 196.026†	-34.4	-53.0	145.38 µg/L	145.38 ppb	04:20:44
1	SiO2†	280482.1	273777.6	54040 µg/L	54040 ppb	04:20:18
1	Si 251.611†	336402.7	329719.9	25066 µg/L	25066 ppb	04:20:18
1	Sn 189.927†	26.7	25.9	3.0563 µg/L	3.0563 ppb	04:20:44
1	Ti 334.940†	1095696.2	1074766.4	2376.9 µg/L	2376.9 ppb	04:20:18
1	Tl 190.801†	-48.1	-24.8	13.449 µg/L	13.449 ppb	04:20:44
1	U 409.014†	10706.7	10580.9	866.25 µg/L	866.25 ppb	04:20:24
1	V 292.402†	14088.7	13866.5	147.37 µg/L	147.37 ppb	04:20:24
1	Zn 213.857†	16678.3	15828.0	363.84 µg/L	363.84 ppb	04:20:24
2	Sc RADIAL	57801.6	57801.6	102 %		04:19:20
2	Al 396.153Radial†	71204.2	69588.0	48409 µg/L	48409 ppb	04:19:20
2	Ca 317.933Radial†	18654.0	18021.3	15393 µg/L	15393 ppb	04:19:20
2	Fe 238.204 Radial†	11104.0	10836.6	85468 µg/L	85468 ppb	04:19:40
2	K 766.490 Radial†	11234.8	10816.0	7064.1 µg/L	7064.1 ppb	04:19:20
2	Mg 279.077 IEC†	1349.5	1306.2	11585 µg/L	11585 ppb	04:19:40
2	Na 589.592 Radial†	2299.2	1775.0	545.19 µg/L	545.19 ppb	04:19:20
2	Sr 421.552†	13081.4	12757.0	117.69 µg/L	117.69 ppb	04:19:20
2	Sc 361.383	2002245.6	2002245.6	101.99 %		04:20:52
2	Y 371.029	1412317.4	1412317.4	104.40 %		04:20:52
2	Ag 328.068†	-1094.6	-671.6	1.3063 µg/L	1.3063 ppb	04:20:57
2	As 188.979†	6.8	7.1	16.867 µg/L	16.867 ppb	04:21:18
2	B 249.677†	797.9	398.2	-27.529 µg/L	-27.529 ppb	04:20:57
2	Ba 233.527†	64451.8	63209.4	1517.7 µg/L	1517.7 ppb	04:20:57
2	Be 313.107†	52936.1	54757.4	31.591 µg/L	31.591 ppb	04:20:57
2	Cd 226.502†	276.1	412.4	0.9085 µg/L	0.9085 ppb	04:21:18
2	Co 228.616†	854.0	835.4	32.866 µg/L	32.866 ppb	04:21:18
2	Cr 267.716†	26596.6	26127.2	524.86 µg/L	524.86 ppb	04:20:57
2	Cu 324.752†	152278.2	146758.8	969.85 µg/L	969.85 ppb	04:20:57
2	Mn 257.610†	749498.9	735109.0	2312.9 µg/L	2312.9 ppb	04:20:52
2	Mo 202.031†	26.1	30.9	6.2734 µg/L	6.2734 ppb	04:21:18
2	Ni 231.604†	6087.8	5656.5	283.04 µg/L	283.04 ppb	04:20:57
2	P 214.914†	863.4	831.2	1489.2 µg/L	1489.2 ppb	04:21:18
2	Pb 220.353†	16014.0	15610.2	3791.5 µg/L	3791.5 ppb	04:20:57

2	S 181.975 Axial†	227.9	204.6	848.27 µg/L	848.27 ppb	04:21:18
2	Sb 206.836†	48.2	24.8	15.539 µg/L	15.539 ppb	04:21:18
2	Se 196.026†	-37.9	-56.5	139.63 µg/L	139.63 ppb	04:21:18
2	SiO2†	281395.5	274505.2	54184 µg/L	54184 ppb	04:20:52
2	Si 251.611†	337186.7	330287.1	25109 µg/L	25109 ppb	04:20:52
2	Sn 189.927†	31.7	30.7	5.1454 µg/L	5.1454 ppb	04:21:18
2	Ti 334.940†	1098493.4	1076852.7	2381.6 µg/L	2381.6 ppb	04:20:52
2	Tl 190.801†	-52.2	-28.8	8.3073 µg/L	8.3073 ppb	04:21:18
2	U 409.014†	10830.8	10696.2	875.87 µg/L	875.87 ppb	04:20:57
2	V 292.402†	14180.6	13948.3	148.14 µg/L	148.14 ppb	04:20:57
2	Zn 213.857†	16776.3	15914.1	365.86 µg/L	365.86 ppb	04:20:57
3	Sc RADIAL	57657.6	57657.6	102 %		04:19:46
3	Al 396.153Radial†	71090.2	69650.2	48452 µg/L	48452 ppb	04:19:46
3	Ca 317.933Radial†	18619.8	18033.3	15404 µg/L	15404 ppb	04:19:46
3	Fe 238.204 Radial†	11088.1	10848.1	85559 µg/L	85559 ppb	04:20:06
3	K 766.490 Radial†	11324.7	10931.5	7139.6 µg/L	7139.6 ppb	04:19:46
3	Mg 279.077 IEC†	1347.8	1307.8	11599 µg/L	11599 ppb	04:20:06
3	Na 589.592 Radial†	2319.6	1800.7	553.07 µg/L	553.07 ppb	04:19:46
3	Sr 421.552†	13062.1	12770.1	117.81 µg/L	117.81 ppb	04:19:46
3	Sc 361.383	2009363.9	2009363.9	102.36 %		04:21:25
3	Y 371.029	1414937.6	1414937.6	104.60 %		04:21:25
3	Ag 328.068†	-1045.1	-619.4	1.6473 µg/L	1.6473 ppb	04:21:31
3	As 188.979†	8.6	8.8	19.953 µg/L	19.953 ppb	04:21:51
3	B 249.677†	793.0	390.6	-27.938 µg/L	-27.938 ppb	04:21:31
3	Ba 233.527†	61448.9	60051.7	1441.9 µg/L	1441.9 ppb	04:21:31
3	Be 313.107†	49806.1	51515.6	29.700 µg/L	29.700 ppb	04:21:31
3	Cd 226.502†	226.7	363.2	-0.3456 µg/L	-0.3456 ppb	04:21:51
3	Co 228.616†	778.9	759.0	29.584 µg/L	29.584 ppb	04:21:51
3	Cr 267.716†	25022.6	24497.1	492.11 µg/L	492.11 ppb	04:21:31
3	Cu 324.752†	144440.8	138572.8	916.43 µg/L	916.43 ppb	04:21:31
3	Mn 257.610†	727310.3	710827.7	2236.9 µg/L	2236.9 ppb	04:21:25
3	Mo 202.031†	24.2	29.0	6.0943 µg/L	6.0943 ppb	04:21:51
3	Ni 231.604†	5745.1	5300.5	265.30 µg/L	265.30 ppb	04:21:31
3	P 214.914†	778.6	745.3	1324.7 µg/L	1324.7 ppb	04:21:51
3	Pb 220.353†	15476.9	15029.8	3650.6 µg/L	3650.6 ppb	04:21:31
3	S 181.975 Axial†	212.1	188.3	780.87 µg/L	780.87 ppb	04:21:51
3	Sb 206.836†	55.1	31.3	21.859 µg/L	21.859 ppb	04:21:51
3	Se 196.026†	-20.7	-39.6	163.61 µg/L	163.61 ppb	04:21:51
3	SiO2†	275872.4	268131.9	52926 µg/L	52926 ppb	04:21:25
3	Si 251.611†	330713.5	322791.7	24539 µg/L	24539 ppb	04:21:25
3	Sn 189.927†	19.9	19.1	0.2333 µg/L	0.2333 ppb	04:21:51
3	Ti 334.940†	1062988.1	1038349.1	2296.4 µg/L	2296.4 ppb	04:21:25
3	Tl 190.801†	-39.5	-16.2	23.539 µg/L	23.539 ppb	04:21:51
3	U 409.014†	10125.5	9969.5	815.48 µg/L	815.48 ppb	04:21:31
3	V 292.402†	13414.9	13150.9	140.24 µg/L	140.24 ppb	04:21:31
3	Zn 213.857†	15996.7	15094.2	346.78 µg/L	346.78 ppb	04:21:31

Mean Data: 245979012|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2004211.0	102.09 %	0.229			0.22%
Sc RADIAL	57712.5	102 %	0.1			0.13%
Y 371.029	1412954.1	104.45 %	0.130			0.12%
Ag 328.068†	-639.4	1.5347 µg/L	0.19788	1.5347 ppb	0.19788	12.89%
Al 396.153Radial†	69506.9	48353 µg/L	136.9	48353 ppb	136.9	0.28%
As 188.979†	8.7	19.806 µg/L	2.8687	19.806 ppb	2.8687	14.48%
B 249.677†	393.9	-27.796 µg/L	0.2311	-27.796 ppb	0.2311	0.83%
Ba 233.527†	62005.6	1488.8 µg/L	40.99	1488.8 ppb	40.99	2.75%
Be 313.107†	53509.0	30.862 µg/L	1.0172	30.862 ppb	1.0172	3.30%
Ca 317.933Radial†	18013.8	15387 µg/L	20.5	15387 ppb	20.5	0.13%
Cd 226.502†	398.4	0.5382 µg/L	0.76873	0.5382 ppb	0.76873	142.83%
Co 228.616†	809.9	31.772 µg/L	1.8952	31.772 ppb	1.8952	5.96%
Cr 267.716†	25547.0	513.20 µg/L	18.299	513.20 ppb	18.299	3.57%
Cu 324.752†	143797.0	950.53 µg/L	29.625	950.53 ppb	29.625	3.12%
Fe 238.204 Radial†	10854.7	85611 µg/L	175.0	85611 ppb	175.0	0.20%
K 766.490 Radial†	10854.7	7089.4 µg/L	43.43	7089.4 ppb	43.43	0.61%
Mg 279.077 IEC†	1308.7	11606 µg/L	26.2	11606 ppb	26.2	0.23%
Mn 257.610†	726124.6	2284.8 µg/L	41.70	2284.8 ppb	41.70	1.83%
Mo 202.031†	26.9	5.8922 µg/L	0.51299	5.8922 ppb	0.51299	8.71%
Na 589.592 Radial†	1773.6	544.74 µg/L	8.567	544.74 ppb	8.567	1.57%

Ni 231.604†	5513.0	275.89 µg/L	9.358	275.89 ppb	9.358	3.39%
P 214.914†	804.3	1437.8 µg/L	98.04	1437.8 ppb	98.04	6.82%
Pb 220.353†	15390.2	3738.1 µg/L	76.39	3738.1 ppb	76.39	2.04%
S 181.975 Axial†	198.6	823.71 µg/L	37.234	823.71 ppb	37.234	4.52%
Sb 206.836†	24.1	14.987 µg/L	7.1647	14.987 ppb	7.1647	47.81%
Se 196.026†	-49.7	149.54 µg/L	12.517	149.54 ppb	12.517	8.37%
SiO2†	272138.2	53717 µg/L	688.6	53717 ppb	688.6	1.28%
Si 251.611†	327599.6	24905 µg/L	317.3	24905 ppb	317.3	1.27%
Sn 189.927†	25.2	2.8117 µg/L	2.46515	2.8117 ppb	2.46515	87.68%
Sr 421.552†	12752.4	117.64 µg/L	0.188	117.64 ppb	0.188	0.16%
Ti 334.940†	1063322.8	2351.6 µg/L	47.90	2351.6 ppb	47.90	2.04%
Tl 190.801†	-23.3	15.099 µg/L	7.7488	15.099 ppb	7.7488	51.32%
U 409.014†	10415.6	852.53 µg/L	32.448	852.53 ppb	32.448	3.81%
V 292.402†	13655.2	145.25 µg/L	4.353	145.25 ppb	4.353	3.00%
Zn 213.857†	15612.1	358.83 µg/L	10.481	358.83 ppb	10.481	2.92%

Sequence No.: 23

Sample ID: 245979013|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 245

Date Collected: 2/20/2010 04:22:00

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979013|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58012.3	58012.3	103 %		04:22:33
1	Al 396.153Radial†	97118.6	94572.2	65789 µg/L	65789 ppb	04:22:33
1	Ca 317.933Radial†	34911.8	33787.8	28861 µg/L	28861 ppb	04:22:33
1	Fe 238.204 Radial†	12211.0	11875.2	93659 µg/L	93659 ppb	04:22:54
1	K 766.490 Radial†	10958.7	10507.2	6862.4 µg/L	6862.4 ppb	04:22:33
1	Mg 279.077 IEC†	1302.2	1255.3	11121 µg/L	11121 ppb	04:22:54
1	Na 589.592 Radial†	2035.4	1510.0	463.79 µg/L	463.79 ppb	04:22:33
1	Sr 421.552†	17339.3	16857.2	155.51 µg/L	155.51 ppb	04:22:33
1	Sc 361.383	2008209.4	2008209.4	102.30 %		04:23:59
1	Y 371.029	1402256.5	1402256.5	103.66 %		04:23:59
1	Ag 328.068†	-727.7	-309.8	4.5793 µg/L	4.5793 ppb	04:24:05
1	As 188.979†	17.4	17.5	35.247 µg/L	35.247 ppb	04:24:25
1	B 249.677†	1262.5	850.0	-14.064 µg/L	-14.064 ppb	04:24:05
1	Ba 233.527†	41013.5	40109.7	963.19 µg/L	963.19 ppb	04:24:05
1	Be 313.107†	193047.3	191568.6	113.05 µg/L	113.05 ppb	04:23:59
1	Cd 226.502†	263.0	398.8	-0.5687 µg/L	-0.5687 ppb	04:24:25
1	Co 228.616†	675.2	658.1	26.243 µg/L	26.243 ppb	04:24:25
1	Cr 267.716†	5119.3	5054.7	101.62 µg/L	101.62 ppb	04:24:05
1	Cu 324.752†	765870.2	746130.7	4883.4 µg/L	4883.4 ppb	04:23:59
1	Mn 257.610†	437260.9	427699.2	1351.4 µg/L	1351.4 ppb	04:23:59
1	Mo 202.031†	72.9	76.7	11.066 µg/L	11.066 ppb	04:24:25
1	Ni 231.604†	1729.1	1378.0	69.874 µg/L	69.874 ppb	04:24:25
1	P 214.914†	751.3	719.1	853.02 µg/L	853.02 ppb	04:24:25
1	Pb 220.353†	11189.7	10847.5	2622.7 µg/L	2622.7 ppb	04:24:05
1	S 181.975 Axial†	124.3	102.6	425.36 µg/L	425.36 ppb	04:24:25
1	Sb 206.836†	102.0	77.2	67.336 µg/L	67.336 ppb	04:24:25
1	Se 196.026†	-42.2	-60.6	152.96 µg/L	152.96 ppb	04:24:25
1	SiO2†	294959.1	286944.9	56639 µg/L	56639 ppb	04:23:59
1	Si 251.611†	353517.7	345269.7	26248 µg/L	26248 ppb	04:23:59
1	Sn 189.927†	105.7	102.9	34.590 µg/L	34.590 ppb	04:24:25
1	Ti 334.940†	790432.6	772510.3	1708.5 µg/L	1708.5 ppb	04:23:59
1	Tl 190.801†	-45.6	-22.2	14.321 µg/L	14.321 ppb	04:24:25
1	U 409.014†	71602.2	70071.7	5807.1 µg/L	5807.1 ppb	04:23:59
1	V 292.402†	15440.9	15138.9	164.90 µg/L	164.90 ppb	04:24:05
1	Zn 213.857†	35005.4	33685.0	777.07 µg/L	777.07 ppb	04:24:05
2	Sc RADIAL	58299.0	58299.0	103 %		04:22:59
2	Al 396.153Radial†	97965.1	94927.4	66036 µg/L	66036 ppb	04:22:59
2	Ca 317.933Radial†	35252.2	33950.5	29000 µg/L	29000 ppb	04:22:59
2	Fe 238.204 Radial†	12207.0	11812.9	93168 µg/L	93168 ppb	04:23:20
2	K 766.490 Radial†	11012.1	10506.5	6862.0 µg/L	6862.0 ppb	04:22:59
2	Mg 279.077 IEC†	1302.1	1249.0	11065 µg/L	11065 ppb	04:23:20
2	Na 589.592 Radial†	2020.7	1486.0	456.43 µg/L	456.43 ppb	04:22:59
2	Sr 421.552†	17568.0	16995.8	156.79 µg/L	156.79 ppb	04:22:59
2	Sc 361.383	1998022.7	1998022.7	101.78 %		04:24:34
2	Y 371.029	1395622.0	1395622.0	103.17 %		04:24:34
2	Ag 328.068†	-801.3	-385.7	4.0050 µg/L	4.0050 ppb	04:24:39
2	As 188.979†	19.7	19.9	39.458 µg/L	39.458 ppb	04:25:00
2	B 249.677†	1250.6	844.6	-14.025 µg/L	-14.025 ppb	04:24:39
2	Ba 233.527†	41428.9	40722.3	977.90 µg/L	977.90 ppb	04:24:39
2	Be 313.107†	193103.4	192585.9	113.65 µg/L	113.65 ppb	04:24:34
2	Cd 226.502†	272.4	409.3	-0.2499 µg/L	-0.2499 ppb	04:25:00
2	Co 228.616†	676.0	662.3	26.416 µg/L	26.416 ppb	04:25:00
2	Cr 267.716†	5193.9	5153.5	103.60 µg/L	103.60 ppb	04:24:39
2	Cu 324.752†	765393.7	749479.5	4905.2 µg/L	4905.2 ppb	04:24:34
2	Mn 257.610†	436841.6	429466.5	1356.8 µg/L	1356.8 ppb	04:24:34
2	Mo 202.031†	77.0	81.0	11.473 µg/L	11.473 ppb	04:25:00
2	Ni 231.604†	1732.5	1389.9	70.460 µg/L	70.460 ppb	04:25:00
2	P 214.914†	750.2	721.7	856.40 µg/L	856.40 ppb	04:25:00
2	Pb 220.353†	11272.1	10984.2	2655.9 µg/L	2655.9 ppb	04:24:39

2	S 181.975 Axial†	125.3	104.2	432.17 µg/L	432.17 ppb	04:25:00
2	Sb 206.836†	98.8	74.5	64.869 µg/L	64.869 ppb	04:25:00
2	Se 196.026†	-28.8	-47.6	169.75 µg/L	169.75 ppb	04:25:00
2	SiO2†	294781.6	288240.6	56895 µg/L	56895 ppb	04:24:34
2	Si 251.611†	353275.7	346793.8	26364 µg/L	26364 ppb	04:24:34
2	Sn 189.927†	109.6	107.3	36.469 µg/L	36.469 ppb	04:25:00
2	Ti 334.940†	790181.6	776203.1	1716.7 µg/L	1716.7 ppb	04:24:34
2	Tl 190.801†	-49.9	-26.6	8.7118 µg/L	8.7118 ppb	04:25:00
2	U 409.014†	71560.2	70387.3	5833.4 µg/L	5833.4 ppb	04:24:34
2	V 292.402†	15664.5	15435.6	167.77 µg/L	167.77 ppb	04:24:39
2	Zn 213.857†	35303.3	34152.2	788.01 µg/L	788.01 ppb	04:24:39
3	Sc RADIAL	58692.2	58692.2	104 %		04:23:25
3	Al 396.153Radial†	97068.2	93428.1	64993 µg/L	64993 ppb	04:23:25
3	Ca 317.933Radial†	34968.2	33448.2	28571 µg/L	28571 ppb	04:23:25
3	Fe 238.204 Radial†	12118.9	11648.8	91873 µg/L	91873 ppb	04:23:45
3	K 766.490 Radial†	10954.2	10379.2	6778.8 µg/L	6778.8 ppb	04:23:25
3	Mg 279.077 IEC†	1291.3	1230.2	10898 µg/L	10898 ppb	04:23:45
3	Na 589.592 Radial†	2041.5	1492.9	458.54 µg/L	458.54 ppb	04:23:25
3	Sr 421.552†	17396.2	16716.4	154.21 µg/L	154.21 ppb	04:23:25
3	Sc 361.383	2020409.2	2020409.2	102.92 %		04:25:08
3	Y 371.029	1409179.2	1409179.2	104.17 %		04:25:08
3	Ag 328.068†	-654.7	-234.6	4.9548 µg/L	4.9548 ppb	04:25:14
3	As 188.979†	16.1	16.1	32.715 µg/L	32.715 ppb	04:25:34
3	B 249.677†	1209.5	791.1	-15.546 µg/L	-15.546 ppb	04:25:14
3	Ba 233.527†	38584.1	37507.1	900.69 µg/L	900.69 ppb	04:25:14
3	Be 313.107†	184121.2	181756.1	107.26 µg/L	107.26 ppb	04:25:08
3	Cd 226.502†	226.8	362.1	-1.2903 µg/L	-1.2903 ppb	04:25:34
3	Co 228.616†	616.2	596.8	23.668 µg/L	23.668 ppb	04:25:34
3	Cr 267.716†	4770.9	4686.0	94.207 µg/L	94.207 ppb	04:25:14
3	Cu 324.752†	731886.2	708589.6	4638.1 µg/L	4638.1 ppb	04:25:08
3	Mn 257.610†	418748.7	407131.0	1286.7 µg/L	1286.7 ppb	04:25:08
3	Mo 202.031†	66.1	69.6	10.306 µg/L	10.306 ppb	04:25:34
3	Ni 231.604†	1579.0	1221.9	62.072 µg/L	62.072 ppb	04:25:34
3	P 214.914†	675.9	641.4	726.28 µg/L	726.28 ppb	04:25:34
3	Pb 220.353†	10649.3	10256.4	2479.8 µg/L	2479.8 ppb	04:25:14
3	S 181.975 Axial†	115.9	93.7	388.52 µg/L	388.52 ppb	04:25:34
3	Sb 206.836†	97.1	71.9	62.537 µg/L	62.537 ppb	04:25:34
3	Se 196.026†	-29.2	-47.7	166.45 µg/L	166.45 ppb	04:25:34
3	SiO2†	285140.3	275663.5	54412 µg/L	54412 ppb	04:25:08
3	Si 251.611†	341552.6	331557.2	25206 µg/L	25206 ppb	04:25:08
3	Sn 189.927†	102.3	99.0	33.103 µg/L	33.103 ppb	04:25:34
3	Ti 334.940†	750894.9	729428.0	1613.2 µg/L	1613.2 ppb	04:25:08
3	Tl 190.801†	-40.9	-17.3	18.901 µg/L	18.901 ppb	04:25:34
3	U 409.014†	67930.5	66081.4	5475.8 µg/L	5475.8 ppb	04:25:08
3	V 292.402†	14429.6	14065.2	153.86 µg/L	153.86 ppb	04:25:14
3	Zn 213.857†	33053.1	31581.5	728.24 µg/L	728.24 ppb	04:25:14

Mean Data: 245979013|948764|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2008880.4	102.33	%	0.571			0.56%
Sc RADIAL	58334.5	103	%	0.6			0.59%
Y 371.029	1402352.6	103.67	%	0.501			0.48%
Ag 328.068†	-310.0	4.5130	µg/L	0.47832	4.5130 ppb	0.47832	10.60%
Al 396.153Radial†	94309.2	65606	µg/L	545.0	65606 ppb	545.0	0.83%
As 188.979†	17.8	35.807	µg/L	3.4058	35.807 ppb	3.4058	9.51%
B 249.677†	828.6	-14.545	µg/L	0.8673	-14.545 ppb	0.8673	5.96%
Ba 233.527†	39446.4	947.26	µg/L	40.997	947.26 ppb	40.997	4.33%
Be 313.107†	188636.9	111.32	µg/L	3.528	111.32 ppb	3.528	3.17%
Ca 317.933Radial†	33728.8	28810	µg/L	218.9	28810 ppb	218.9	0.76%
Cd 226.502†	390.1	-0.7030	µg/L	0.53303	-0.7030 ppb	0.53303	75.83%
Co 228.616†	639.1	25.443	µg/L	1.5392	25.443 ppb	1.5392	6.05%
Cr 267.716†	4964.7	99.810	µg/L	4.9530	99.810 ppb	4.9530	4.96%
Cu 324.752†	734733.3	4808.9	µg/L	148.31	4808.9 ppb	148.31	3.08%
Fe 238.204 Radial†	11778.9	92900	µg/L	922.6	92900 ppb	922.6	0.99%
K 766.490 Radial†	10464.3	6834.4	µg/L	48.11	6834.4 ppb	48.11	0.70%
Mg 279.077 IEC†	1244.8	11028	µg/L	116.0	11028 ppb	116.0	1.05%
Mn 257.610†	421432.3	1331.6	µg/L	38.99	1331.6 ppb	38.99	2.93%
Mo 202.031†	75.8	10.948	µg/L	0.5925	10.948 ppb	0.5925	5.41%
Na 589.592 Radial†	1496.3	459.59	µg/L	3.791	459.59 ppb	3.791	0.82%

Ni 231.604†	1329.9	67.469 µg/L	4.6829	67.469 ppb	4.6829	6.94%
P 214.914†	694.1	811.90 µg/L	74.170	811.90 ppb	74.170	9.14%
Pb 220.353†	10696.0	2586.2 µg/L	93.58	2586.2 ppb	93.58	3.62%
S 181.975 Axial†	100.2	415.35 µg/L	23.483	415.35 ppb	23.483	5.65%
Sb 206.836†	74.5	64.914 µg/L	2.3997	64.914 ppb	2.3997	3.70%
Se 196.026†	-52.0	163.05 µg/L	8.895	163.05 ppb	8.895	5.46%
SiO2†	283616.3	55982 µg/L	1365.5	55982 ppb	1365.5	2.44%
Si 251.611†	341206.9	25939 µg/L	637.9	25939 ppb	637.9	2.46%
Sn 189.927†	103.1	34.720 µg/L	1.6867	34.720 ppb	1.6867	4.86%
Sr 421.552†	16856.5	155.50 µg/L	1.289	155.50 ppb	1.289	0.83%
Ti 334.940†	759380.5	1679.5 µg/L	57.52	1679.5 ppb	57.52	3.43%
Tl 190.801†	-22.1	13.978 µg/L	5.1033	13.978 ppb	5.1033	36.51%
U 409.014†	68846.8	5705.4 µg/L	199.27	5705.4 ppb	199.27	3.49%
V 292.402†	14879.9	162.17 µg/L	7.344	162.17 ppb	7.344	4.53%
Zn 213.857†	33139.5	764.44 µg/L	31.825	764.44 ppb	31.825	4.16%

Sequence No.: 24

Sample ID: 245979014|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 246

Date Collected: 2/20/2010 04:25:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979014|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57797.3	57797.3	102 %		04:26:16
1	Al 396.153Radial†	69545.2	67971.6	47285 µg/L	47285 ppb	04:26:16
1	Ca 317.933Radial†	13994.4	13468.0	11504 µg/L	11504 ppb	04:26:36
1	Fe 238.204 Radial†	12484.7	12187.0	96118 µg/L	96118 ppb	04:26:36
1	K 766.490 Radial†	13083.3	12623.6	8244.7 µg/L	8244.7 ppb	04:26:16
1	Mg 279.077 IEC†	1110.5	1072.7	9485.9 µg/L	9485.9 ppb	04:26:36
1	Na 589.592 Radial†	1980.0	1463.2	449.42 µg/L	449.42 ppb	04:26:16
1	Sr 421.552†	13338.1	13008.9	120.01 µg/L	120.01 ppb	04:26:16
1	Sc 361.383	2022388.7	2022388.7	103.02 %		04:27:40
1	Y 371.029	1414635.7	1414635.7	104.57 %		04:27:40
1	Ag 328.068†	-1557.1	-1109.9	-0.9639 µg/L	-0.9639 ppb	04:27:46
1	As 188.979†	16.7	16.6	34.784 µg/L	34.784 ppb	04:28:06
1	B 249.677†	911.7	500.8	-29.535 µg/L	-29.535 ppb	04:27:46
1	Ba 233.527†	24692.4	23985.9	576.16 µg/L	576.16 ppb	04:27:46
1	Be 313.107†	12345.1	14839.0	7.6510 µg/L	7.6510 ppb	04:27:46
1	Cd 226.502†	239.5	374.1	-1.4576 µg/L	-1.4576 ppb	04:28:06
1	Co 228.616†	1046.1	1013.5	39.569 µg/L	39.569 ppb	04:28:06
1	Cr 267.716†	6611.5	6468.1	130.03 µg/L	130.03 ppb	04:27:46
1	Cu 324.752†	25510.8	22219.4	158.40 µg/L	158.40 ppb	04:27:46
1	Mn 257.610†	738520.0	717132.7	2258.1 µg/L	2258.1 ppb	04:27:40
1	Mo 202.031†	9.8	14.8	5.1063 µg/L	5.1063 ppb	04:28:06
1	Ni 231.604†	1812.5	1447.0	73.327 µg/L	73.327 ppb	04:28:06
1	P 214.914†	291.5	267.6	450.15 µg/L	450.15 ppb	04:28:06
1	Pb 220.353†	5791.0	5530.3	1343.1 µg/L	1343.1 ppb	04:27:46
1	S 181.975 Axial†	94.4	72.7	301.53 µg/L	301.53 ppb	04:28:06
1	Sb 206.836†	41.0	17.3	13.425 µg/L	13.425 ppb	04:28:06
1	Se 196.026†	-36.7	-54.9	173.88 µg/L	173.88 ppb	04:28:06
1	SiO2†	294840.1	284807.9	56217 µg/L	56217 ppb	04:27:40
1	Si 251.611†	352976.4	342321.3	26024 µg/L	26024 ppb	04:27:40
1	Sn 189.927†	12.8	12.0	-4.1084 µg/L	-4.1084 ppb	04:28:06
1	Ti 334.940†	1413108.5	1371520.4	3033.5 µg/L	3033.5 ppb	04:27:40
1	Tl 190.801†	-56.2	-32.2	9.9727 µg/L	9.9727 ppb	04:28:06
1	U 409.014†	-239.1	-155.0	-26.942 µg/L	-26.942 ppb	04:27:46
1	V 292.402†	19217.2	18698.7	193.83 µg/L	193.83 ppb	04:27:46
1	Zn 213.857†	9838.0	9015.3	205.85 µg/L	205.85 ppb	04:27:46
2	Sc RADIAL	57381.0	57381.0	102 %		04:26:42
2	Al 396.153Radial†	69455.2	68376.2	47566 µg/L	47566 ppb	04:26:42
2	Ca 317.933Radial†	13774.9	13351.1	11404 µg/L	11404 ppb	04:27:02
2	Fe 238.204 Radial†	12296.0	12089.8	95352 µg/L	95352 ppb	04:27:02
2	K 766.490 Radial†	13105.9	12738.7	8319.9 µg/L	8319.9 ppb	04:26:42
2	Mg 279.077 IEC†	1090.7	1061.0	9382.5 µg/L	9382.5 ppb	04:27:02
2	Na 589.592 Radial†	1950.4	1448.1	444.79 µg/L	444.79 ppb	04:26:42
2	Sr 421.552†	13307.5	13073.3	120.60 µg/L	120.60 ppb	04:26:42
2	Sc 361.383	2009199.4	2009199.4	102.35 %		04:28:14
2	Y 371.029	1404912.2	1404912.2	103.86 %		04:28:14
2	Ag 328.068†	-1567.1	-1129.6	-1.1354 µg/L	-1.1354 ppb	04:28:19
2	As 188.979†	7.5	7.8	18.967 µg/L	18.967 ppb	04:28:40
2	B 249.677†	879.0	474.7	-30.194 µg/L	-30.194 ppb	04:28:19
2	Ba 233.527†	24923.6	24369.0	585.37 µg/L	585.37 ppb	04:28:19
2	Be 313.107†	12443.9	15014.2	7.7454 µg/L	7.7454 ppb	04:28:19
2	Cd 226.502†	227.6	364.1	-1.6212 µg/L	-1.6212 ppb	04:28:40
2	Co 228.616†	1050.5	1024.5	40.015 µg/L	40.015 ppb	04:28:40
2	Cr 267.716†	6703.9	6600.5	132.69 µg/L	132.69 ppb	04:28:19
2	Cu 324.752†	25712.1	22578.7	160.64 µg/L	160.64 ppb	04:28:19
2	Mn 257.610†	739473.5	722770.2	2275.7 µg/L	2275.7 ppb	04:28:14
2	Mo 202.031†	11.8	16.9	5.2748 µg/L	5.2748 ppb	04:28:40
2	Ni 231.604†	1804.8	1451.1	73.519 µg/L	73.519 ppb	04:28:40
2	P 214.914†	285.2	263.3	441.98 µg/L	441.98 ppb	04:28:40
2	Pb 220.353†	5857.0	5631.7	1367.8 µg/L	1367.8 ppb	04:28:19

2	S 181.975 Axial†	92.0	70.9	294.21 µg/L	294.21 ppb	04:28:40
2	Sb 206.836†	42.3	18.8	14.834 µg/L	14.834 ppb	04:28:40
2	Se 196.026†	-35.7	-54.2	172.90 µg/L	172.90 ppb	04:28:40
2	SiO2†	294950.1	286794.1	56609 µg/L	56609 ppb	04:28:14
2	Si 251.611†	353338.2	344924.0	26222 µg/L	26222 ppb	04:28:14
2	Sn 189.927†	5.4	4.9	-7.0416 µg/L	-7.0416 ppb	04:28:40
2	Ti 334.940†	1415520.3	1382881.3	3058.7 µg/L	3058.7 ppb	04:28:14
2	Tl 190.801†	-55.2	-31.5	11.092 µg/L	11.092 ppb	04:28:40
2	U 409.014†	-312.2	-228.0	-32.889 µg/L	-32.889 ppb	04:28:19
2	V 292.402†	19454.1	19052.7	197.19 µg/L	197.19 ppb	04:28:19
2	Zn 213.857†	9984.8	9221.4	210.72 µg/L	210.72 ppb	04:28:19
3	Sc RADIAL	58320.2	58320.2	103 %		04:27:08
3	Al 396.153Radial†	69493.6	67312.0	46826 µg/L	46826 ppb	04:27:08
3	Ca 317.933Radial†	13822.0	13178.3	11257 µg/L	11257 ppb	04:27:28
3	Fe 238.204 Radial†	12327.3	11925.0	94052 µg/L	94052 ppb	04:27:28
3	K 766.490 Radial†	13065.2	12491.5	8158.4 µg/L	8158.4 ppb	04:27:08
3	Mg 279.077 IEC†	1095.4	1048.3	9269.7 µg/L	9269.7 ppb	04:27:28
3	Na 589.592 Radial†	1930.1	1397.5	429.24 µg/L	429.24 ppb	04:27:08
3	Sr 421.552†	13291.1	12846.5	118.51 µg/L	118.51 ppb	04:27:08
3	Sc 361.383	2025623.0	2025623.0	103.18 %		04:28:47
3	Y 371.029	1415552.9	1415552.9	104.64 %		04:28:47
3	Ag 328.068†	-1488.1	-1040.6	-0.6534 µg/L	-0.6534 ppb	04:28:52
3	As 188.979†	6.8	7.0	17.482 µg/L	17.482 ppb	04:29:13
3	B 249.677†	813.1	403.9	-32.422 µg/L	-32.422 ppb	04:28:52
3	Ba 233.527†	23381.9	22677.5	544.73 µg/L	544.73 ppb	04:28:52
3	Be 313.107†	11322.8	13829.2	7.1001 µg/L	7.1001 ppb	04:28:52
3	Cd 226.502†	202.4	337.8	-2.1375 µg/L	-2.1375 ppb	04:29:13
3	Co 228.616†	945.4	914.3	35.342 µg/L	35.342 ppb	04:29:13
3	Cr 267.716†	6152.1	6012.7	120.87 µg/L	120.87 ppb	04:28:52
3	Cu 324.752†	24255.8	20963.6	149.91 µg/L	149.91 ppb	04:28:52
3	Mn 257.610†	713050.6	691304.5	2177.0 µg/L	2177.0 ppb	04:28:47
3	Mo 202.031†	3.3	8.6	4.4120 µg/L	4.4120 ppb	04:29:13
3	Ni 231.604†	1656.8	1293.3	65.645 µg/L	65.645 ppb	04:29:13
3	P 214.914†	262.7	239.2	396.36 µg/L	396.36 ppb	04:29:13
3	Pb 220.353†	5586.3	5323.0	1292.8 µg/L	1292.8 ppb	04:28:52
3	S 181.975 Axial†	85.3	63.7	264.31 µg/L	264.31 ppb	04:29:13
3	Sb 206.836†	38.4	14.7	11.186 µg/L	11.186 ppb	04:29:13
3	Se 196.026†	-29.3	-47.7	178.57 µg/L	178.57 ppb	04:29:13
3	SiO2†	286666.4	276429.3	54564 µg/L	54564 ppb	04:28:47
3	Si 251.611†	343320.2	332416.0	25271 µg/L	25271 ppb	04:28:47
3	Sn 189.927†	8.2	7.6	-5.7930 µg/L	-5.7930 ppb	04:29:13
3	Ti 334.940†	1356034.1	1314016.9	2906.3 µg/L	2906.3 ppb	04:28:47
3	Tl 190.801†	-52.4	-28.4	13.235 µg/L	13.235 ppb	04:29:13
3	U 409.014†	-371.7	-283.2	-37.288 µg/L	-37.288 ppb	04:28:52
3	V 292.402†	18078.0	17564.9	182.50 µg/L	182.50 ppb	04:28:52
3	Zn 213.857†	9383.0	8559.0	195.30 µg/L	195.30 ppb	04:28:52

Mean Data: 245979014|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2019070.4	102.85 %	0.443			0.43%
Sc RADIAL	57832.8	102 %	0.8			0.81%
Y 371.029	1411700.3	104.36 %	0.436			0.42%
Ag 328.068†	-1093.3	-0.9176 µg/L	0.24428	-0.9176 ppb	0.24428	26.62%
Al 396.153Radial†	67886.6	47226 µg/L	373.7	47226 ppb	373.7	0.79%
As 188.979†	10.5	23.744 µg/L	9.5893	23.744 ppb	9.5893	40.39%
B 249.677†	459.8	-30.717 µg/L	1.5127	-30.717 ppb	1.5127	4.92%
Ba 233.527†	23677.5	568.75 µg/L	21.307	568.75 ppb	21.307	3.75%
Be 313.107†	14560.8	7.4989 µg/L	0.34851	7.4989 ppb	0.34851	4.65%
Ca 317.933Radial†	13332.5	11388 µg/L	124.5	11388 ppb	124.5	1.09%
Cd 226.502†	358.7	-1.7387 µg/L	0.35485	-1.7387 ppb	0.35485	20.41%
Co 228.616†	984.1	38.308 µg/L	2.5787	38.308 ppb	2.5787	6.73%
Cr 267.716†	6360.4	127.86 µg/L	6.198	127.86 ppb	6.198	4.85%
Cu 324.752†	21920.6	156.32 µg/L	5.656	156.32 ppb	5.656	3.62%
Fe 238.204 Radial†	12067.2	95174 µg/L	1044.4	95174 ppb	1044.4	1.10%
K 766.490 Radial†	12617.9	8241.0 µg/L	80.80	8241.0 ppb	80.80	0.98%
Mg 279.077 IEC†	1060.7	9379.4 µg/L	108.14	9379.4 ppb	108.14	1.15%
Mn 257.610†	710402.5	2236.9 µg/L	52.66	2236.9 ppb	52.66	2.35%
Mo 202.031†	13.4	4.9310 µg/L	0.45733	4.9310 ppb	0.45733	9.27%
Na 589.592 Radial†	1436.3	441.15 µg/L	10.570	441.15 ppb	10.570	2.40%

Ni 231.604†	1397.1	70.830 µg/L	4.4919	70.830 ppb	4.4919	6.34%
P 214.914†	256.7	429.50 µg/L	28.983	429.50 ppb	28.983	6.75%
Pb 220.353†	5495.0	1334.5 µg/L	38.23	1334.5 ppb	38.23	2.86%
S 181.975 Axial†	69.1	286.69 µg/L	19.719	286.69 ppb	19.719	6.88%
Sb 206.836†	17.0	13.148 µg/L	1.8394	13.148 ppb	1.8394	13.99%
Se 196.026†	-52.3	175.12 µg/L	3.029	175.12 ppb	3.029	1.73%
SiO2†	282677.1	55797 µg/L	1085.8	55797 ppb	1085.8	1.95%
Si 251.611†	339887.1	25839 µg/L	501.7	25839 ppb	501.7	1.94%
Sn 189.927†	8.2	-5.6476 µg/L	1.47199	-5.6476 ppb	1.47199	26.06%
Sr 421.552†	12976.2	119.71 µg/L	1.078	119.71 ppb	1.078	0.90%
Ti 334.940†	1356139.5	2999.5 µg/L	81.67	2999.5 ppb	81.67	2.72%
Tl 190.801†	-30.7	11.433 µg/L	1.6579	11.433 ppb	1.6579	14.50%
U 409.014†	-222.1	-32.373 µg/L	5.1922	-32.373 ppb	5.1922	16.04%
V 292.402†	18438.8	191.18 µg/L	7.697	191.18 ppb	7.697	4.03%
Zn 213.857†	8931.9	203.96 µg/L	7.882	203.96 ppb	7.882	3.86%

Sequence No.: 25

Sample ID: 245979015|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 247

Date Collected: 2/20/2010 04:29:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979015|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56521.6	56521.6	100 %		04:29:55
1	Al 396.153Radial†	17670.6	17655.1	12282 µg/L	12282 ppb	04:29:55
1	Ca 317.933Radial†	7579.9	7365.2	6291.2 µg/L	6291.2 ppb	04:29:55
1	Fe 238.204 Radial†	11498.8	11477.0	90519 µg/L	90519 ppb	04:29:55
1	K 766.490 Radial†	4843.7	4676.5	3054.3 µg/L	3054.3 ppb	04:29:55
1	Mg 279.077 IEC†	284.5	271.5	2330.0 µg/L	2330.0 ppb	04:30:15
1	Na 589.592 Radial†	6183.4	5708.3	1753.3 µg/L	1753.3 ppb	04:29:55
1	Sr 421.552†	3520.2	3489.8	32.194 µg/L	32.194 ppb	04:29:55
1	Sc 361.383	2020503.8	2020503.8	102.92 %		04:31:20
1	Y 371.029	1500507.4	1500507.4	110.92 %		04:31:20
1	Ag 328.068†	-1456.8	-1013.8	-1.6349 µg/L	-1.6349 ppb	04:31:25
1	As 188.979†	6.4	6.7	16.892 µg/L	16.892 ppb	04:31:46
1	B 249.677†	711.3	307.0	-34.544 µg/L	-34.544 ppb	04:31:25
1	Ba 233.527†	9057.5	8817.3	211.73 µg/L	211.73 ppb	04:31:25
1	Be 313.107†	6822.9	9484.8	4.9605 µg/L	4.9605 ppb	04:31:25
1	Cd 226.502†	175.7	312.4	-2.3653 µg/L	-2.3653 ppb	04:31:25
1	Co 228.616†	1452.9	1409.7	60.184 µg/L	60.184 ppb	04:31:46
1	Cr 267.716†	5629.5	5520.0	110.89 µg/L	110.89 ppb	04:31:25
1	Cu 324.752†	11438.5	8569.9	68.522 µg/L	68.522 ppb	04:31:25
1	Mn 257.610†	732318.3	711775.9	2240.9 µg/L	2240.9 ppb	04:31:20
1	Mo 202.031†	56.4	60.2	9.3305 µg/L	9.3305 ppb	04:31:46
1	Ni 231.604†	1782.7	1419.8	71.875 µg/L	71.875 ppb	04:31:25
1	P 214.914†	431.2	403.6	723.32 µg/L	723.32 ppb	04:31:46
1	Pb 220.353†	458.9	354.9	83.541 µg/L	83.541 ppb	04:31:46
1	S 181.975 Axial†	22.9	3.3	13.648 µg/L	13.648 ppb	04:31:46
1	Sb 206.836†	30.2	6.8	4.5675 µg/L	4.5675 ppb	04:31:46
1	Se 196.026†	-35.4	-53.7	168.09 µg/L	168.09 ppb	04:31:46
1	SiO2†	158676.4	152778.3	30156 µg/L	30156 ppb	04:31:25
1	Si 251.611†	192987.1	187195.5	14231 µg/L	14231 ppb	04:31:20
1	Sn 189.927†	16.8	15.9	-2.6884 µg/L	-2.6884 ppb	04:31:46
1	Ti 334.940†	816876.1	793501.1	1755.3 µg/L	1755.3 ppb	04:31:20
1	Tl 190.801†	-54.6	-30.7	-2.6139 µg/L	-2.6139 ppb	04:31:46
1	U 409.014†	-1372.8	-1256.7	-117.38 µg/L	-117.38 ppb	04:31:20
1	V 292.402†	2717.5	2685.0	37.013 µg/L	37.013 ppb	04:31:25
1	Zn 213.857†	20848.8	19722.3	457.87 µg/L	457.87 ppb	04:31:25
2	Sc RADIAL	56808.5	56808.5	101 %		04:30:21
2	Al 396.153Radial†	17789.9	17684.6	12302 µg/L	12302 ppb	04:30:21
2	Ca 317.933Radial†	7556.1	7303.2	6238.3 µg/L	6238.3 ppb	04:30:21
2	Fe 238.204 Radial†	11543.9	11463.7	90414 µg/L	90414 ppb	04:30:21
2	K 766.490 Radial†	4790.9	4599.6	3004.1 µg/L	3004.1 ppb	04:30:21
2	Mg 279.077 IEC†	286.4	272.0	2334.3 µg/L	2334.3 ppb	04:30:41
2	Na 589.592 Radial†	6222.8	5716.3	1755.7 µg/L	1755.7 ppb	04:30:21
2	Sr 421.552†	3523.9	3475.7	32.064 µg/L	32.064 ppb	04:30:21
2	Sc 361.383	2006868.7	2006868.7	102.23 %		04:31:53
2	Y 371.029	1487407.3	1487407.3	109.95 %		04:31:53
2	Ag 328.068†	-1454.9	-1021.6	-1.7010 µg/L	-1.7010 ppb	04:31:59
2	As 188.979†	12.5	12.7	27.610 µg/L	27.610 ppb	04:32:20
2	B 249.677†	708.0	308.4	-34.428 µg/L	-34.428 ppb	04:31:59
2	Ba 233.527†	9078.2	8897.4	213.65 µg/L	213.65 ppb	04:31:59
2	Be 313.107†	6804.0	9511.4	4.9770 µg/L	4.9770 ppb	04:31:59
2	Cd 226.502†	168.2	306.2	-2.5075 µg/L	-2.5075 ppb	04:31:59
2	Co 228.616†	1413.2	1380.5	58.863 µg/L	58.863 ppb	04:32:20
2	Cr 267.716†	5621.5	5549.3	111.48 µg/L	111.48 ppb	04:31:59
2	Cu 324.752†	11297.9	8507.9	68.102 µg/L	68.102 ppb	04:31:59
2	Mn 257.610†	726771.1	711183.8	2239.0 µg/L	2239.0 ppb	04:31:53
2	Mo 202.031†	55.2	59.4	9.2500 µg/L	9.2500 ppb	04:32:20
2	Ni 231.604†	1787.1	1435.8	72.673 µg/L	72.673 ppb	04:31:59
2	P 214.914†	422.1	397.6	711.57 µg/L	711.57 ppb	04:32:20
2	Pb 220.353†	459.6	358.6	84.455 µg/L	84.455 ppb	04:32:20

2	S 181.975 Axial†	20.6	1.2	5.0762 µg/L	5.0762 ppb	04:32:20
2	Sb 206.836†	32.0	8.8	6.3736 µg/L	6.3736 ppb	04:32:20
2	Se 196.026†	-42.3	-60.7	157.99 µg/L	157.99 ppb	04:32:20
2	SiO2†	158711.4	153860.0	30370 µg/L	30370 ppb	04:31:59
2	Si 251.611†	191243.6	186763.9	14198 µg/L	14198 ppb	04:31:53
2	Sn 189.927†	20.6	19.8	-1.0342 µg/L	-1.0342 ppb	04:32:20
2	Ti 334.940†	810470.6	792627.6	1753.4 µg/L	1753.4 ppb	04:31:53
2	Tl 190.801†	-47.5	-24.1	5.9258 µg/L	5.9258 ppb	04:32:20
2	U 409.014†	-1412.7	-1304.8	-121.36 µg/L	-121.36 ppb	04:31:53
2	V 292.402†	2663.8	2650.5	36.660 µg/L	36.660 ppb	04:31:59
2	Zn 213.857†	20811.7	19823.6	460.25 µg/L	460.25 ppb	04:31:59
3	Sc RADIAL	56752.9	56752.9	100 %		04:30:47
3	Al 396.153Radial†	17760.8	17673.0	12294 µg/L	12294 ppb	04:30:47
3	Ca 317.933Radial†	7556.4	7310.9	6244.8 µg/L	6244.8 ppb	04:30:47
3	Fe 238.204 Radial†	11522.7	11453.9	90337 µg/L	90337 ppb	04:30:47
3	K 766.490 Radial†	4811.8	4625.0	3020.6 µg/L	3020.6 ppb	04:30:47
3	Mg 279.077 IEC†	283.3	269.2	2309.6 µg/L	2309.6 ppb	04:31:07
3	Na 589.592 Radial†	6275.7	5775.1	1773.8 µg/L	1773.8 ppb	04:30:47
3	Sr 421.552†	3532.2	3487.4	32.172 µg/L	32.172 ppb	04:30:47
3	Sc 361.383	2019092.0	2019092.0	102.85 %		04:32:27
3	Y 371.029	1493197.6	1493197.6	110.38 %		04:32:27
3	Ag 328.068†	-1291.4	-854.0	-0.4768 µg/L	-0.4768 ppb	04:32:33
3	As 188.979†	7.5	7.8	18.864 µg/L	18.864 ppb	04:32:53
3	B 249.677†	706.8	303.1	-34.622 µg/L	-34.622 ppb	04:32:33
3	Ba 233.527†	8569.3	8348.8	200.47 µg/L	200.47 ppb	04:32:33
3	Be 313.107†	6009.7	8698.8	4.5267 µg/L	4.5267 ppb	04:32:33
3	Cd 226.502†	149.1	286.6	-2.9955 µg/L	-2.9955 ppb	04:32:33
3	Co 228.616†	1283.3	1245.8	52.940 µg/L	52.940 ppb	04:32:53
3	Cr 267.716†	5151.6	5059.2	101.63 µg/L	101.63 ppb	04:32:33
3	Cu 324.752†	10776.1	7933.6	64.343 µg/L	64.343 ppb	04:32:33
3	Mn 257.610†	700982.9	681806.7	2147.0 µg/L	2147.0 ppb	04:32:27
3	Mo 202.031†	47.6	51.6	8.4856 µg/L	8.4856 ppb	04:32:53
3	Ni 231.604†	1643.4	1285.5	65.191 µg/L	65.191 ppb	04:32:33
3	P 214.914†	384.6	358.6	634.68 µg/L	634.68 ppb	04:32:53
3	Pb 220.353†	421.8	319.1	74.868 µg/L	74.868 ppb	04:32:53
3	S 181.975 Axial†	24.7	5.0	20.880 µg/L	20.880 ppb	04:32:53
3	Sb 206.836†	27.4	4.2	2.2030 µg/L	2.2030 ppb	04:32:53
3	Se 196.026†	-32.4	-50.8	171.69 µg/L	171.69 ppb	04:32:53
3	SiO2†	150225.7	144669.7	28556 µg/L	28556 ppb	04:32:33
3	Si 251.611†	186604.5	181120.9	13769 µg/L	13769 ppb	04:32:27
3	Sn 189.927†	14.0	13.2	-3.8199 µg/L	-3.8199 ppb	04:32:53
3	Ti 334.940†	776324.6	754628.7	1669.3 µg/L	1669.3 ppb	04:32:27
3	Tl 190.801†	-43.1	-19.5	10.817 µg/L	10.817 ppb	04:32:53
3	U 409.014†	-1461.0	-1343.4	-124.55 µg/L	-124.55 ppb	04:32:27
3	V 292.402†	2484.0	2459.8	34.761 µg/L	34.761 ppb	04:32:33
3	Zn 213.857†	19582.8	18505.5	429.37 µg/L	429.37 ppb	04:32:33

Mean Data: 245979015|948764|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2015488.2	102.67 %		0.382			0.37%
Sc RADIAL	56694.3	100 %		0.3			0.27%
Y 371.029	1493704.1	110.42 %		0.485			0.44%
Ag 328.068†	-963.1	-1.2709 µg/L		0.68848	-1.2709 ppb	0.68848	54.17%
Al 396.153Radial†	17670.9	12293 µg/L		10.3	12293 ppb	10.3	0.08%
As 188.979†	9.0	21.122 µg/L		5.7046	21.122 ppb	5.7046	27.01%
B 249.677†	306.2	-34.531 µg/L		0.0975	-34.531 ppb	0.0975	0.28%
Ba 233.527†	8687.8	208.62 µg/L		7.116	208.62 ppb	7.116	3.41%
Be 313.107†	9231.6	4.8214 µg/L		0.25533	4.8214 ppb	0.25533	5.30%
Ca 317.933Radial†	7326.4	6258.1 µg/L		28.84	6258.1 ppb	28.84	0.46%
Cd 226.502†	301.8	-2.6228 µg/L		0.33050	-2.6228 ppb	0.33050	12.60%
Co 228.616†	1345.3	57.329 µg/L		3.8584	57.329 ppb	3.8584	6.73%
Cr 267.716†	5376.1	108.00 µg/L		5.523	108.00 ppb	5.523	5.11%
Cu 324.752†	8337.1	66.989 µg/L		2.3009	66.989 ppb	2.3009	3.43%
Fe 238.204 Radial†	11464.9	90424 µg/L		91.4	90424 ppb	91.4	0.10%
K 766.490 Radial†	4633.7	3026.3 µg/L		25.59	3026.3 ppb	25.59	0.85%
Mg 279.077 IEC†	270.9	2324.6 µg/L		13.20	2324.6 ppb	13.20	0.57%
Mn 257.610†	701588.8	2209.0 µg/L		53.67	2209.0 ppb	53.67	2.43%
Mo 202.031†	57.0	9.0221 µg/L		0.46634	9.0221 ppb	0.46634	5.17%
Na 589.592 Radial†	5733.2	1760.9 µg/L		11.20	1760.9 ppb	11.20	0.64%

Ni 231.604†	1380.4	69.913 µg/L	4.1087	69.913 ppb	4.1087	5.88%
P 214.914†	386.6	689.86 µg/L	48.142	689.86 ppb	48.142	6.98%
Pb 220.353†	344.2	80.955 µg/L	5.2912	80.955 ppb	5.2912	6.54%
S 181.975 Axial†	3.2	13.201 µg/L	7.9112	13.201 ppb	7.9112	59.93%
Sb 206.836†	6.6	4.3813 µg/L	2.09150	4.3813 ppb	2.09150	47.74%
Se 196.026†	-55.1	165.92 µg/L	7.098	165.92 ppb	7.098	4.28%
SiO2†	150436.0	29694 µg/L	991.5	29694 ppb	991.5	3.34%
Si 251.611†	185026.8	14066 µg/L	257.7	14066 ppb	257.7	1.83%
Sn 189.927†	16.3	-2.5142 µg/L	1.40099	-2.5142 ppb	1.40099	55.72%
Sr 421.552†	3484.3	32.143 µg/L	0.0695	32.143 ppb	0.0695	0.22%
Ti 334.940†	780252.5	1726.0 µg/L	49.10	1726.0 ppb	49.10	2.84%
Tl 190.801†	-24.8	4.7095 µg/L	6.79733	4.7095 ppb	6.79733	144.33%
U 409.014†	-1301.6	-121.09 µg/L	3.594	-121.09 ppb	3.594	2.97%
V 292.402†	2598.5	36.145 µg/L	1.2109	36.145 ppb	1.2109	3.35%
Zn 213.857†	19350.5	449.17 µg/L	17.183	449.17 ppb	17.183	3.83%

Sequence No.: 26

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 04:33:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56716.6	56716.6	100 %		04:33:42
1	Al 396.153Radial†	7309.2	7273.4	5049.5 µg/L	5049.5 ppb	04:33:42
1	Ca 317.933Radial†	6117.5	5882.4	5024.7 µg/L	5024.7 ppb	04:34:02
1	Fe 238.204 Radial†	669.3	650.1	5137.6 µg/L	5137.6 ppb	04:34:02
1	K 766.490 Radial†	7852.2	7656.6	5000.6 µg/L	5000.6 ppb	04:33:42
1	Mg 279.077 IEC†	583.8	568.7	5086.3 µg/L	5086.3 ppb	04:34:02
1	Na 589.592 Radial†	33581.3	32978.2	10129 µg/L	10129 ppb	04:33:42
1	Sr 421.552†	53712.7	53474.6	493.31 µg/L	493.31 ppb	04:33:42
1	Sc 361.383	2057581.8	2057581.8	104.81 %		04:35:06
1	Y 371.029	1415488.7	1415488.7	104.64 %		04:35:06
1	Ag 328.068†	67158.7	64477.1	481.13 µg/L	481.13 ppb	04:35:11
1	As 188.979†	295.7	282.6	505.46 µg/L	505.46 ppb	04:35:32
1	B 249.677†	12570.6	11609.4	471.27 µg/L	471.27 ppb	04:35:11
1	Ba 233.527†	21092.0	20140.8	484.39 µg/L	484.39 ppb	04:35:11
1	Be 313.107†	840789.4	805045.1	477.62 µg/L	477.62 ppb	04:35:06
1	Cd 226.502†	20261.5	19473.0	485.58 µg/L	485.58 ppb	04:35:11
1	Co 228.616†	11305.1	10784.2	487.85 µg/L	487.85 ppb	04:35:11
1	Cr 267.716†	25367.7	24253.4	487.44 µg/L	487.44 ppb	04:35:11
1	Cu 324.752†	80514.9	74274.8	485.54 µg/L	485.54 ppb	04:35:11
1	Mn 257.610†	162898.9	155676.3	487.98 µg/L	487.98 ppb	04:35:06
1	Mo 202.031†	5349.6	5109.3	500.53 µg/L	500.53 ppb	04:35:32
1	Ni 231.604†	10577.2	9779.3	486.98 µg/L	486.98 ppb	04:35:11
1	P 214.914†	1328.9	1252.6	2433.5 µg/L	2433.5 ppb	04:35:32
1	Pb 220.353†	2243.1	2049.2	498.33 µg/L	498.33 ppb	04:35:32
1	S 181.975 Axial†	266.7	235.5	976.57 µg/L	976.57 ppb	04:35:32
1	Sb 206.836†	584.9	535.6	493.87 µg/L	493.87 ppb	04:35:32
1	Se 196.026†	394.7	357.3	509.84 µg/L	509.84 ppb	04:35:32
1	SiO2†	28956.8	26235.8	5178.6 µg/L	5178.6 ppb	04:35:11
1	Si 251.611†	33732.5	31873.2	2423.1 µg/L	2423.1 ppb	04:35:11
1	Sn 189.927†	1252.0	1194.1	503.61 µg/L	503.61 ppb	04:35:32
1	Ti 334.940†	226602.2	216024.0	477.57 µg/L	477.57 ppb	04:35:06
1	Tl 190.801†	370.9	376.2	494.42 µg/L	494.42 ppb	04:35:32
1	U 409.014†	6035.7	5835.7	483.83 µg/L	483.83 ppb	04:35:11
1	V 292.402†	51816.2	49482.1	488.30 µg/L	488.30 ppb	04:35:11
1	Zn 213.857†	22427.6	20863.6	486.02 µg/L	486.02 ppb	04:35:11
2	Sc RADIAL	57768.9	57768.9	102 %		04:34:08
2	Al 396.153Radial†	7186.3	7020.6	4873.8 µg/L	4873.8 ppb	04:34:08
2	Ca 317.933Radial†	6012.9	5669.1	4842.4 µg/L	4842.4 ppb	04:34:28
2	Fe 238.204 Radial†	659.5	628.4	4966.7 µg/L	4966.7 ppb	04:34:28
2	K 766.490 Radial†	7701.4	7366.6	4811.3 µg/L	4811.3 ppb	04:34:08
2	Mg 279.077 IEC†	576.1	550.6	4924.8 µg/L	4924.8 ppb	04:34:28
2	Na 589.592 Radial†	33062.7	31861.8	9786.1 µg/L	9786.1 ppb	04:34:08
2	Sr 421.552†	52835.4	51642.1	476.41 µg/L	476.41 ppb	04:34:08
2	Sc 361.383	2050935.4	2050935.4	104.47 %		04:35:39
2	Y 371.029	1412139.6	1412139.6	104.39 %		04:35:39
2	Ag 328.068†	67198.1	64722.5	482.94 µg/L	482.94 ppb	04:35:45
2	As 188.979†	281.0	269.4	481.96 µg/L	481.96 ppb	04:36:05
2	B 249.677†	12564.6	11642.5	472.71 µg/L	472.71 ppb	04:35:45
2	Ba 233.527†	20994.9	20113.0	483.73 µg/L	483.73 ppb	04:35:45
2	Be 313.107†	846460.4	813072.9	482.38 µg/L	482.38 ppb	04:35:39
2	Cd 226.502†	20329.9	19601.1	488.80 µg/L	488.80 ppb	04:35:45
2	Co 228.616†	11285.7	10800.6	488.57 µg/L	488.57 ppb	04:35:45
2	Cr 267.716†	25389.2	24352.5	489.43 µg/L	489.43 ppb	04:35:45
2	Cu 324.752†	80623.3	74627.4	487.82 µg/L	487.82 ppb	04:35:45
2	Mn 257.610†	163524.2	156778.5	491.42 µg/L	491.42 ppb	04:35:39
2	Mo 202.031†	5216.7	4998.6	489.69 µg/L	489.69 ppb	04:36:05
2	Ni 231.604†	10542.4	9778.6	486.94 µg/L	486.94 ppb	04:35:45
2	P 214.914†	1294.7	1223.9	2376.4 µg/L	2376.4 ppb	04:36:05
2	Pb 220.353†	2188.1	2003.5	487.18 µg/L	487.18 ppb	04:36:05

2	S 181.975 Axial†	265.7	235.4	976.00 µg/L	976.00 ppb	04:36:05
2	Sb 206.836†	577.1	529.9	488.51 µg/L	488.51 ppb	04:36:05
2	Se 196.026†	384.4	348.6	497.40 µg/L	497.40 ppb	04:36:05
2	SiO2†	28986.6	26353.9	5201.9 µg/L	5201.9 ppb	04:35:45
2	Si 251.611†	33771.3	32014.6	2433.8 µg/L	2433.8 ppb	04:35:45
2	Sn 189.927†	1216.2	1163.8	490.80 µg/L	490.80 ppb	04:36:05
2	Ti 334.940†	227991.3	218054.3	482.07 µg/L	482.07 ppb	04:35:39
2	Tl 190.801†	361.9	368.8	484.79 µg/L	484.79 ppb	04:36:05
2	U 409.014†	6052.9	5870.9	486.79 µg/L	486.79 ppb	04:35:45
2	V 292.402†	51831.3	49656.8	489.91 µg/L	489.91 ppb	04:35:45
2	Zn 213.857†	22400.8	20907.3	487.06 µg/L	487.06 ppb	04:35:45
3	Sc RADIAL	58380.8	58380.8	103 %		04:34:34
3	Al 396.153Radial†	7127.6	6890.0	4784.9 µg/L	4784.9 ppb	04:34:34
3	Ca 317.933Radial†	5971.9	5567.8	4755.9 µg/L	4755.9 ppb	04:34:54
3	Fe 238.204 Radial†	652.3	614.7	4857.1 µg/L	4857.1 ppb	04:34:54
3	K 766.490 Radial†	7730.4	7315.7	4778.0 µg/L	4778.0 ppb	04:34:34
3	Mg 279.077 IEC†	570.5	539.2	4821.8 µg/L	4821.8 ppb	04:34:54
3	Na 589.592 Radial†	32825.0	31292.8	9611.4 µg/L	9611.4 ppb	04:34:34
3	Sr 421.552†	52349.1	50629.9	467.07 µg/L	467.07 ppb	04:34:34
3	Sc 361.383	2067153.9	2067153.9	105.30 %		04:36:12
3	Y 371.029	1423556.1	1423556.1	105.23 %		04:36:12
3	Ag 328.068†	62436.5	59695.9	445.27 µg/L	445.27 ppb	04:36:18
3	As 188.979†	242.9	231.1	413.46 µg/L	413.46 ppb	04:36:38
3	B 249.677†	11600.5	10632.5	431.49 µg/L	431.49 ppb	04:36:18
3	Ba 233.527†	18793.8	17865.1	429.65 µg/L	429.65 ppb	04:36:18
3	Be 313.107†	774598.8	738471.2	438.12 µg/L	438.12 ppb	04:36:12
3	Cd 226.502†	18092.7	17323.8	431.95 µg/L	431.95 ppb	04:36:18
3	Co 228.616†	9919.0	9417.9	425.97 µg/L	425.97 ppb	04:36:18
3	Cr 267.716†	21648.0	20608.9	414.20 µg/L	414.20 ppb	04:36:18
3	Cu 324.752†	71593.7	65446.8	427.88 µg/L	427.88 ppb	04:36:18
3	Mn 257.610†	150444.4	143128.9	448.66 µg/L	448.66 ppb	04:36:12
3	Mo 202.031†	4281.2	4071.1	398.85 µg/L	398.85 ppb	04:36:38
3	Ni 231.604†	9375.2	8591.1	427.82 µg/L	427.82 ppb	04:36:18
3	P 214.914†	1092.8	1022.5	1982.5 µg/L	1982.5 ppb	04:36:38
3	Pb 220.353†	1883.3	1697.5	412.73 µg/L	412.73 ppb	04:36:38
3	S 181.975 Axial†	234.1	203.4	843.53 µg/L	843.53 ppb	04:36:38
3	Sb 206.836†	477.9	431.3	397.40 µg/L	397.40 ppb	04:36:38
3	Se 196.026†	329.4	293.5	419.87 µg/L	419.87 ppb	04:36:38
3	SiO2†	26475.1	23751.2	4688.2 µg/L	4688.2 ppb	04:36:18
3	Si 251.611†	30684.8	28829.9	2191.7 µg/L	2191.7 ppb	04:36:18
3	Sn 189.927†	982.9	933.0	393.50 µg/L	393.50 ppb	04:36:38
3	Ti 334.940†	207167.6	196566.4	434.54 µg/L	434.54 ppb	04:36:12
3	Tl 190.801†	317.4	323.8	425.88 µg/L	425.88 ppb	04:36:38
3	U 409.014†	5213.2	5027.9	416.78 µg/L	416.78 ppb	04:36:18
3	V 292.402†	45246.3	43013.9	424.21 µg/L	424.21 ppb	04:36:18
3	Zn 213.857†	19812.2	18280.7	425.81 µg/L	425.81 ppb	04:36:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2058557.1	104.86 %	0.415			0.40%
Sc RADIAL	57622.1	102 %	1.5			1.46%
Y 371.029	1417061.5	104.75 %	0.434			0.41%
Ag 328.068†	62965.2	469.78 µg/L	21.243	469.78 ppb	21.243	4.52%
QC value within limits for Ag 328.068 Recovery = 93.96%						
Al 396.153Radial†	7061.3	4902.7 µg/L	134.65	4902.7 ppb	134.65	2.75%
QC value within limits for Al 396.153Radial Recovery = 98.05%						
As 188.979†	261.0	466.96 µg/L	47.798	466.96 ppb	47.798	10.24%
QC value within limits for As 188.979 Recovery = 93.39%						
B 249.677†	11294.8	458.49 µg/L	23.397	458.49 ppb	23.397	5.10%
QC value within limits for B 249.677 Recovery = 91.70%						
Ba 233.527†	19373.0	465.92 µg/L	31.419	465.92 ppb	31.419	6.74%
QC value within limits for Ba 233.527 Recovery = 93.18%						
Be 313.107†	785529.7	466.04 µg/L	24.295	466.04 ppb	24.295	5.21%
QC value within limits for Be 313.107 Recovery = 93.21%						
Ca 317.933Radial†	5706.4	4874.3 µg/L	137.21	4874.3 ppb	137.21	2.81%
QC value within limits for Ca 317.933Radial Recovery = 97.49%						
Cd 226.502†	18799.3	468.78 µg/L	31.932	468.78 ppb	31.932	6.81%
QC value within limits for Cd 226.502 Recovery = 93.76%						
Co 228.616†	10334.2	467.46 µg/L	35.935	467.46 ppb	35.935	7.69%

Cr	267.716†	23071.6	463.69 µg/L	42.872	463.69 ppb	42.872	9.25%
Cu	324.752†	71449.7	467.08 µg/L	33.969	467.08 ppb	33.969	7.27%
Fe	238.204 Radial†	631.1	4987.1 µg/L	141.37	4987.1 ppb	141.37	2.83%
K	766.490 Radial†	7446.3	4863.3 µg/L	120.08	4863.3 ppb	120.08	2.47%
Mg	279.077 IEC†	552.8	4944.3 µg/L	133.31	4944.3 ppb	133.31	2.70%
Mn	257.610†	151861.3	476.02 µg/L	23.755	476.02 ppb	23.755	4.99%
Mo	202.031†	4726.3	463.02 µg/L	55.841	463.02 ppb	55.841	12.06%
Na	589.592 Radial†	32044.3	9842.2 µg/L	263.34	9842.2 ppb	263.34	2.68%
Ni	231.604†	9383.0	467.25 µg/L	34.146	467.25 ppb	34.146	7.31%
P	214.914†	1166.3	2264.1 µg/L	245.54	2264.1 ppb	245.54	10.84%
Pb	220.353†	1916.7	466.08 µg/L	46.539	466.08 ppb	46.539	9.99%
S	181.975 Axial†	224.8	932.03 µg/L	76.647	932.03 ppb	76.647	8.22%
Sb	206.836†	498.9	459.93 µg/L	54.216	459.93 ppb	54.216	11.79%
Se	196.026†	333.1	475.70 µg/L	48.752	475.70 ppb	48.752	10.25%
SiO2†		25446.9	5022.9 µg/L	290.12	5022.9 ppb	290.12	5.78%
Si	251.611†	30905.9	2349.5 µg/L	136.78	2349.5 ppb	136.78	5.82%
Sn	189.927†	1097.0	462.64 µg/L	60.215	462.64 ppb	60.215	13.02%
Sr	421.552†	51915.5	478.93 µg/L	13.302	478.93 ppb	13.302	2.78%
Ti	334.940†	210214.9	464.73 µg/L	26.238	464.73 ppb	26.238	5.65%
Tl	190.801†	356.3	468.36 µg/L	37.106	468.36 ppb	37.106	7.92%
U	409.014†	5578.1	462.47 µg/L	39.597	462.47 ppb	39.597	8.56%
V	292.402†	47384.3	467.48 µg/L	37.475	467.48 ppb	37.475	8.02%
Zn	213.857†	20017.2	466.30 µg/L	35.069	466.30 ppb	35.069	7.52%

QC value within limits for Co 228.616 Recovery = 93.49%

QC value within limits for Cr 267.716 Recovery = 92.74%

QC value within limits for Cu 324.752 Recovery = 93.42%

QC value within limits for Fe 238.204 Radial Recovery = 99.74%

QC value within limits for K 766.490 Radial Recovery = 97.27%

QC value within limits for Mg 279.077 IEC Recovery = 98.89%

QC value within limits for Mn 257.610 Recovery = 95.20%

QC value within limits for Mo 202.031 Recovery = 92.60%

QC value within limits for Na 589.592 Radial Recovery = 98.42%

QC value within limits for Ni 231.604 Recovery = 93.45%

QC value within limits for P 214.914 Recovery = 90.57%

QC value within limits for Pb 220.353 Recovery = 93.22%

QC value within limits for S 181.975 Axial Recovery = 93.20%

QC value within limits for Sb 206.836 Recovery = 91.99%

QC value within limits for Se 196.026 Recovery = 95.14%

QC value within limits for SiO2 Recovery = 93.93%

QC value within limits for Si 251.611 Recovery = 93.98%

QC value within limits for Sn 189.927 Recovery = 92.53%

QC value within limits for Sr 421.552 Recovery = 95.79%

QC value within limits for Ti 334.940 Recovery = 92.95%

QC value within limits for Tl 190.801 Recovery = 93.67%

QC value within limits for U 409.014 Recovery = 92.49%

QC value within limits for V 292.402 Recovery = 93.50%

QC value within limits for Zn 213.857 Recovery = 93.26%

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 04:36:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57868.7	57868.7	102 %		04:37:20
1	Al 396.153Radial†	7.5	-0.0	-0.0160 µg/L	-0.0160 ppb	04:37:20
1	Ca 317.933Radial†	209.9	-6.4	-5.4517 µg/L	-5.4517 ppb	04:37:41
1	Fe 238.204 Radial†	19.3	2.3	17.774 µg/L	17.774 ppb	04:37:41
1	K 766.490 Radial†	202.6	32.8	21.423 µg/L	21.423 ppb	04:37:20
1	Mg 279.077 IEC†	12.1	-1.0	-8.5745 µg/L	-8.5745 ppb	04:37:41
1	Na 589.592 Radial†	385.3	-96.1	-29.506 µg/L	-29.506 ppb	04:37:20
1	Sr 421.552†	42.2	12.4	0.1147 µg/L	0.1147 ppb	04:37:20
1	Sc 361.383	2034662.5	2034662.5	103.64 %		04:38:43
1	Y 371.029	1405941.1	1405941.1	103.93 %		04:38:43
1	Ag 328.068†	-460.1	-42.3	-0.3132 µg/L	-0.3132 ppb	04:38:48
1	As 188.979†	2.0	2.4	4.2696 µg/L	4.2696 ppb	04:39:09
1	B 249.677†	355.2	-41.5	-1.6997 µg/L	-1.6997 ppb	04:39:09
1	Ba 233.527†	-12.2	5.3	0.1260 µg/L	0.1260 ppb	04:39:09
1	Be 313.107†	-2636.1	312.3	0.1852 µg/L	0.1852 ppb	04:38:48
1	Cd 226.502†	-135.5	11.0	0.2707 µg/L	0.2707 ppb	04:39:09
1	Co 228.616†	-2.6	-4.5	-0.2026 µg/L	-0.2026 ppb	04:39:09
1	Cr 267.716†	-51.0	1.2	0.0237 µg/L	0.0237 ppb	04:38:48
1	Cu 324.752†	3400.7	737.4	4.8160 µg/L	4.8160 ppb	04:38:48
1	Mn 257.610†	-140.3	120.6	0.3804 µg/L	0.3804 ppb	04:39:09
1	Mo 202.031†	0.5	5.8	0.5696 µg/L	0.5696 ppb	04:39:09
1	Ni 231.604†	295.2	-27.6	-1.3739 µg/L	-1.3739 ppb	04:39:09
1	P 214.914†	15.9	-0.0	-0.5043 µg/L	-0.5043 ppb	04:39:09
1	Pb 220.353†	92.4	-1.8	-0.4555 µg/L	-0.4555 ppb	04:39:09
1	S 181.975 Axial†	17.7	-1.9	-7.8103 µg/L	-7.8103 ppb	04:39:09
1	Sb 206.836†	32.6	9.0	8.2319 µg/L	8.2319 ppb	04:39:09
1	Se 196.026†	16.7	-3.2	-4.4102 µg/L	-4.4102 ppb	04:39:09
1	SiO2†	1490.5	46.5	9.1802 µg/L	9.1802 ppb	04:38:48
1	Si 251.611†	377.7	53.8	4.0900 µg/L	4.0900 ppb	04:39:09
1	Sn 189.927†	6.9	6.3	2.6659 µg/L	2.6659 ppb	04:39:09
1	Ti 334.940†	416.0	226.3	0.5013 µg/L	0.5013 ppb	04:38:48
1	Tl 190.801†	-23.4	-0.2	-0.2155 µg/L	-0.2155 ppb	04:39:09
1	U 409.014†	-34.3	44.0	3.6550 µg/L	3.6550 ppb	04:38:48
1	V 292.402†	-60.8	-13.9	-0.1248 µg/L	-0.1248 ppb	04:38:48
1	Zn 213.857†	578.0	23.2	0.5432 µg/L	0.5432 ppb	04:39:09
2	Sc RADIAL	57050.3	57050.3	101 %		04:37:46
2	Al 396.153Radial†	10.3	2.8	1.9655 µg/L	1.9655 ppb	04:37:46
2	Ca 317.933Radial†	190.1	-23.1	-19.696 µg/L	-19.696 ppb	04:38:07
2	Fe 238.204 Radial†	19.1	2.3	18.208 µg/L	18.208 ppb	04:38:07
2	K 766.490 Radial†	193.4	26.5	17.319 µg/L	17.319 ppb	04:37:46
2	Mg 279.077 IEC†	11.7	-1.3	-11.434 µg/L	-11.434 ppb	04:38:07
2	Na 589.592 Radial†	407.2	-69.0	-21.193 µg/L	-21.193 ppb	04:37:46
2	Sr 421.552†	60.4	31.1	0.2865 µg/L	0.2865 ppb	04:37:46
2	Sc 361.383	2015478.6	2015478.6	102.67 %		04:39:15
2	Y 371.029	1392709.4	1392709.4	102.95 %		04:39:15
2	Ag 328.068†	-386.4	25.3	0.1904 µg/L	0.1904 ppb	04:39:20
2	As 188.979†	0.5	1.0	1.7383 µg/L	1.7383 ppb	04:39:41
2	B 249.677†	349.2	-44.1	-1.8040 µg/L	-1.8040 ppb	04:39:41
2	Ba 233.527†	-11.2	6.1	0.1478 µg/L	0.1478 ppb	04:39:41
2	Be 313.107†	-2630.4	293.6	0.1740 µg/L	0.1740 ppb	04:39:20
2	Cd 226.502†	-143.8	1.6	0.0383 µg/L	0.0383 ppb	04:39:41
2	Co 228.616†	2.9	0.9	0.0388 µg/L	0.0388 ppb	04:39:41
2	Cr 267.716†	-22.4	28.5	0.5731 µg/L	0.5731 ppb	04:39:20
2	Cu 324.752†	3346.7	716.1	4.6767 µg/L	4.6767 ppb	04:39:20
2	Mn 257.610†	-139.2	120.4	0.3799 µg/L	0.3799 ppb	04:39:41
2	Mo 202.031†	1.7	7.0	0.6903 µg/L	0.6903 ppb	04:39:41
2	Ni 231.604†	313.1	-7.4	-0.3687 µg/L	-0.3687 ppb	04:39:41
2	P 214.914†	15.5	-0.2	-0.9256 µg/L	-0.9256 ppb	04:39:41
2	Pb 220.353†	81.1	-11.9	-2.9128 µg/L	-2.9128 ppb	04:39:41

2	S 181.975 Axial†	13.3	-6.0	-24.770 µg/L	-24.770 ppb	04:39:41
2	Sb 206.836†	19.5	-3.5	-3.2179 µg/L	-3.2179 ppb	04:39:41
2	Se 196.026†	13.1	-6.6	-9.1464 µg/L	-9.1464 ppb	04:39:41
2	SiO2†	1501.6	71.0	14.010 µg/L	14.010 ppb	04:39:20
2	Si 251.611†	429.3	107.5	8.1710 µg/L	8.1710 ppb	04:39:41
2	Sn 189.927†	3.9	3.4	1.4512 µg/L	1.4512 ppb	04:39:41
2	Ti 334.940†	431.1	244.8	0.5422 µg/L	0.5422 ppb	04:39:20
2	Tl 190.801†	-22.6	0.3	0.4497 µg/L	0.4497 ppb	04:39:41
2	U 409.014†	-32.9	45.0	3.7386 µg/L	3.7386 ppb	04:39:20
2	V 292.402†	-10.8	34.2	0.3461 µg/L	0.3461 ppb	04:39:20
2	Zn 213.857†	583.1	33.6	0.7813 µg/L	0.7813 ppb	04:39:41
3	Sc RADIAL	57317.4	57317.4	101 %		04:38:12
3	Al 396.153Radial†	5.7	-1.7	-1.2299 µg/L	-1.2299 ppb	04:38:12
3	Ca 317.933Radial†	192.8	-21.3	-18.157 µg/L	-18.157 ppb	04:38:33
3	Fe 238.204 Radial†	19.7	2.8	22.062 µg/L	22.062 ppb	04:38:33
3	K 766.490 Radial†	185.6	17.9	11.716 µg/L	11.716 ppb	04:38:12
3	Mg 279.077 IEC†	11.0	-1.9	-17.262 µg/L	-17.262 ppb	04:38:33
3	Na 589.592 Radial†	390.9	-86.9	-26.704 µg/L	-26.704 ppb	04:38:12
3	Sr 421.552†	10.3	-18.6	-0.1719 µg/L	-0.1719 ppb	04:38:12
3	Sc 361.383	2020687.3	2020687.3	102.93 %		04:39:47
3	Y 371.029	1396523.9	1396523.9	103.24 %		04:39:47
3	Ag 328.068†	-374.4	37.8	0.2835 µg/L	0.2835 ppb	04:39:52
3	As 188.979†	-1.7	-1.2	-2.0783 µg/L	-2.0783 ppb	04:40:13
3	B 249.677†	340.7	-53.1	-2.1776 µg/L	-2.1776 ppb	04:40:13
3	Ba 233.527†	-13.5	4.0	0.0956 µg/L	0.0956 ppb	04:40:13
3	Be 313.107†	-2789.4	145.8	0.0864 µg/L	0.0864 ppb	04:39:52
3	Cd 226.502†	-134.6	10.9	0.2684 µg/L	0.2684 ppb	04:40:13
3	Co 228.616†	8.2	6.0	0.2722 µg/L	0.2722 ppb	04:40:13
3	Cr 267.716†	-47.7	4.0	0.0803 µg/L	0.0803 ppb	04:39:52
3	Cu 324.752†	3330.8	692.2	4.5215 µg/L	4.5215 ppb	04:39:52
3	Mn 257.610†	-141.0	119.1	0.3764 µg/L	0.3764 ppb	04:40:13
3	Mo 202.031†	3.1	8.3	0.8178 µg/L	0.8178 ppb	04:40:13
3	Ni 231.604†	307.1	-14.0	-0.6974 µg/L	-0.6974 ppb	04:40:13
3	P 214.914†	0.2	-15.2	-30.533 µg/L	-30.533 ppb	04:40:13
3	Pb 220.353†	89.7	-3.8	-0.9249 µg/L	-0.9249 ppb	04:40:13
3	S 181.975 Axial†	18.4	-1.1	-4.5446 µg/L	-4.5446 ppb	04:40:13
3	Sb 206.836†	19.8	-3.3	-2.9723 µg/L	-2.9723 ppb	04:40:13
3	Se 196.026†	15.7	-4.1	-5.6852 µg/L	-5.6852 ppb	04:40:13
3	SiO2†	1501.0	66.7	13.168 µg/L	13.168 ppb	04:39:52
3	Si 251.611†	397.4	75.4	5.7347 µg/L	5.7347 ppb	04:40:13
3	Sn 189.927†	-0.6	-0.9	-0.3868 µg/L	-0.3868 ppb	04:40:13
3	Ti 334.940†	314.3	130.3	0.2893 µg/L	0.2893 ppb	04:39:52
3	Tl 190.801†	-20.9	2.1	2.6816 µg/L	2.6816 ppb	04:40:13
3	U 409.014†	-117.6	-37.1	-3.0878 µg/L	-3.0878 ppb	04:39:52
3	V 292.402†	-18.5	26.8	0.2670 µg/L	0.2670 ppb	04:39:52
3	Zn 213.857†	566.8	16.2	0.3767 µg/L	0.3767 ppb	04:40:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2023609.5	103.08 %		0.505			0.49%
Sc RADIAL	57412.1	102 %		0.7			0.73%
Y 371.029	1398391.5	103.37 %		0.503			0.49%
Ag 328.068†	6.9	0.0536 µg/L		0.32100	0.0536 ppb	0.32100	599.15%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.4	0.2399 µg/L		1.61301	0.2399 ppb	1.61301	672.43%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.7	1.3099 µg/L		3.19557	1.3099 ppb	3.19557	243.96%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	-46.2	-1.8938 µg/L		0.25126	-1.8938 ppb	0.25126	13.27%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	5.1	0.1231 µg/L		0.02620	0.1231 ppb	0.02620	21.27%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	250.6	0.1485 µg/L		0.05410	0.1485 ppb	0.05410	36.42%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-16.9	-14.435 µg/L		7.8175	-14.435 ppb	7.8175	54.16%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	7.8	0.1925 µg/L		0.13350	0.1925 ppb	0.13350	69.36%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.8	0.0362 µg/L		0.23741	0.0362 ppb	0.23741	656.28%

Cr 267.716†	11.2	0.2257 µg/L	0.30217	0.2257 ppb	0.30217	133.87%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	715.2	4.6714 µg/L	0.14734	4.6714 ppb	0.14734	3.15%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	2.5	19.348 µg/L	2.3603	19.348 ppb	2.3603	12.20%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	25.8	16.819 µg/L	4.8727	16.819 ppb	4.8727	28.97%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.4	-12.423 µg/L	4.4273	-12.423 ppb	4.4273	35.64%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	120.0	0.3789 µg/L	0.00216	0.3789 ppb	0.00216	0.57%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.1	0.6926 µg/L	0.12410	0.6926 ppb	0.12410	17.92%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-84.0	-25.801 µg/L	4.2294	-25.801 ppb	4.2294	16.39%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-16.3	-0.8133 µg/L	0.51249	-0.8133 ppb	0.51249	63.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-5.1	-10.654 µg/L	17.2168	-10.654 ppb	17.2168	161.59%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-5.9	-1.4311 µg/L	1.30451	-1.4311 ppb	1.30451	91.16%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-3.0	-12.375 µg/L	10.8578	-12.375 ppb	10.8578	87.74%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	0.7	0.6805 µg/L	6.54083	0.6805 ppb	6.54083	961.13%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-4.6	-6.4139 µg/L	2.45079	-6.4139 ppb	2.45079	38.21%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2†	61.4	12.119 µg/L	2.5799	12.119 ppb	2.5799	21.29%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	78.9	5.9986 µg/L	2.05324	5.9986 ppb	2.05324	34.23%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.0	1.2434 µg/L	1.53692	1.2434 ppb	1.53692	123.60%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	8.3	0.0764 µg/L	0.23160	0.0764 ppb	0.23160	303.10%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	200.5	0.4443 µg/L	0.13574	0.4443 ppb	0.13574	30.55%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.7	0.9720 µg/L	1.51750	0.9720 ppb	1.51750	156.13%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	17.3	1.4352 µg/L	3.91732	1.4352 ppb	3.91732	272.94%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	15.7	0.1628 µg/L	0.25219	0.1628 ppb	0.25219	154.94%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	24.3	0.5671 µg/L	0.20334	0.5671 ppb	0.20334	35.86%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

2/20/2010 20:49:28 Hg ReAlign... Actual peak offset (nm): -0.001
 Drift (nm): 0.000 Slit adjustment: 0

Analysis Begun

Start Time: 2/20/2010 20:51:18

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\022010.SIF

Batch ID:

Results Data Set: 022010C

Results Library: c:\pe\optimal\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/20/2010 20:51:20

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	58448.9	58448.9	99.0 %	20:51:55
1	Al 396.153Radial†	-15.2	-15.4	[0.00] µg/L	20:51:55
1	Ca 317.933Radial†	194.3	196.3	[0.00] µg/L	20:52:16
1	Fe 238.204 Radial†	14.6	14.8	[0.00] µg/L	20:52:16
1	K 766.490 Radial†	192.6	194.5	[0.00] µg/L	20:51:55
1	Mg 279.077 IEC†	11.9	12.1	[0.00] µg/L	20:52:16
1	Na 589.592 Radial†	440.9	445.4	[0.00] µg/L	20:51:55
1	Sr 421.552†	28.8	29.1	[0.00] µg/L	20:51:55
1	Sc 361.383	2094656.1	2094656.1	99.763 %	20:53:17
1	Y 371.029	1452202.2	1452202.2	99.774 %	20:53:17
1	Ag 328.068†	-422.6	-423.6	[0.00] µg/L	20:53:23
1	As 188.979†	-2.8	-2.8	[0.00] µg/L	20:53:43
1	B 249.677†	330.9	331.7	[0.00] µg/L	20:53:43
1	Ba 233.527†	-14.5	-14.5	[0.00] µg/L	20:53:43
1	Be 313.107†	-3741.6	-3750.5	[0.00] µg/L	20:53:23
1	Cd 226.502†	-132.1	-132.4	[0.00] µg/L	20:53:43
1	Co 228.616†	6.5	6.6	[0.00] µg/L	20:53:43
1	Cr 267.716†	-54.3	-54.4	[0.00] µg/L	20:53:23
1	Cu 324.752†	2873.7	2880.5	[0.00] µg/L	20:53:23
1	Mn 257.610†	-298.2	-298.9	[0.00] µg/L	20:53:43
1	Mo 202.031†	-6.3	-6.3	[0.00] µg/L	20:53:43
1	Ni 231.604†	310.1	310.8	[0.00] µg/L	20:53:43
1	P 214.914†	17.5	17.6	[0.00] µg/L	20:53:43
1	Pb 220.353†	108.8	109.0	[0.00] µg/L	20:53:43
1	S 181.975 Axial†	18.2	18.3	[0.00] µg/L	20:53:43
1	Sb 206.836†	23.7	23.7	[0.00] µg/L	20:53:43
1	Se 196.026†	14.2	14.2	[0.00] µg/L	20:53:43
1	SiO2†	1469.0	1472.4	[0.00] µg/L	20:53:23
1	Si 251.611†	284.2	284.9	[0.00] µg/L	20:53:43
1	Sn 189.927†	4.2	4.2	[0.00] µg/L	20:53:43
1	Ti 334.940†	162.5	162.9	[0.00] µg/L	20:53:23
1	Tl 190.801†	-20.4	-20.4	[0.00] µg/L	20:53:43
1	U 409.014†	-4.3	-4.3	[0.00] µg/L	20:53:23
1	V 292.402†	-116.7	-117.0	[0.00] µg/L	20:53:23
1	Zn 213.857†	500.3	501.5	[0.00] µg/L	20:53:43
2	Sc RADIAL	59409.4	59409.4	101 %	20:52:21
2	Al 396.153Radial†	-5.5	-5.5	[0.00] µg/L	20:52:21
2	Ca 317.933Radial†	197.9	196.6	[0.00] µg/L	20:52:41
2	Fe 238.204 Radial†	14.4	14.3	[0.00] µg/L	20:52:41
2	K 766.490 Radial†	231.7	230.3	[0.00] µg/L	20:52:21
2	Mg 279.077 IEC†	13.5	13.4	[0.00] µg/L	20:52:41
2	Na 589.592 Radial†	487.2	484.2	[0.00] µg/L	20:52:21
2	Sr 421.552†	70.6	70.1	[0.00] µg/L	20:52:21

2	Sc 361.383	2104522.3	2104522.3	100.23 %	20:53:49
2	Y 371.029	1458624.5	1458624.5	100.22 %	20:53:49
2	Ag 328.068†	-484.5	-483.4	[0.00] µg/L	20:53:55
2	As 188.979†	3.1	3.1	[0.00] µg/L	20:54:15
2	B 249.677†	331.7	330.9	[0.00] µg/L	20:54:15
2	Ba 233.527†	-22.2	-22.1	[0.00] µg/L	20:54:15
2	Be 313.107†	-3797.7	-3788.9	[0.00] µg/L	20:53:55
2	Cd 226.502†	-140.2	-139.8	[0.00] µg/L	20:54:15
2	Co 228.616†	0.9	0.9	[0.00] µg/L	20:54:15
2	Cr 267.716†	-48.3	-48.2	[0.00] µg/L	20:53:55
2	Cu 324.752†	2909.8	2903.1	[0.00] µg/L	20:53:55
2	Mn 257.610†	-303.5	-302.8	[0.00] µg/L	20:54:15
2	Mo 202.031†	-2.0	-2.0	[0.00] µg/L	20:54:15
2	Ni 231.604†	308.7	307.9	[0.00] µg/L	20:54:15
2	P 214.914†	12.7	12.7	[0.00] µg/L	20:54:15
2	Pb 220.353†	87.0	86.8	[0.00] µg/L	20:54:15
2	S 181.975 Axial†	16.8	16.7	[0.00] µg/L	20:54:15
2	Sb 206.836†	26.2	26.1	[0.00] µg/L	20:54:15
2	Se 196.026†	14.8	14.8	[0.00] µg/L	20:54:15
2	SiO2†	1489.6	1486.1	[0.00] µg/L	20:53:55
2	Si 251.611†	290.6	289.9	[0.00] µg/L	20:54:15
2	Sn 189.927†	7.4	7.4	[0.00] µg/L	20:54:15
2	Ti 334.940†	137.6	137.3	[0.00] µg/L	20:53:55
2	Tl 190.801†	-26.8	-26.7	[0.00] µg/L	20:54:15
2	U 409.014†	30.6	30.5	[0.00] µg/L	20:53:55
2	V 292.402†	-76.2	-76.0	[0.00] µg/L	20:53:55
2	Zn 213.857†	503.0	501.9	[0.00] µg/L	20:54:15
3	Sc RADIAL	59272.8	59272.8	100 %	20:52:47
3	Al 396.153Radial†	-5.2	-5.2	[0.00] µg/L	20:52:47
3	Ca 317.933Radial†	186.7	186.0	[0.00] µg/L	20:53:07
3	Fe 238.204 Radial†	17.1	17.0	[0.00] µg/L	20:53:07
3	K 766.490 Radial†	171.1	170.4	[0.00] µg/L	20:52:47
3	Mg 279.077 IEC†	10.8	10.8	[0.00] µg/L	20:53:07
3	Na 589.592 Radial†	493.5	491.6	[0.00] µg/L	20:52:47
3	Sr 421.552†	25.0	24.9	[0.00] µg/L	20:52:47
3	Sc 361.383	2099721.0	2099721.0	100.00 %	20:54:21
3	Y 371.029	1455632.1	1455632.1	100.01 %	20:54:21
3	Ag 328.068†	-482.4	-482.3	[0.00] µg/L	20:54:27
3	As 188.979†	-1.1	-1.1	[0.00] µg/L	20:54:48
3	B 249.677†	313.8	313.8	[0.00] µg/L	20:54:48
3	Ba 233.527†	-18.4	-18.4	[0.00] µg/L	20:54:48
3	Be 313.107†	-3737.3	-3737.2	[0.00] µg/L	20:54:27
3	Cd 226.502†	-137.6	-137.6	[0.00] µg/L	20:54:48
3	Co 228.616†	0.3	0.3	[0.00] µg/L	20:54:48
3	Cr 267.716†	-39.6	-39.6	[0.00] µg/L	20:54:27
3	Cu 324.752†	2825.7	2825.6	[0.00] µg/L	20:54:27
3	Mn 257.610†	-306.0	-306.0	[0.00] µg/L	20:54:48
3	Mo 202.031†	-1.7	-1.7	[0.00] µg/L	20:54:48
3	Ni 231.604†	307.2	307.2	[0.00] µg/L	20:54:48
3	P 214.914†	18.5	18.5	[0.00] µg/L	20:54:48
3	Pb 220.353†	88.6	88.6	[0.00] µg/L	20:54:48
3	S 181.975 Axial†	16.9	16.9	[0.00] µg/L	20:54:48
3	Sb 206.836†	16.5	16.5	[0.00] µg/L	20:54:48
3	Se 196.026†	16.0	16.0	[0.00] µg/L	20:54:48
3	SiO2†	1494.7	1494.6	[0.00] µg/L	20:54:27
3	Si 251.611†	305.8	305.8	[0.00] µg/L	20:54:48
3	Sn 189.927†	2.5	2.5	[0.00] µg/L	20:54:48
3	Ti 334.940†	124.8	124.8	[0.00] µg/L	20:54:27
3	Tl 190.801†	-19.6	-19.6	[0.00] µg/L	20:54:48
3	U 409.014†	-28.5	-28.5	[0.00] µg/L	20:54:27
3	V 292.402†	-95.1	-95.0	[0.00] µg/L	20:54:27
3	Zn 213.857†	502.5	502.5	[0.00] µg/L	20:54:48

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	2099633.2	4933.68	0.23%	100.00 %
Sc RADIAL	59043.7	519.64	0.88%	100 %
Y 371.029	1455486.3	3213.62	0.22%	100.00 %
Ag 328.068†	-463.1	34.20	7.39%	[0.00] µg/L

Al 396.153Radial†	-8.7	5.81	66.78%	[0.00]	µg/L
As 188.979†	-0.3	3.05	>999.9%	[0.00]	µg/L
B 249.677†	325.5	10.09	3.10%	[0.00]	µg/L
Ba 233.527†	-18.4	3.82	20.83%	[0.00]	µg/L
Be 313.107†	-3758.9	26.86	0.71%	[0.00]	µg/L
Ca 317.933Radial†	193.0	6.04	3.13%	[0.00]	µg/L
Cd 226.502†	-136.6	3.80	2.78%	[0.00]	µg/L
Co 228.616†	2.6	3.47	135.12%	[0.00]	µg/L
Cr 267.716†	-47.4	7.44	15.70%	[0.00]	µg/L
Cu 324.752†	2869.7	39.84	1.39%	[0.00]	µg/L
Fe 238.204 Radial†	15.4	1.44	9.38%	[0.00]	µg/L
K 766.490 Radial†	198.4	30.11	15.18%	[0.00]	µg/L
Mg 279.077 IEC†	12.1	1.31	10.86%	[0.00]	µg/L
Mn 257.610†	-302.6	3.56	1.18%	[0.00]	µg/L
Mo 202.031†	-3.3	2.62	78.84%	[0.00]	µg/L
Na 589.592 Radial†	473.7	24.82	5.24%	[0.00]	µg/L
Ni 231.604†	308.6	1.90	0.62%	[0.00]	µg/L
P 214.914†	16.2	3.12	19.25%	[0.00]	µg/L
Pb 220.353†	94.8	12.36	13.04%	[0.00]	µg/L
S 181.975 Axial†	17.3	0.84	4.84%	[0.00]	µg/L
Sb 206.836†	22.1	5.03	22.74%	[0.00]	µg/L
Se 196.026†	15.0	0.89	5.93%	[0.00]	µg/L
SiO2†	1484.4	11.19	0.75%	[0.00]	µg/L
Si 251.611†	293.5	10.90	3.71%	[0.00]	µg/L
Sn 189.927†	4.7	2.49	52.70%	[0.00]	µg/L
Sr 421.552†	41.4	24.99	60.43%	[0.00]	µg/L
Ti 334.940†	141.7	19.43	13.72%	[0.00]	µg/L
Tl 190.801†	-22.2	3.89	17.52%	[0.00]	µg/L
U 409.014†	-0.8	29.68	>999.9%	[0.00]	µg/L
V 292.402†	-96.0	20.49	21.35%	[0.00]	µg/L
Zn 213.857†	501.9	0.52	0.10%	[0.00]	µg/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 2/20/2010 20:54:57

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	60231.0	60231.0	102 %		20:55:32
1	K 766.490 Radial†	1682.2	1450.6	[1000] µg/L		20:55:32
1	Sr 421.552†	9970.9	9733.0	[100] µg/L		20:55:32
1	Sc 361.383	2095468.6	2095468.6	99.802 %		20:55:54
1	Y 371.029	1450728.0	1450728.0	99.673 %		20:55:54
1	Ag 328.068†	12683.7	13172.0	[100] µg/L		20:55:59
1	As 188.979†	57.2	57.6	[100] µg/L		20:56:20
1	B 249.677†	2642.3	2322.1	[100] µg/L		20:55:59
1	Ba 233.527†	3983.6	4009.9	[100] µg/L		20:55:59
1	Be 313.107†	158762.4	162836.8	[100] µg/L		20:55:54
1	Cd 226.502†	3804.5	3948.7	[100] µg/L		20:55:59
1	Co 228.616†	2135.7	2137.4	[100] µg/L		20:56:20
1	Cr 267.716†	4838.6	4895.6	[100] µg/L		20:55:59
1	Cu 324.752†	17911.4	15077.2	[100] µg/L		20:55:59
1	Mn 257.610†	30916.6	31280.6	[100] µg/L		20:55:59
1	Mo 202.031†	1002.9	1008.2	[100] µg/L		20:56:20
1	Ni 231.604†	2295.0	1990.9	[100] µg/L		20:55:59
1	P 214.914†	265.2	249.5	[500] µg/L		20:56:20
1	Pb 220.353†	494.0	400.2	[100] µg/L		20:56:20
1	S 181.975 Axial†	61.7	44.5	[200] µg/L		20:56:20
1	Sb 206.836†	129.9	108.1	[100] µg/L		20:56:20
1	Se 196.026†	89.9	75.1	[100] µg/L		20:56:20
1	SiO2†	6595.6	5124.3	[1069.5] µg/L		20:55:59
1	Si 251.611†	6540.9	6260.3	[500] µg/L		20:55:59
1	Sn 189.927†	237.5	233.3	[100] µg/L		20:56:20
1	Ti 334.940†	42581.6	42524.6	[100] µg/L		20:55:59
1	Tl 190.801†	56.8	79.2	[100] µg/L		20:56:20
1	U 409.014†	1187.9	1191.0	[100] µg/L		20:55:59
1	V 292.402†	9838.9	9954.5	[100] µg/L		20:55:59
1	Zn 213.857†	4771.0	4278.6	[100] µg/L		20:55:59
2	Sc RADIAL	59982.5	59982.5	102 %		20:55:38
2	K 766.490 Radial†	1686.9	1462.2	[1000] µg/L		20:55:38
2	Sr 421.552†	10019.9	9821.7	[100] µg/L		20:55:38
2	Sc 361.383	2083683.4	2083683.4	99.240 %		20:56:26
2	Y 371.029	1443727.8	1443727.8	99.192 %		20:56:26
2	Ag 328.068†	12701.4	13261.8	[100] µg/L		20:56:32
2	As 188.979†	56.0	56.8	[100] µg/L		20:56:52
2	B 249.677†	2666.9	2361.8	[100] µg/L		20:56:32
2	Ba 233.527†	4011.6	4060.6	[100] µg/L		20:56:32
2	Be 313.107†	157999.5	162967.8	[100] µg/L		20:56:26
2	Cd 226.502†	3841.7	4007.7	[100] µg/L		20:56:32
2	Co 228.616†	2125.8	2139.5	[100] µg/L		20:56:52
2	Cr 267.716†	4835.1	4919.5	[100] µg/L		20:56:32
2	Cu 324.752†	17997.2	15265.2	[100] µg/L		20:56:32
2	Mn 257.610†	31096.9	31637.5	[100] µg/L		20:56:32
2	Mo 202.031†	1001.9	1012.9	[100] µg/L		20:56:52
2	Ni 231.604†	2288.5	1997.4	[100] µg/L		20:56:32
2	P 214.914†	261.1	246.8	[500] µg/L		20:56:52
2	Pb 220.353†	494.2	403.2	[100] µg/L		20:56:52
2	S 181.975 Axial†	64.6	47.8	[200] µg/L		20:56:52
2	Sb 206.836†	132.3	111.2	[100] µg/L		20:56:52
2	Se 196.026†	97.4	83.1	[100] µg/L		20:56:52
2	SiO2†	6674.6	5241.3	[1069.5] µg/L		20:56:32
2	Si 251.611†	6587.1	6344.0	[500] µg/L		20:56:32
2	Sn 189.927†	239.4	236.5	[100] µg/L		20:56:52
2	Ti 334.940†	42771.3	42957.0	[100] µg/L		20:56:32
2	Tl 190.801†	48.9	71.5	[100] µg/L		20:56:52
2	U 409.014†	1202.1	1212.1	[100] µg/L		20:56:32
2	V 292.402†	9871.9	10043.4	[100] µg/L		20:56:32

2	Zn 213.857†	4797.5	4332.3	[100] µg/L	20:56:32
3	Sc RADIAL	59501.1	59501.1	101 %	20:55:43
3	K 766.490 Radial†	1557.1	1346.7	[1000] µg/L	20:55:43
3	Sr 421.552†	9925.5	9807.9	[100] µg/L	20:55:43
3	Sc 361.383	2088502.3	2088502.3	99.470 %	20:56:59
3	Y 371.029	1446604.0	1446604.0	99.390 %	20:56:59
3	Ag 328.068†	12678.4	13209.1	[100] µg/L	20:57:04
3	As 188.979†	53.4	54.0	[100] µg/L	20:57:25
3	B 249.677†	2669.0	2357.8	[100] µg/L	20:57:04
3	Ba 233.527†	4010.7	4050.4	[100] µg/L	20:57:04
3	Be 313.107†	158721.9	163326.7	[100] µg/L	20:56:59
3	Cd 226.502†	3816.9	3973.9	[100] µg/L	20:57:04
3	Co 228.616†	2149.2	2158.1	[100] µg/L	20:57:25
3	Cr 267.716†	4805.9	4879.0	[100] µg/L	20:57:04
3	Cu 324.752†	17911.9	15137.7	[100] µg/L	20:57:04
3	Mn 257.610†	30979.9	31447.6	[100] µg/L	20:57:04
3	Mo 202.031†	1008.1	1016.8	[100] µg/L	20:57:25
3	Ni 231.604†	2297.0	2000.6	[100] µg/L	20:57:04
3	P 214.914†	271.5	256.7	[500] µg/L	20:57:25
3	Pb 220.353†	500.0	407.9	[100] µg/L	20:57:25
3	S 181.975 Axial†	61.2	44.3	[200] µg/L	20:57:25
3	Sb 206.836†	132.0	110.6	[100] µg/L	20:57:25
3	Se 196.026†	88.5	74.0	[100] µg/L	20:57:25
3	SiO2†	6602.5	5153.3	[1069.5] µg/L	20:57:04
3	Si 251.611†	6582.4	6324.0	[500] µg/L	20:57:04
3	Sn 189.927†	244.2	240.8	[100] µg/L	20:57:25
3	Ti 334.940†	42614.4	42699.8	[100] µg/L	20:57:04
3	Tl 190.801†	48.8	71.3	[100] µg/L	20:57:25
3	U 409.014†	1112.7	1119.4	[100] µg/L	20:57:04
3	V 292.402†	9933.7	10082.7	[100] µg/L	20:57:04
3	Zn 213.857†	4763.3	4286.7	[100] µg/L	20:57:04

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	2089218.1	5925.11	0.28%	99.504	%
Sc RADIAL	59904.9	371.08	0.62%	101	%
Y 371.029	1447019.9	3518.57	0.24%	99.418	%
Ag 328.068†	13214.3	45.11	0.34%	[100]	µg/L
As 188.979†	56.1	1.92	3.42%	[100]	µg/L
B 249.677†	2347.2	21.88	0.93%	[100]	µg/L
Ba 233.527†	4040.3	26.83	0.66%	[100]	µg/L
Be 313.107†	163043.7	253.62	0.16%	[100]	µg/L
Cd 226.502†	3976.8	29.62	0.74%	[100]	µg/L
Co 228.616†	2145.0	11.38	0.53%	[100]	µg/L
Cr 267.716†	4898.0	20.38	0.42%	[100]	µg/L
Cu 324.752†	15160.0	95.96	0.63%	[100]	µg/L
K 766.490 Radial†	1419.8	63.57	4.48%	[1000]	µg/L
Mn 257.610†	31455.2	178.57	0.57%	[100]	µg/L
Mo 202.031†	1012.6	4.27	0.42%	[100]	µg/L
Ni 231.604†	1996.3	4.90	0.25%	[100]	µg/L
P 214.914†	251.0	5.13	2.04%	[500]	µg/L
Pb 220.353†	403.8	3.87	0.96%	[100]	µg/L
S 181.975 Axial†	45.5	1.97	4.34%	[200]	µg/L
Sb 206.836†	109.9	1.64	1.49%	[100]	µg/L
Se 196.026†	77.4	5.00	6.46%	[100]	µg/L
SiO2†	5173.0	60.92	1.18%	[1069.5]	µg/L
Si 251.611†	6309.4	43.68	0.69%	[500]	µg/L
Sn 189.927†	236.8	3.76	1.59%	[100]	µg/L
Sr 421.552†	9787.5	47.74	0.49%	[100]	µg/L
Ti 334.940†	42727.1	217.52	0.51%	[100]	µg/L
Tl 190.801†	74.0	4.49	6.07%	[100]	µg/L
U 409.014†	1174.2	48.60	4.14%	[100]	µg/L
V 292.402†	10026.9	65.68	0.66%	[100]	µg/L
Zn 213.857†	4299.2	28.95	0.67%	[100]	µg/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 2/20/2010 20:57:34
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	59227.0	59227.0	100 %	20:58:07
1	Al 396.153Radial†	6666.8	6654.8	[5000] µg/L	20:58:07
1	Ca 317.933Radial†	5603.4	5393.1	[5000] µg/L	20:58:27
1	K 766.490 Radial†	7261.7	7040.9	[5000] µg/L	20:58:07
1	Mg 279.077 IEC†	541.6	527.8	[5000] µg/L	20:58:27
1	Sr 421.552†	49363.8	49169.6	[500] µg/L	20:58:07
1	Sc 361.383	2099306.9	2099306.9	99.984 %	20:59:31
1	Y 371.029	1449551.5	1449551.5	99.592 %	20:59:31
1	Ag 328.068†	64806.3	65279.5	[500] µg/L	20:59:36
1	As 188.979†	279.4	279.8	[500] µg/L	20:59:57
1	B 249.677†	12233.8	11910.2	[500] µg/L	20:59:36
1	Ba 233.527†	20099.7	20121.1	[500] µg/L	20:59:36
1	Be 313.107†	809214.8	813099.4	[500] µg/L	20:59:31
1	Cd 226.502†	19527.9	19667.6	[500] µg/L	20:59:36
1	Co 228.616†	10750.6	10749.7	[500] µg/L	20:59:36
1	Cr 267.716†	24287.6	24338.8	[500] µg/L	20:59:36
1	Cu 324.752†	76692.9	73835.1	[500] µg/L	20:59:36
1	Mn 257.610†	155162.7	155489.4	[500] µg/L	20:59:31
1	Mo 202.031†	5073.3	5077.4	[500] µg/L	20:59:57
1	Ni 231.604†	10161.8	9854.7	[500] µg/L	20:59:36
1	P 214.914†	1287.2	1271.2	[2500] µg/L	20:59:57
1	Pb 220.353†	2118.6	2024.2	[500] µg/L	20:59:57
1	S 181.975 Axial†	259.5	242.2	[1000] µg/L	20:59:57
1	Sb 206.836†	567.7	545.7	[500] µg/L	20:59:57
1	Se 196.026†	378.9	363.9	[500] µg/L	20:59:57
1	SiO2†	27719.4	26239.3	[5347.5] µg/L	20:59:36
1	Si 251.611†	32170.8	31882.3	[2500] µg/L	20:59:36
1	Sn 189.927†	1201.7	1197.2	[500] µg/L	20:59:57
1	Ti 334.940†	216326.3	216218.2	[500] µg/L	20:59:31
1	Tl 190.801†	355.8	378.1	[500] µg/L	20:59:57
1	U 409.014†	5849.8	5851.5	[500] µg/L	20:59:36
1	V 292.402†	49629.9	49733.6	[500] µg/L	20:59:36
1	Zn 213.857†	21637.6	21139.1	[500] µg/L	20:59:36
2	Sc RADIAL	59249.3	59249.3	100 %	20:58:33
2	Al 396.153Radial†	6692.0	6677.5	[5000] µg/L	20:58:33
2	Ca 317.933Radial†	5642.9	5430.4	[5000] µg/L	20:58:53
2	K 766.490 Radial†	7335.0	7111.1	[5000] µg/L	20:58:33
2	Mg 279.077 IEC†	536.3	522.3	[5000] µg/L	20:58:53
2	Sr 421.552†	49509.2	49296.1	[500] µg/L	20:58:33
2	Sc 361.383	2102625.9	2102625.9	100.14 %	21:00:04
2	Y 371.029	1453568.6	1453568.6	99.868 %	21:00:04
2	Ag 328.068†	64581.7	64952.9	[500] µg/L	21:00:10
2	As 188.979†	273.0	272.9	[500] µg/L	21:00:30
2	B 249.677†	12164.5	11821.7	[500] µg/L	21:00:10
2	Ba 233.527†	20007.1	19996.9	[500] µg/L	21:00:10
2	Be 313.107†	811385.9	813989.9	[500] µg/L	21:00:04
2	Cd 226.502†	19386.0	19495.0	[500] µg/L	21:00:10
2	Co 228.616†	10648.4	10630.7	[500] µg/L	21:00:10
2	Cr 267.716†	24137.7	24150.7	[500] µg/L	21:00:10
2	Cu 324.752†	76382.2	73403.7	[500] µg/L	21:00:10
2	Mn 257.610†	155515.3	155596.5	[500] µg/L	21:00:04
2	Mo 202.031†	4982.5	4978.7	[500] µg/L	21:00:30
2	Ni 231.604†	10088.0	9765.0	[500] µg/L	21:00:10
2	P 214.914†	1259.9	1241.9	[2500] µg/L	21:00:30
2	Pb 220.353†	2119.2	2021.4	[500] µg/L	21:00:30
2	S 181.975 Axial†	255.2	237.5	[1000] µg/L	21:00:30
2	Sb 206.836†	559.7	536.8	[500] µg/L	21:00:30
2	Se 196.026†	381.8	366.3	[500] µg/L	21:00:30
2	SiO2†	27683.2	26159.4	[5347.5] µg/L	21:00:10

2	Si 251.611†	32044.2	31705.0	[2500]	µg/L	21:00:10
2	Sn 189.927†	1175.2	1168.8	[500]	µg/L	21:00:30
2	Ti 334.940†	216499.2	216049.4	[500]	µg/L	21:00:04
2	Tl 190.801†	350.4	372.1	[500]	µg/L	21:00:30
2	U 409.014†	5757.2	5749.7	[500]	µg/L	21:00:10
2	V 292.402†	49422.0	49447.7	[500]	µg/L	21:00:10
2	Zn 213.857†	21443.5	20911.1	[500]	µg/L	21:00:10
3	Sc RADIAL	59262.1	59262.1	100	%	20:58:59
3	Al 396.153Radial†	6698.8	6682.8	[5000]	µg/L	20:58:59
3	Ca 317.933Radial†	5625.0	5411.3	[5000]	µg/L	20:59:19
3	K 766.490 Radial†	7351.8	7126.3	[5000]	µg/L	20:58:59
3	Mg 279.077 IEC†	539.1	525.0	[5000]	µg/L	20:59:19
3	Sr 421.552†	49542.1	49318.1	[500]	µg/L	20:58:59
3	Sc 361.383	2090574.9	2090574.9	99.569	%	21:00:37
3	Y 371.029	1444442.1	1444442.1	99.241	%	21:00:37
3	Ag 328.068†	60634.2	61360.1	[500]	µg/L	21:00:43
3	As 188.979†	231.6	232.9	[500]	µg/L	21:01:03
3	B 249.677†	11315.3	11038.8	[500]	µg/L	21:00:43
3	Ba 233.527†	18100.7	18197.5	[500]	µg/L	21:00:43
3	Be 313.107†	745374.2	752362.7	[500]	µg/L	21:00:37
3	Cd 226.502†	17553.6	17766.2	[500]	µg/L	21:00:43
3	Co 228.616†	9546.1	9584.9	[500]	µg/L	21:00:43
3	Cr 267.716†	21031.8	21170.4	[500]	µg/L	21:00:43
3	Cu 324.752†	68692.8	66120.7	[500]	µg/L	21:00:43
3	Mn 257.610†	143478.9	144403.2	[500]	µg/L	21:00:37
3	Mo 202.031†	4102.3	4123.4	[500]	µg/L	21:01:03
3	Ni 231.604†	9076.4	8807.1	[500]	µg/L	21:00:43
3	P 214.914†	1065.5	1053.9	[2500]	µg/L	21:01:03
3	Pb 220.353†	1816.3	1729.4	[500]	µg/L	21:01:03
3	S 181.975 Axial†	223.3	207.0	[1000]	µg/L	21:01:03
3	Sb 206.836†	475.1	455.1	[500]	µg/L	21:01:03
3	Se 196.026†	322.0	308.4	[500]	µg/L	21:01:03
3	SiO2†	25559.9	24186.3	[5347.5]	µg/L	21:00:43
3	Si 251.611†	29523.2	29357.6	[2500]	µg/L	21:00:43
3	Sn 189.927†	956.6	956.0	[500]	µg/L	21:01:03
3	Ti 334.940†	198087.6	198804.3	[500]	µg/L	21:00:37
3	Tl 190.801†	309.7	333.2	[500]	µg/L	21:01:03
3	U 409.014†	5157.8	5180.9	[500]	µg/L	21:00:43
3	V 292.402†	43891.6	44177.8	[500]	µg/L	21:00:43
3	Zn 213.857†	19304.6	18886.3	[500]	µg/L	21:00:43

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2097502.5	6224.83	0.30%	99.899	%
Sc RADIAL	59246.1	17.79	0.03%	100	%
Y 371.029	1449187.4	4574.13	0.32%	99.567	%
Ag 328.068†	63864.1	2174.72	3.41%	[500]	µg/L
Al 396.153Radial†	6671.7	14.86	0.22%	[5000]	µg/L
As 188.979†	261.9	25.31	9.66%	[500]	µg/L
B 249.677†	11590.2	479.57	4.14%	[500]	µg/L
Ba 233.527†	19438.5	1076.57	5.54%	[500]	µg/L
Be 313.107†	793150.7	35326.24	4.45%	[500]	µg/L
Ca 317.933Radial†	5411.6	18.66	0.34%	[5000]	µg/L
Cd 226.502†	18976.3	1051.48	5.54%	[500]	µg/L
Co 228.616†	10321.8	640.94	6.21%	[500]	µg/L
Cr 267.716†	23220.0	1777.48	7.65%	[500]	µg/L
Cu 324.752†	71119.9	4334.73	6.09%	[500]	µg/L
K 766.490 Radial†	7092.8	45.59	0.64%	[5000]	µg/L
Mg 279.077 IEC†	525.1	2.76	0.52%	[5000]	µg/L
Mn 257.610†	151829.7	6431.77	4.24%	[500]	µg/L
Mo 202.031†	4726.5	524.65	11.10%	[500]	µg/L
Ni 231.604†	9475.6	580.65	6.13%	[500]	µg/L
P 214.914†	1189.0	117.88	9.91%	[2500]	µg/L
Pb 220.353†	1925.0	169.42	8.80%	[500]	µg/L
S 181.975 Axial†	228.9	19.12	8.35%	[1000]	µg/L
Sb 206.836†	512.5	49.94	9.74%	[500]	µg/L
Se 196.026†	346.2	32.75	9.46%	[500]	µg/L
SiO2†	25528.3	1162.94	4.56%	[5347.5]	µg/L
Si 251.611†	30981.6	1409.26	4.55%	[2500]	µg/L

Sn 189.927†	1107.3	131.83	11.90%	[500] µg/L
Sr 421.552†	49261.3	80.10	0.16%	[500] µg/L
Ti 334.940†	210357.3	10005.59	4.76%	[500] µg/L
Tl 190.801†	361.1	24.36	6.75%	[500] µg/L
U 409.014†	5594.0	361.39	6.46%	[500] µg/L
V 292.402†	47786.3	3128.37	6.55%	[500] µg/L
Zn 213.857†	20312.1	1240.06	6.11%	[500] µg/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 2/20/2010 21:01:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	60156.6	60156.6	102	%	21:01:46
1	Al 396.153Radial†	14096.5	13844.4	[10000]	µg/L	21:01:46
1	Ca 317.933Radial†	11567.0	11160.1	[10000]	µg/L	21:02:07
1	Fe 238.204 Radial†	1237.6	1199.3	[10000]	µg/L	21:02:07
1	K 766.490 Radial†	15035.1	14558.6	[10000]	µg/L	21:01:46
1	Mg 279.077 IEC†	1108.9	1076.3	[10000]	µg/L	21:02:07
1	Na 589.592 Radial†	32632.6	31555.2	[10000]	µg/L	21:01:46
1	Sr 421.552†	104229.5	102259.9	[1000]	µg/L	21:01:46
1	Sc 361.383	2088573.1	2088573.1	99.473	%	21:03:10
1	Y 371.029	1441916.2	1441916.2	99.068	%	21:03:10
1	Ag 328.068†	135179.9	136358.8	[1000]	µg/L	21:03:16
1	As 188.979†	579.2	582.6	[1000]	µg/L	21:03:37
1	B 249.677†	25141.1	24948.8	[1000]	µg/L	21:03:16
1	Ba 233.527†	41576.8	41815.3	[1000]	µg/L	21:03:16
1	Be 313.107†	1685742.4	1698428.1	[1000]	µg/L	21:03:10
1	Cd 226.502†	40328.7	40678.9	[1000]	µg/L	21:03:16
1	Co 228.616†	22041.9	22156.0	[1000]	µg/L	21:03:16
1	Cr 267.716†	50424.8	50739.2	[1000]	µg/L	21:03:16
1	Cu 324.752†	157161.0	155123.5	[1000]	µg/L	21:03:16
1	Mn 257.610†	319858.7	321855.1	[1000]	µg/L	21:03:16
1	Mo 202.031†	10542.0	10601.1	[1000]	µg/L	21:03:37
1	Ni 231.604†	20518.2	20318.2	[1000]	µg/L	21:03:16
1	P 214.914†	2655.9	2653.7	[5000]	µg/L	21:03:37
1	Pb 220.353†	4343.8	4272.0	[1000]	µg/L	21:03:37
1	S 181.975 Axial†	519.8	505.3	[2000]	µg/L	21:03:37
1	Sb 206.836†	1178.1	1162.2	[1000]	µg/L	21:03:37
1	Se 196.026†	767.3	756.3	[1000]	µg/L	21:03:37
1	SiO2†	55621.0	54431.1	[10695]	µg/L	21:03:16
1	Si 251.611†	65937.9	65993.6	[5000]	µg/L	21:03:16
1	Sn 189.927†	2486.5	2495.0	[1000]	µg/L	21:03:37
1	Ti 334.940†	449191.9	451429.0	[1000]	µg/L	21:03:10
1	Tl 190.801†	752.0	778.2	[1000]	µg/L	21:03:37
1	U 409.014†	12111.5	12176.4	[1000]	µg/L	21:03:16
1	V 292.402†	103704.6	104349.8	[1000]	µg/L	21:03:16
1	Zn 213.857†	43749.1	43478.8	[1000]	µg/L	21:03:16
2	Sc RADIAL	59483.2	59483.2	101	%	21:02:12
2	Al 396.153Radial†	14015.6	13920.7	[10000]	µg/L	21:02:12
2	Ca 317.933Radial†	11589.5	11310.9	[10000]	µg/L	21:02:33
2	Fe 238.204 Radial†	1247.6	1223.0	[10000]	µg/L	21:02:33
2	K 766.490 Radial†	15007.8	14698.5	[10000]	µg/L	21:02:12
2	Mg 279.077 IEC†	1115.7	1095.4	[10000]	µg/L	21:02:33
2	Na 589.592 Radial†	32442.9	31729.5	[10000]	µg/L	21:02:12
2	Sr 421.552†	103196.7	102392.9	[1000]	µg/L	21:02:12
2	Sc 361.383	2076936.3	2076936.3	98.919	%	21:03:44
2	Y 371.029	1433096.3	1433096.3	98.462	%	21:03:44
2	Ag 328.068†	135646.8	137592.3	[1000]	µg/L	21:03:49
2	As 188.979†	580.7	587.4	[1000]	µg/L	21:04:10
2	B 249.677†	25220.2	25170.4	[1000]	µg/L	21:03:49
2	Ba 233.527†	41800.5	42275.7	[1000]	µg/L	21:03:49
2	Be 313.107†	1674002.4	1696054.8	[1000]	µg/L	21:03:44
2	Cd 226.502†	40550.0	41129.7	[1000]	µg/L	21:03:49
2	Co 228.616†	22185.4	22425.3	[1000]	µg/L	21:03:49
2	Cr 267.716†	50687.7	51289.0	[1000]	µg/L	21:03:49
2	Cu 324.752†	157816.1	156671.0	[1000]	µg/L	21:03:49
2	Mn 257.610†	320975.4	324785.6	[1000]	µg/L	21:03:49
2	Mo 202.031†	10422.5	10539.8	[1000]	µg/L	21:04:10
2	Ni 231.604†	20570.4	20486.6	[1000]	µg/L	21:03:49
2	P 214.914†	2634.0	2646.5	[5000]	µg/L	21:04:10
2	Pb 220.353†	4295.5	4247.7	[1000]	µg/L	21:04:10

2	S 181.975 Axial†	519.1	507.5	[2000]	µg/L	21:04:10
2	Sb 206.836†	1162.4	1153.0	[1000]	µg/L	21:04:10
2	Se 196.026†	774.3	767.8	[1000]	µg/L	21:04:10
2	SiO2†	55947.2	55074.2	[10695]	µg/L	21:03:49
2	Si 251.611†	66408.5	66840.7	[5000]	µg/L	21:03:49
2	Sn 189.927†	2453.5	2475.6	[1000]	µg/L	21:04:10
2	Ti 334.940†	446354.9	451091.1	[1000]	µg/L	21:03:44
2	Tl 190.801†	749.5	779.9	[1000]	µg/L	21:04:10
2	U 409.014†	12159.8	12293.4	[1000]	µg/L	21:03:49
2	V 292.402†	104178.5	105413.0	[1000]	µg/L	21:03:49
2	Zn 213.857†	43897.6	43875.3	[1000]	µg/L	21:03:49
3	Sc RADIAL	60224.9	60224.9	102	%	21:02:38
3	Al 396.153Radial†	14209.8	13939.8	[10000]	µg/L	21:02:38
3	Ca 317.933Radial†	11532.6	11113.4	[10000]	µg/L	21:02:59
3	Fe 238.204 Radial†	1240.6	1200.9	[10000]	µg/L	21:02:59
3	K 766.490 Radial†	15145.7	14650.3	[10000]	µg/L	21:02:38
3	Mg 279.077 IEC†	1110.7	1076.8	[10000]	µg/L	21:02:59
3	Na 589.592 Radial†	32889.7	31770.9	[10000]	µg/L	21:02:38
3	Sr 421.552†	104952.1	102852.3	[1000]	µg/L	21:02:38
3	Sc 361.383	2086636.2	2086636.2	99.381	%	21:04:17
3	Y 371.029	1440282.4	1440282.4	98.955	%	21:04:17
3	Ag 328.068†	131729.1	133012.8	[1000]	µg/L	21:04:23
3	As 188.979†	516.9	520.4	[1000]	µg/L	21:04:43
3	B 249.677†	24365.3	24191.6	[1000]	µg/L	21:04:23
3	Ba 233.527†	39525.4	39790.0	[1000]	µg/L	21:04:23
3	Be 313.107†	1611957.3	1625756.5	[1000]	µg/L	21:04:17
3	Cd 226.502†	38378.8	38754.4	[1000]	µg/L	21:04:23
3	Co 228.616†	20799.7	20926.7	[1000]	µg/L	21:04:23
3	Cr 267.716†	46683.3	47021.4	[1000]	µg/L	21:04:23
3	Cu 324.752†	148756.8	146813.6	[1000]	µg/L	21:04:23
3	Mn 257.610†	301499.5	303680.0	[1000]	µg/L	21:04:23
3	Mo 202.031†	9131.4	9191.6	[1000]	µg/L	21:04:43
3	Ni 231.604†	19364.3	19176.2	[1000]	µg/L	21:04:23
3	P 214.914†	2348.3	2346.7	[5000]	µg/L	21:04:43
3	Pb 220.353†	3904.7	3834.3	[1000]	µg/L	21:04:43
3	S 181.975 Axial†	468.4	454.0	[2000]	µg/L	21:04:43
3	Sb 206.836†	1038.9	1023.2	[1000]	µg/L	21:04:43
3	Se 196.026†	703.1	692.5	[1000]	µg/L	21:04:43
3	SiO2†	53682.7	52532.6	[10695]	µg/L	21:04:23
3	Si 251.611†	63568.9	63671.4	[5000]	µg/L	21:04:23
3	Sn 189.927†	2128.2	2136.7	[1000]	µg/L	21:04:43
3	Ti 334.940†	428580.9	431108.8	[1000]	µg/L	21:04:17
3	Tl 190.801†	679.5	705.9	[1000]	µg/L	21:04:43
3	U 409.014†	11258.4	11329.3	[1000]	µg/L	21:04:23
3	V 292.402†	96976.6	97676.7	[1000]	µg/L	21:04:23
3	Zn 213.857†	41296.0	41051.3	[1000]	µg/L	21:04:23

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	2084048.5	6235.06	0.30%	99.258	%
Sc RADIAL	59954.9	409.94	0.68%	102	%
Y 371.029	1438431.6	4692.20	0.33%	98.828	%
Ag 328.068†	135654.6	2369.59	1.75%	[1000]	µg/L
Al 396.153Radial†	13901.6	50.49	0.36%	[10000]	µg/L
As 188.979†	563.4	37.36	6.63%	[1000]	µg/L
B 249.677†	24770.2	513.22	2.07%	[1000]	µg/L
Ba 233.527†	41293.7	1322.42	3.20%	[1000]	µg/L
Be 313.107†	1673413.1	41288.92	2.47%	[1000]	µg/L
Ca 317.933Radial†	11194.8	103.22	0.92%	[10000]	µg/L
Cd 226.502†	40187.7	1261.54	3.14%	[1000]	µg/L
Co 228.616†	21836.0	798.93	3.66%	[1000]	µg/L
Cr 267.716†	49683.2	2321.51	4.67%	[1000]	µg/L
Cu 324.752†	152869.4	5301.19	3.47%	[1000]	µg/L
Fe 238.204 Radial†	1207.7	13.26	1.10%	[10000]	µg/L
K 766.490 Radial†	14635.8	71.07	0.49%	[10000]	µg/L
Mg 279.077 IEC†	1082.8	10.87	1.00%	[10000]	µg/L
Mn 257.610†	316773.6	11433.63	3.61%	[1000]	µg/L
Mo 202.031†	10110.8	796.66	7.88%	[1000]	µg/L
Na 589.592 Radial†	31685.2	114.46	0.36%	[10000]	µg/L

Ni 231.604†	19993.7	712.91	3.57%	[1000] µg/L
P 214.914†	2549.0	175.19	6.87%	[5000] µg/L
Pb 220.353†	4118.0	246.02	5.97%	[1000] µg/L
S 181.975 Axial†	488.9	30.24	6.18%	[2000] µg/L
Sb 206.836†	1112.8	77.72	6.98%	[1000] µg/L
Se 196.026†	738.9	40.56	5.49%	[1000] µg/L
SiO2†	54012.7	1321.46	2.45%	[10695] µg/L
Si 251.611†	65501.9	1640.90	2.51%	[5000] µg/L
Sn 189.927†	2369.1	201.49	8.50%	[1000] µg/L
Sr 421.552†	102501.7	310.79	0.30%	[1000] µg/L
Ti 334.940†	444542.9	11635.57	2.62%	[1000] µg/L
Tl 190.801†	754.7	42.24	5.60%	[1000] µg/L
U 409.014†	11933.0	526.12	4.41%	[1000] µg/L
V 292.402†	102479.8	4193.48	4.09%	[1000] µg/L
Zn 213.857†	42801.8	1528.90	3.57%	[1000] µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/20/2010 21:04:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	59919.1	59919.1	101 %	21:05:25
1	Al 396.153Radial†	67636.3	66656.8	[50000] µg/L	21:05:25
1	Ca 317.933Radial†	55352.9	54351.2	[50000] µg/L	21:05:25
1	Fe 238.204 Radial†	2357.4	2307.6	[20000] µg/L	21:05:45
1	Mg 279.077 IEC†	5199.4	5111.3	[50000] µg/L	21:05:45
1	Na 589.592 Radial†	61841.3	60464.1	[20000] µg/L	21:05:25
1	Sc 361.383	2083386.2	2083386.2	99.226 %	21:06:49
1	Y 371.029	1430016.9	1430016.9	98.250 %	21:06:49
2	Sc RADIAL	59375.6	59375.6	101 %	21:05:51
2	Al 396.153Radial†	67037.3	66671.2	[50000] µg/L	21:05:51
2	Ca 317.933Radial†	54848.8	54349.2	[50000] µg/L	21:05:51
2	Fe 238.204 Radial†	2348.8	2320.3	[20000] µg/L	21:06:11
2	Mg 279.077 IEC†	5193.5	5152.4	[50000] µg/L	21:06:11
2	Na 589.592 Radial†	61435.9	60618.8	[20000] µg/L	21:05:51
2	Sc 361.383	2076508.3	2076508.3	98.899 %	21:06:57
2	Y 371.029	1426990.7	1426990.7	98.042 %	21:06:57
3	Sc RADIAL	59694.5	59694.5	101 %	21:06:17
3	Al 396.153Radial†	67735.8	67006.1	[50000] µg/L	21:06:17
3	Ca 317.933Radial†	55463.3	54665.7	[50000] µg/L	21:06:17
3	Fe 238.204 Radial†	2338.4	2297.5	[20000] µg/L	21:06:37
3	Mg 279.077 IEC†	5179.3	5110.8	[50000] µg/L	21:06:37
3	Na 589.592 Radial†	61946.4	60797.3	[20000] µg/L	21:06:17
3	Sc 361.383	2085817.8	2085817.8	99.342 %	21:07:05
3	Y 371.029	1433003.8	1433003.8	98.455 %	21:07:05

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	2081904.1	4828.46	0.23%	99.156 %
Sc RADIAL	59663.1	273.11	0.46%	101 %
Y 371.029	1430003.8	3006.55	0.21%	98.249 %
Al 396.153Radial†	66778.0	197.64	0.30%	[50000] µg/L
Ca 317.933Radial†	54455.4	182.14	0.33%	[50000] µg/L
Fe 238.204 Radial†	2308.5	11.43	0.49%	[20000] µg/L
Mg 279.077 IEC†	5124.8	23.86	0.47%	[50000] µg/L
Na 589.592 Radial†	60626.7	166.76	0.28%	[20000] µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	134.1	0.00000	0.999722	
Al 396.153Radial	3	Lin Thru 0	0.0	1.338	0.00000	0.999969	
As 188.979	3	Lin Thru 0	0.0	0.5555	0.00000	0.999594	
B 249.677	3	Lin Thru 0	0.0	24.44	0.00000	0.999658	
Ba 233.527	3	Lin Thru 0	0.0	40.81	0.00000	0.999721	
Be 313.107	3	Lin Thru 0	0.0	1656	0.00000	0.999779	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.090	0.00000	0.999986	
Cd 226.502	3	Lin Thru 0	0.0	39.74	0.00000	0.999749	
Co 228.616	3	Lin Thru 0	0.0	21.60	0.00000	0.999758	
Cr 267.716	3	Lin Thru 0	0.0	49.03	0.00000	0.999653	
Cu 324.752	3	Lin Thru 0	0.0	150.8	0.00000	0.999606	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1165	0.00000	0.999831	
K 766.490 Radial	3	Lin Thru 0	0.0	1.454	0.00000	0.999922	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1027	0.00000	0.999940	
Mn 257.610	3	Lin Thru 0	0.0	314.2	0.00000	0.999862	
Mo 202.031	3	Lin Thru 0	0.0	9.980	0.00000	0.999655	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.059	0.00000	0.999839	

Ni 231.604	3	Lin Thru 0	0.0	19.79	0.00000	0.999779
P 214.914	3	Lin Thru 0	0.0	0.5030	0.00000	0.999633
Pb 220.353	3	Lin Thru 0	0.0	4.064	0.00000	0.999655
S 181.975 Axial	3	Lin Thru 0	0.0	0.2412	0.00000	0.999657
Sb 206.836	3	Lin Thru 0	0.0	1.095	0.00000	0.999490
Se 196.026	3	Lin Thru 0	0.0	0.7300	0.00000	0.999665
SiO2	3	Lin Thru 0	0.0	4.994	0.00000	0.999753
Si 251.611	3	Lin Thru 0	0.0	12.96	0.00000	0.999761
Sn 189.927	3	Lin Thru 0	0.0	2.338	0.00000	0.999653
Sr 421.552	3	Lin Thru 0	0.0	101.7	0.00000	0.999873
Ti 334.940	3	Lin Thru 0	0.0	439.7	0.00000	0.999764
Tl 190.801	3	Lin Thru 0	0.0	0.7481	0.00000	0.999851
U 409.014	3	Lin Thru 0	0.0	11.78	0.00000	0.999683
V 292.402	3	Lin Thru 0	0.0	101.1	0.00000	0.999629
Zn 213.857	3	Lin Thru 0	0.0	42.37	0.00000	0.999790

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/20/2010 21:07:14

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	59298.2	59298.2	100 %			21:07:47
1	Al 396.153Radial†	6742.2	6722.0	5014.4 µg/L		5014.4 ppb	21:07:47
1	Ca 317.933Radial†	5609.2	5392.1	4946.0 µg/L		4946.0 ppb	21:08:08
1	Fe 238.204 Radial†	610.2	592.2	5093.8 µg/L		5093.8 ppb	21:08:08
1	K 766.490 Radial†	3647.7	3433.7	2361.1 µg/L		2361.1 ppb	21:07:47
1	Mg 279.077 IEC†	537.6	523.2	5095.7 µg/L		5095.7 ppb	21:08:08
1	Na 589.592 Radial†	8072.8	7564.4	2473.0 µg/L		2473.0 ppb	21:07:47
1	Sr 421.552†	51335.1	51073.4	502.32 µg/L		502.32 ppb	21:07:47
1	Sc 361.383	2093410.3	2093410.3	99.704 %			21:09:11
1	Y 371.029	1444904.7	1444904.7	99.273 %			21:09:11
1	Ag 328.068†	32149.4	32708.1	247.53 µg/L		247.53 ppb	21:09:17
1	As 188.979†	267.3	268.4	482.08 µg/L		482.08 ppb	21:09:37
1	B 249.677†	12545.6	12257.4	499.56 µg/L		499.56 ppb	21:09:17
1	Ba 233.527†	20210.0	20288.4	498.06 µg/L		498.06 ppb	21:09:17
1	Be 313.107†	410657.7	415637.3	250.84 µg/L		250.84 ppb	21:09:11
1	Cd 226.502†	19282.1	19476.0	489.99 µg/L		489.99 ppb	21:09:17
1	Co 228.616†	10782.3	10811.8	500.12 µg/L		500.12 ppb	21:09:17
1	Cr 267.716†	23531.4	23648.8	482.60 µg/L		482.60 ppb	21:09:17
1	Cu 324.752†	77386.4	74746.7	496.54 µg/L		496.54 ppb	21:09:17
1	Mn 257.610†	155171.3	155935.1	496.84 µg/L		496.84 ppb	21:09:11
1	Mo 202.031†	5279.5	5298.5	531.08 µg/L		531.08 ppb	21:09:37
1	Ni 231.604†	9881.0	9601.7	484.73 µg/L		484.73 ppb	21:09:17
1	P 214.914†	1282.8	1270.4	2478.8 µg/L		2478.8 ppb	21:09:37
1	Pb 220.353†	2131.1	2042.7	502.90 µg/L		502.90 ppb	21:09:37
1	S 181.975 Axial†	604.4	588.9	2441.3 µg/L		2441.3 ppb	21:09:37
1	Sb 206.836†	547.4	526.9	483.83 µg/L		483.83 ppb	21:09:37
1	Se 196.026†	1866.4	1856.9	2551.9 µg/L		2551.9 ppb	21:09:37
1	SiO2†	52341.1	51012.3	10215 µg/L		10215 ppb	21:09:17
1	Si 251.611†	61706.4	61596.3	4754.2 µg/L		4754.2 ppb	21:09:17
1	Sn 189.927†	1246.3	1245.3	532.55 µg/L		532.55 ppb	21:09:37
1	Ti 334.940†	208718.0	209196.8	475.47 µg/L		475.47 ppb	21:09:11
1	Tl 190.801†	355.4	378.7	511.90 µg/L		511.90 ppb	21:09:37
1	U 409.014†	5449.2	5466.1	462.86 µg/L		462.86 ppb	21:09:17
1	V 292.402†	49021.9	49263.7	493.60 µg/L		493.60 ppb	21:09:17
1	Zn 213.857†	21386.8	20948.4	490.93 µg/L		490.93 ppb	21:09:17
2	Sc RADIAL	58520.2	58520.2	99.1 %			21:08:13
2	Al 396.153Radial†	6708.2	6776.9	5055.6 µg/L		5055.6 ppb	21:08:13
2	Ca 317.933Radial†	5585.4	5442.4	4992.1 µg/L		4992.1 ppb	21:08:34
2	Fe 238.204 Radial†	606.9	596.9	5134.9 µg/L		5134.9 ppb	21:08:34
2	K 766.490 Radial†	3713.9	3548.7	2440.2 µg/L		2440.2 ppb	21:08:13
2	Mg 279.077 IEC†	536.0	528.7	5148.9 µg/L		5148.9 ppb	21:08:34
2	Na 589.592 Radial†	8041.1	7639.3	2497.5 µg/L		2497.5 ppb	21:08:13
2	Sr 421.552†	50922.5	51336.7	504.91 µg/L		504.91 ppb	21:08:13
2	Sc 361.383	2092537.1	2092537.1	99.662 %			21:09:44
2	Y 371.029	1445744.5	1445744.5	99.331 %			21:09:44
2	Ag 328.068†	32120.3	32692.3	247.42 µg/L		247.42 ppb	21:09:50
2	As 188.979†	260.5	261.7	470.04 µg/L		470.04 ppb	21:10:10
2	B 249.677†	12595.0	12312.2	501.78 µg/L		501.78 ppb	21:09:50
2	Ba 233.527†	20197.1	20283.9	497.95 µg/L		497.95 ppb	21:09:50
2	Be 313.107†	410209.2	415359.2	250.67 µg/L		250.67 ppb	21:09:44
2	Cd 226.502†	19361.4	19563.7	492.19 µg/L		492.19 ppb	21:09:50
2	Co 228.616†	10832.8	10867.0	502.67 µg/L		502.67 ppb	21:09:50
2	Cr 267.716†	23645.5	23773.1	485.14 µg/L		485.14 ppb	21:09:50
2	Cu 324.752†	77350.7	74743.3	496.52 µg/L		496.52 ppb	21:09:50
2	Mn 257.610†	154859.2	155686.9	496.05 µg/L		496.05 ppb	21:09:44
2	Mo 202.031†	5189.9	5210.9	522.30 µg/L		522.30 ppb	21:10:10
2	Ni 231.604†	9855.9	9580.7	483.67 µg/L		483.67 ppb	21:09:50
2	P 214.914†	1266.5	1254.6	2447.1 µg/L		2447.1 ppb	21:10:10
2	Pb 220.353†	2092.1	2004.4	493.46 µg/L		493.46 ppb	21:10:10

2	S 181.975 Axial†	602.7	587.5	2435.3 µg/L	2435.3 ppb	21:10:10
2	Sb 206.836†	541.9	521.7	478.88 µg/L	478.88 ppb	21:10:10
2	Se 196.026†	1842.6	1833.9	2520.3 µg/L	2520.3 ppb	21:10:10
2	SiO2†	52485.3	51178.9	10249 µg/L	10249 ppb	21:09:50
2	Si 251.611†	61901.1	61817.5	4771.3 µg/L	4771.3 ppb	21:09:50
2	Sn 189.927†	1223.9	1223.3	523.17 µg/L	523.17 ppb	21:10:10
2	Ti 334.940†	208285.0	208849.7	474.68 µg/L	474.68 ppb	21:09:44
2	Tl 190.801†	366.2	389.6	526.51 µg/L	526.51 ppb	21:10:10
2	U 409.014†	5476.2	5495.5	465.35 µg/L	465.35 ppb	21:09:50
2	V 292.402†	49179.3	49442.1	495.31 µg/L	495.31 ppb	21:09:50
2	Zn 213.857†	21439.3	21010.1	492.38 µg/L	492.38 ppb	21:09:50
3	Sc RADIAL	59096.0	59096.0	100 %		21:08:39
3	Al 396.153Radial†	6747.8	6750.6	5037.7 µg/L	5037.7 ppb	21:08:39
3	Ca 317.933Radial†	5596.7	5398.8	4952.1 µg/L	4952.1 ppb	21:08:59
3	Fe 238.204 Radial†	606.6	590.7	5080.1 µg/L	5080.1 ppb	21:08:59
3	K 766.490 Radial†	3696.9	3495.2	2403.4 µg/L	2403.4 ppb	21:08:39
3	Mg 279.077 IEC†	535.3	522.7	5089.9 µg/L	5089.9 ppb	21:08:59
3	Na 589.592 Radial†	8071.9	7591.0	2481.7 µg/L	2481.7 ppb	21:08:39
3	Sr 421.552†	51459.2	51372.3	505.26 µg/L	505.26 ppb	21:08:39
3	Sc 361.383	2094405.8	2094405.8	99.751 %		21:10:18
3	Y 371.029	1447263.1	1447263.1	99.435 %		21:10:18
3	Ag 328.068†	30096.5	30634.8	231.71 µg/L	231.71 ppb	21:10:23
3	As 188.979†	226.6	227.4	408.55 µg/L	408.55 ppb	21:10:44
3	B 249.677†	11723.3	11427.1	465.50 µg/L	465.50 ppb	21:10:23
3	Ba 233.527†	18382.6	18446.8	452.83 µg/L	452.83 ppb	21:10:23
3	Be 313.107†	380739.4	385448.5	232.62 µg/L	232.62 ppb	21:10:18
3	Cd 226.502†	17489.2	17669.5	444.48 µg/L	444.48 ppb	21:10:23
3	Co 228.616†	9671.7	9693.2	448.32 µg/L	448.32 ppb	21:10:23
3	Cr 267.716†	20510.3	20608.9	420.57 µg/L	420.57 ppb	21:10:23
3	Cu 324.752†	69854.0	67158.6	446.20 µg/L	446.20 ppb	21:10:23
3	Mn 257.610†	144167.2	144829.6	461.49 µg/L	461.49 ppb	21:10:18
3	Mo 202.031†	4313.1	4327.2	433.76 µg/L	433.76 ppb	21:10:44
3	Ni 231.604†	8882.5	8596.0	433.97 µg/L	433.97 ppb	21:10:23
3	P 214.914†	1071.9	1058.4	2061.0 µg/L	2061.0 ppb	21:10:44
3	Pb 220.353†	1818.3	1728.0	425.34 µg/L	425.34 ppb	21:10:44
3	S 181.975 Axial†	531.7	515.7	2137.7 µg/L	2137.7 ppb	21:10:44
3	Sb 206.836†	466.9	445.9	409.02 µg/L	409.02 ppb	21:10:44
3	Se 196.026†	1609.6	1598.6	2197.9 µg/L	2197.9 ppb	21:10:44
3	SiO2†	48374.9	47011.3	9414.0 µg/L	9414.0 ppb	21:10:23
3	Si 251.611†	57002.4	56851.1	4388.0 µg/L	4388.0 ppb	21:10:23
3	Sn 189.927†	1010.2	1008.0	431.08 µg/L	431.08 ppb	21:10:44
3	Ti 334.940†	192169.6	192507.6	437.51 µg/L	437.51 ppb	21:10:18
3	Tl 190.801†	325.3	348.3	470.89 µg/L	470.89 ppb	21:10:44
3	U 409.014†	4809.6	4822.4	408.23 µg/L	408.23 ppb	21:10:23
3	V 292.402†	43652.8	43857.8	439.18 µg/L	439.18 ppb	21:10:23
3	Zn 213.857†	19288.3	18834.5	441.35 µg/L	441.35 ppb	21:10:23

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2093451.0	99.706 %	0.0445			0.04%
Sc RADIAL	58971.5	99.9 %	0.68			0.68%
Y 371.029	1445970.8	99.346 %	0.0821			0.08%
Ag 328.068†	32011.7	242.22 µg/L	9.104	242.22 ppb	9.104	3.76%
QC value within limits for Ag 328.068 Recovery = 96.89%						
Al 396.153Radial†	6749.8	5035.9 µg/L	20.68	5035.9 ppb	20.68	0.41%
QC value within limits for Al 396.153Radial Recovery = 100.72%						
As 188.979†	252.5	453.56 µg/L	39.442	453.56 ppb	39.442	8.70%
QC value within limits for As 188.979 Recovery = 90.71%						
B 249.677†	11998.9	488.95 µg/L	20.337	488.95 ppb	20.337	4.16%
QC value within limits for B 249.677 Recovery = 97.79%						
Ba 233.527†	19673.0	482.95 µg/L	26.080	482.95 ppb	26.080	5.40%
QC value within limits for Ba 233.527 Recovery = 96.59%						
Be 313.107†	405481.7	244.71 µg/L	10.470	244.71 ppb	10.470	4.28%
QC value within limits for Be 313.107 Recovery = 97.88%						
Ca 317.933Radial†	5411.1	4963.4 µg/L	25.04	4963.4 ppb	25.04	0.50%
QC value within limits for Ca 317.933Radial Recovery = 99.27%						
Cd 226.502†	18903.1	475.55 µg/L	26.932	475.55 ppb	26.932	5.66%
QC value within limits for Cd 226.502 Recovery = 95.11%						
Co 228.616†	10457.3	483.70 µg/L	30.670	483.70 ppb	30.670	6.34%

QC value within limits for Co 228.616	Recovery = 96.74%				
Cr 267.716†	22676.9	462.77 µg/L	36.566	462.77 ppb	36.566 7.90%
QC value within limits for Cr 267.716	Recovery = 92.55%				
Cu 324.752†	72216.2	479.75 µg/L	29.057	479.75 ppb	29.057 6.06%
QC value within limits for Cu 324.752	Recovery = 95.95%				
Fe 238.204 Radial†	593.3	5102.9 µg/L	28.53	5102.9 ppb	28.53 0.56%
QC value within limits for Fe 238.204 Radial	Recovery = 102.06%				
K 766.490 Radial†	3492.6	2401.5 µg/L	39.58	2401.5 ppb	39.58 1.65%
QC value within limits for K 766.490 Radial	Recovery = 96.06%				
Mg 279.077 IEC†	524.9	5111.5 µg/L	32.52	5111.5 ppb	32.52 0.64%
QC value within limits for Mg 279.077 IEC	Recovery = 102.23%				
Mn 257.610†	152150.5	484.79 µg/L	20.187	484.79 ppb	20.187 4.16%
QC value within limits for Mn 257.610	Recovery = 96.96%				
Mo 202.031†	4945.5	495.71 µg/L	53.833	495.71 ppb	53.833 10.86%
QC value within limits for Mo 202.031	Recovery = 99.14%				
Na 589.592 Radial†	7598.3	2484.1 µg/L	12.42	2484.1 ppb	12.42 0.50%
QC value within limits for Na 589.592 Radial	Recovery = 99.36%				
Ni 231.604†	9259.5	467.46 µg/L	29.007	467.46 ppb	29.007 6.21%
QC value within limits for Ni 231.604	Recovery = 93.49%				
P 214.914†	1194.5	2329.0 µg/L	232.60	2329.0 ppb	232.60 9.99%
QC value within limits for P 214.914	Recovery = 93.16%				
Pb 220.353†	1925.0	473.90 µg/L	42.315	473.90 ppb	42.315 8.93%
QC value within limits for Pb 220.353	Recovery = 94.78%				
S 181.975 Axial†	564.0	2338.1 µg/L	173.55	2338.1 ppb	173.55 7.42%
QC value within limits for S 181.975 Axial	Recovery = 93.52%				
Sb 206.836†	498.2	457.24 µg/L	41.837	457.24 ppb	41.837 9.15%
QC value within limits for Sb 206.836	Recovery = 91.45%				
Se 196.026†	1763.1	2423.4 µg/L	195.88	2423.4 ppb	195.88 8.08%
QC value within limits for Se 196.026	Recovery = 96.94%				
SiO2†	49734.2	9959.3 µg/L	472.51	9959.3 ppb	472.51 4.74%
QC value within limits for SiO2	Recovery = 93.12%				
Si 251.611†	60088.3	4637.8 µg/L	216.55	4637.8 ppb	216.55 4.67%
QC value within limits for Si 251.611	Recovery = 92.76%				
Sn 189.927†	1158.9	495.60 µg/L	56.074	495.60 ppb	56.074 11.31%
QC value within limits for Sn 189.927	Recovery = 99.12%				
Sr 421.552†	51260.8	504.16 µg/L	1.605	504.16 ppb	1.605 0.32%
QC value within limits for Sr 421.552	Recovery = 100.83%				
Ti 334.940†	203518.0	462.56 µg/L	21.689	462.56 ppb	21.689 4.69%
QC value within limits for Ti 334.940	Recovery = 92.51%				
Tl 190.801†	372.2	503.10 µg/L	28.835	503.10 ppb	28.835 5.73%
QC value within limits for Tl 190.801	Recovery = 100.62%				
U 409.014†	5261.3	445.48 µg/L	32.282	445.48 ppb	32.282 7.25%
QC value less than the lower limit for U 409.014	Recovery = 89.10%				
V 292.402†	47521.2	476.03 µg/L	31.929	476.03 ppb	31.929 6.71%
QC value within limits for V 292.402	Recovery = 95.21%				
Zn 213.857†	20264.3	474.89 µg/L	29.056	474.89 ppb	29.056 6.12%
QC value within limits for Zn 213.857	Recovery = 94.98%				

QC Failed. Continue with analysis.

Sequence No.: 7
 Sample ID: ICB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 10
 Date Collected: 2/20/2010 21:10:53
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58564.9	58564.9	99.2 %		21:11:26
1	Al 396.153Radial†	-6.1	2.5	1.8721 µg/L	1.8721 ppb	21:11:26
1	Ca 317.933Radial†	199.2	7.8	7.1783 µg/L	7.1783 ppb	21:11:47
1	Fe 238.204 Radial†	17.4	2.1	18.159 µg/L	18.159 ppb	21:11:47
1	K 766.490 Radial†	203.0	6.2	4.2821 µg/L	4.2821 ppb	21:11:26
1	Mg 279.077 IEC†	7.5	-4.6	-44.441 µg/L	-44.441 ppb	21:11:47
1	Na 589.592 Radial†	519.5	50.0	16.342 µg/L	16.342 ppb	21:11:26
1	Sr 421.552†	55.6	14.7	0.1441 µg/L	0.1441 ppb	21:11:26
1	Sc 361.383	2085452.9	2085452.9	99.325 %		21:12:48
1	Y 371.029	1444872.9	1444872.9	99.271 %		21:12:48
1	Ag 328.068†	-369.2	91.4	0.6816 µg/L	0.6816 ppb	21:12:54
1	As 188.979†	3.0	3.3	6.0043 µg/L	6.0043 ppb	21:13:15
1	B 249.677†	395.3	72.5	2.9550 µg/L	2.9550 ppb	21:13:15
1	Ba 233.527†	-4.0	14.3	0.3502 µg/L	0.3502 ppb	21:13:15
1	Be 313.107†	-3487.7	247.5	0.1493 µg/L	0.1493 ppb	21:12:54
1	Cd 226.502†	-128.3	7.4	0.1844 µg/L	0.1844 ppb	21:13:15
1	Co 228.616†	5.6	3.1	0.1421 µg/L	0.1421 ppb	21:13:15
1	Cr 267.716†	-37.4	9.7	0.1985 µg/L	0.1985 ppb	21:12:54
1	Cu 324.752†	2887.5	37.4	0.2505 µg/L	0.2505 ppb	21:12:54
1	Mn 257.610†	-248.0	52.8	0.1724 µg/L	0.1724 ppb	21:13:15
1	Mo 202.031†	6.8	10.2	1.0191 µg/L	1.0191 ppb	21:13:15
1	Ni 231.604†	312.7	6.2	0.3110 µg/L	0.3110 ppb	21:13:15
1	P 214.914†	1.1	-15.2	-30.169 µg/L	-30.169 ppb	21:13:15
1	Pb 220.353†	95.1	1.0	0.2452 µg/L	0.2452 ppb	21:13:15
1	S 181.975 Axial†	16.9	-0.3	-1.2677 µg/L	-1.2677 ppb	21:13:15
1	Sb 206.836†	21.3	-0.7	-0.6239 µg/L	-0.6239 ppb	21:13:15
1	Se 196.026†	12.1	-2.8	-3.7521 µg/L	-3.7521 ppb	21:13:15
1	SiO2†	1508.7	34.5	6.9110 µg/L	6.9110 ppb	21:12:54
1	Si 251.611†	341.0	49.8	3.8443 µg/L	3.8443 ppb	21:13:15
1	Sn 189.927†	3.8	-0.9	-0.3913 µg/L	-0.3913 ppb	21:13:15
1	Ti 334.940†	281.1	141.4	0.3252 µg/L	0.3252 ppb	21:12:54
1	Tl 190.801†	-21.8	0.2	0.3385 µg/L	0.3385 ppb	21:13:15
1	U 409.014†	19.5	20.4	1.7315 µg/L	1.7315 ppb	21:12:54
1	V 292.402†	-116.7	-21.5	-0.2000 µg/L	-0.2000 ppb	21:12:54
1	Zn 213.857†	524.7	26.3	0.6208 µg/L	0.6208 ppb	21:13:15
2	Sc RADIAL	58481.1	58481.1	99.0 %		21:11:52
2	Al 396.153Radial†	-24.1	-15.6	-11.699 µg/L	-11.699 ppb	21:11:52
2	Ca 317.933Radial†	197.0	5.9	5.4176 µg/L	5.4176 ppb	21:12:12
2	Fe 238.204 Radial†	14.7	-0.6	-4.7257 µg/L	-4.7257 ppb	21:12:12
2	K 766.490 Radial†	178.6	-18.0	-12.399 µg/L	-12.399 ppb	21:11:52
2	Mg 279.077 IEC†	12.4	0.5	4.6624 µg/L	4.6624 ppb	21:12:12
2	Na 589.592 Radial†	494.5	25.5	8.3432 µg/L	8.3432 ppb	21:11:52
2	Sr 421.552†	30.4	-10.7	-0.1050 µg/L	-0.1050 ppb	21:11:52
2	Sc 361.383	2081054.4	2081054.4	99.115 %		21:13:21
2	Y 371.029	1441674.9	1441674.9	99.051 %		21:13:21
2	Ag 328.068†	-383.8	75.9	0.5684 µg/L	0.5684 ppb	21:13:26
2	As 188.979†	4.6	5.0	8.9367 µg/L	8.9367 ppb	21:13:47
2	B 249.677†	377.6	55.4	2.2708 µg/L	2.2708 ppb	21:13:47
2	Ba 233.527†	-14.7	3.5	0.0865 µg/L	0.0865 ppb	21:13:47
2	Be 313.107†	-3395.4	333.2	0.2011 µg/L	0.2011 ppb	21:13:26
2	Cd 226.502†	-146.1	-10.8	-0.2704 µg/L	-0.2704 ppb	21:13:47
2	Co 228.616†	14.9	12.4	0.5763 µg/L	0.5763 ppb	21:13:47
2	Cr 267.716†	-38.0	9.1	0.1857 µg/L	0.1857 ppb	21:13:26
2	Cu 324.752†	2936.4	92.9	0.6156 µg/L	0.6156 ppb	21:13:26
2	Mn 257.610†	-256.0	44.3	0.1401 µg/L	0.1401 ppb	21:13:47
2	Mo 202.031†	2.5	5.8	0.5834 µg/L	0.5834 ppb	21:13:47
2	Ni 231.604†	315.1	9.3	0.4672 µg/L	0.4672 ppb	21:13:47
2	P 214.914†	17.3	1.2	2.3923 µg/L	2.3923 ppb	21:13:47
2	Pb 220.353†	90.5	-3.5	-0.8520 µg/L	-0.8520 ppb	21:13:47

2	S 181.975 Axial†	20.2	3.1	12.918 µg/L	12.918 ppb	21:13:47
2	Sb 206.836†	23.6	1.7	1.5439 µg/L	1.5439 ppb	21:13:47
2	Se 196.026†	13.3	-1.6	-2.1637 µg/L	-2.1637 ppb	21:13:47
2	SiO2†	1438.6	-32.9	-6.5928 µg/L	-6.5928 ppb	21:13:26
2	Si 251.611†	330.0	39.4	3.0397 µg/L	3.0397 ppb	21:13:47
2	Sn 189.927†	2.0	-2.7	-1.1480 µg/L	-1.1480 ppb	21:13:47
2	Ti 334.940†	279.5	140.3	0.3189 µg/L	0.3189 ppb	21:13:26
2	Tl 190.801†	-29.6	-7.7	-10.244 µg/L	-10.244 ppb	21:13:47
2	U 409.014†	-34.5	-34.1	-2.8921 µg/L	-2.8921 ppb	21:13:26
2	V 292.402†	-60.5	35.0	0.3474 µg/L	0.3474 ppb	21:13:26
2	Zn 213.857†	528.7	31.5	0.7408 µg/L	0.7408 ppb	21:13:47
3	Sc RADIAL	58246.0	58246.0	98.6 %		21:12:18
3	Al 396.153Radial†	-18.3	-9.9	-7.3904 µg/L	-7.3904 ppb	21:12:18
3	Ca 317.933Radial†	194.4	4.1	3.7831 µg/L	3.7831 ppb	21:12:38
3	Fe 238.204 Radial†	16.3	1.1	9.6301 µg/L	9.6301 ppb	21:12:38
3	K 766.490 Radial†	228.7	33.5	23.010 µg/L	23.010 ppb	21:12:18
3	Mg 279.077 IEC†	15.5	3.6	34.925 µg/L	34.925 ppb	21:12:38
3	Na 589.592 Radial†	490.9	23.9	7.8279 µg/L	7.8279 ppb	21:12:18
3	Sr 421.552†	30.7	-10.2	-0.1003 µg/L	-0.1003 ppb	21:12:18
3	Sc 361.383	2087627.0	2087627.0	99.428 %		21:13:53
3	Y 371.029	1446373.3	1446373.3	99.374 %		21:13:53
3	Ag 328.068†	-400.9	59.9	0.4476 µg/L	0.4476 ppb	21:13:58
3	As 188.979†	-4.1	-3.9	-6.9926 µg/L	-6.9926 ppb	21:14:19
3	B 249.677†	385.6	62.3	2.5452 µg/L	2.5452 ppb	21:14:19
3	Ba 233.527†	-12.3	6.0	0.1471 µg/L	0.1471 ppb	21:14:19
3	Be 313.107†	-3568.2	170.1	0.1026 µg/L	0.1026 ppb	21:13:58
3	Cd 226.502†	-143.3	-7.5	-0.1900 µg/L	-0.1900 ppb	21:14:19
3	Co 228.616†	10.0	7.5	0.3489 µg/L	0.3489 ppb	21:14:19
3	Cr 267.716†	-23.2	24.1	0.4908 µg/L	0.4908 ppb	21:13:58
3	Cu 324.752†	2910.0	57.0	0.3793 µg/L	0.3793 ppb	21:13:58
3	Mn 257.610†	-265.6	35.5	0.1128 µg/L	0.1128 ppb	21:14:19
3	Mo 202.031†	3.3	6.7	0.6685 µg/L	0.6685 ppb	21:14:19
3	Ni 231.604†	308.4	1.5	0.0748 µg/L	0.0748 ppb	21:14:19
3	P 214.914†	9.7	-6.5	-13.002 µg/L	-13.002 ppb	21:14:19
3	Pb 220.353†	90.1	-4.2	-1.0268 µg/L	-1.0268 ppb	21:14:19
3	S 181.975 Axial†	17.9	0.7	2.7428 µg/L	2.7428 ppb	21:14:19
3	Sb 206.836†	25.1	3.1	2.8622 µg/L	2.8622 ppb	21:14:19
3	Se 196.026†	18.3	3.4	4.6867 µg/L	4.6867 ppb	21:14:19
3	SiO2†	1440.1	-36.0	-7.2055 µg/L	-7.2055 ppb	21:13:58
3	Si 251.611†	331.4	39.7	3.0667 µg/L	3.0667 ppb	21:14:19
3	Sn 189.927†	1.7	-3.0	-1.2716 µg/L	-1.2716 ppb	21:14:19
3	Ti 334.940†	276.4	136.3	0.3074 µg/L	0.3074 ppb	21:13:58
3	Tl 190.801†	-22.2	-0.1	-0.1300 µg/L	-0.1300 ppb	21:14:19
3	U 409.014†	-28.2	-27.6	-2.3446 µg/L	-2.3446 ppb	21:13:58
3	V 292.402†	-98.1	-2.7	-0.0214 µg/L	-0.0214 ppb	21:13:58
3	Zn 213.857†	526.3	27.4	0.6421 µg/L	0.6421 ppb	21:14:19

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2084711.4	99.289 %	0.1595			0.16%
Sc RADIAL	58430.7	99.0 %	0.28			0.28%
Y 371.029	1444307.0	99.232 %	0.1649			0.17%
Ag 328.068†	75.8	0.5659 µg/L	0.11703	0.5659 ppb	0.11703	20.68%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-7.7	-5.7391 µg/L	6.93458	-5.7391 ppb	6.93458	120.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.5	2.6495 µg/L	8.47799	2.6495 ppb	8.47799	319.99%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	63.4	2.5903 µg/L	0.34433	2.5903 ppb	0.34433	13.29%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.9	0.1946 µg/L	0.13811	0.1946 ppb	0.13811	70.98%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	250.2	0.1510 µg/L	0.04926	0.1510 ppb	0.04926	32.62%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	6.0	5.4596 µg/L	1.69798	5.4596 ppb	1.69798	31.10%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-3.6	-0.0920 µg/L	0.24271	-0.0920 ppb	0.24271	263.84%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	7.7	0.3558 µg/L	0.21721	0.3558 ppb	0.21721	61.06%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	14.3 0.2916 µg/L	0.17257	0.2916 ppb 59.17%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	62.4 0.4151 µg/L	0.18513	0.4151 ppb 44.59%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.9 7.6878 µg/L	11.56524	7.6878 ppb 150.44%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	7.2 4.9642 µg/L	17.71413	4.9642 ppb 356.83%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.2 -1.6181 µg/L	40.05410	-1.6181 ppb >999.9%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	44.2 0.1418 µg/L	0.02981	0.1418 ppb 21.03%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	7.6 0.7570 µg/L	0.23098	0.7570 ppb 30.51%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	33.2 10.838 µg/L	4.7739	10.838 ppb 44.05%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	5.6 0.2844 µg/L	0.19756	0.2844 ppb 69.47%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-6.8 -13.593 µg/L	16.2889	-13.593 ppb 119.83%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-2.2 -0.5445 µg/L	0.68946	-0.5445 ppb 126.61%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.2 4.7978 µg/L	7.31276	4.7978 ppb 152.42%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	1.4 1.2607 µg/L	1.76022	1.2607 ppb 139.62%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-0.3 -0.4097 µg/L	4.48454	-0.4097 ppb >999.9%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-11.5 -2.2958 µg/L	7.97915	-2.2958 ppb 347.56%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	43.0 3.3169 µg/L	0.45696	3.3169 ppb 13.78%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-2.2 -0.9370 µg/L	0.47656	-0.9370 ppb 50.86%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-2.1 -0.0204 µg/L	0.14247	-0.0204 ppb 698.46%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	139.3 0.3171 µg/L	0.00903	0.3171 ppb 2.85%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-2.5 -3.3451 µg/L	5.97899	-3.3451 ppb 178.74%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-13.8 -1.1684 µg/L	2.52625	-1.1684 ppb 216.21%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	3.6 0.0420 µg/L	0.27913	0.0420 ppb 664.64%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	28.4 0.6679 µg/L	0.06403	0.6679 ppb 9.59%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 2/20/2010 21:14:28

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58458.4	58458.4	99.0 %		21:15:01
1	Al 396.153Radial†	258.8	270.1	201.71 µg/L	201.71 ppb	21:15:01
1	Ca 317.933Radial†	411.5	222.6	204.21 µg/L	204.21 ppb	21:15:21
1	Fe 238.204 Radial†	27.1	12.0	103.29 µg/L	103.29 ppb	21:15:21
1	K 766.490 Radial†	436.6	242.6	166.81 µg/L	166.81 ppb	21:15:01
1	Mg 279.077 IEC†	43.2	31.6	307.43 µg/L	307.43 ppb	21:15:21
1	Na 589.592 Radial†	1411.3	951.7	311.14 µg/L	311.14 ppb	21:15:01
1	Sr 421.552†	548.2	512.4	5.0393 µg/L	5.0393 ppb	21:15:01
1	Sc 361.383	2076756.1	2076756.1	98.910 %		21:16:24
1	Y 371.029	1438554.1	1438554.1	98.837 %		21:16:24
1	Ag 328.068†	275.7	741.9	5.5767 µg/L	5.5767 ppb	21:16:29
1	As 188.979†	18.9	19.4	34.854 µg/L	34.854 ppb	21:16:50
1	B 249.677†	1544.9	1236.4	50.536 µg/L	50.536 ppb	21:16:29
1	Ba 233.527†	188.0	208.4	5.1169 µg/L	5.1169 ppb	21:16:50
1	Be 313.107†	4586.8	8396.2	5.0689 µg/L	5.0689 ppb	21:16:29
1	Cd 226.502†	48.0	185.1	4.6526 µg/L	4.6526 ppb	21:16:50
1	Co 228.616†	122.0	120.8	5.5928 µg/L	5.5928 ppb	21:16:50
1	Cr 267.716†	187.5	237.0	4.8358 µg/L	4.8358 ppb	21:16:29
1	Cu 324.752†	4427.8	1606.9	10.674 µg/L	10.674 ppb	21:16:29
1	Mn 257.610†	2956.6	3291.7	10.479 µg/L	10.479 ppb	21:16:29
1	Mo 202.031†	101.5	106.0	10.621 µg/L	10.621 ppb	21:16:50
1	Ni 231.604†	423.2	119.2	6.0200 µg/L	6.0200 ppb	21:16:50
1	P 214.914†	87.1	71.9	141.87 µg/L	141.87 ppb	21:16:50
1	Pb 220.353†	128.7	35.3	8.6690 µg/L	8.6690 ppb	21:16:50
1	S 181.975 Axial†	42.4	25.6	106.10 µg/L	106.10 ppb	21:16:50
1	Sb 206.836†	34.3	12.6	11.564 µg/L	11.564 ppb	21:16:50
1	Se 196.026†	35.5	20.9	28.580 µg/L	28.580 ppb	21:16:50
1	SiO2†	2540.4	1084.0	217.07 µg/L	217.07 ppb	21:16:29
1	Si 251.611†	1606.9	1331.0	102.73 µg/L	102.73 ppb	21:16:29
1	Sn 189.927†	22.6	18.1	7.7813 µg/L	7.7813 ppb	21:16:50
1	Ti 334.940†	2333.3	2217.4	5.0222 µg/L	5.0222 ppb	21:16:29
1	Tl 190.801†	-10.0	12.1	16.365 µg/L	16.365 ppb	21:16:50
1	U 409.014†	545.1	551.8	46.805 µg/L	46.805 ppb	21:16:29
1	V 292.402†	448.5	549.4	5.5885 µg/L	5.5885 ppb	21:16:29
1	Zn 213.857†	962.3	470.9	11.048 µg/L	11.048 ppb	21:16:50
2	Sc RADIAL	58637.7	58637.7	99.3 %		21:15:27
2	Al 396.153Radial†	246.9	257.3	192.14 µg/L	192.14 ppb	21:15:27
2	Ca 317.933Radial†	420.8	230.7	211.63 µg/L	211.63 ppb	21:15:48
2	Fe 238.204 Radial†	27.6	12.4	106.26 µg/L	106.26 ppb	21:15:48
2	K 766.490 Radial†	399.5	203.9	140.19 µg/L	140.19 ppb	21:15:27
2	Mg 279.077 IEC†	42.6	30.8	299.94 µg/L	299.94 ppb	21:15:48
2	Na 589.592 Radial†	1434.6	970.9	317.40 µg/L	317.40 ppb	21:15:27
2	Sr 421.552†	537.3	499.6	4.9139 µg/L	4.9139 ppb	21:15:27
2	Sc 361.383	2073118.3	2073118.3	98.737 %		21:16:56
2	Y 371.029	1436197.3	1436197.3	98.675 %		21:16:56
2	Ag 328.068†	299.5	766.4	5.7589 µg/L	5.7589 ppb	21:17:01
2	As 188.979†	16.0	16.4	29.570 µg/L	29.570 ppb	21:17:22
2	B 249.677†	1526.7	1220.7	49.891 µg/L	49.891 ppb	21:17:01
2	Ba 233.527†	192.5	213.4	5.2381 µg/L	5.2381 ppb	21:17:22
2	Be 313.107†	4573.1	8390.5	5.0654 µg/L	5.0654 ppb	21:17:01
2	Cd 226.502†	52.5	189.8	4.7698 µg/L	4.7698 ppb	21:17:22
2	Co 228.616†	96.1	94.7	4.3852 µg/L	4.3852 ppb	21:17:22
2	Cr 267.716†	195.6	245.5	5.0105 µg/L	5.0105 ppb	21:17:01
2	Cu 324.752†	4459.6	1646.9	10.939 µg/L	10.939 ppb	21:17:01
2	Mn 257.610†	2958.3	3298.7	10.502 µg/L	10.502 ppb	21:17:01
2	Mo 202.031†	92.6	97.1	9.7325 µg/L	9.7325 ppb	21:17:22
2	Ni 231.604†	412.3	109.0	5.5035 µg/L	5.5035 ppb	21:17:22
2	P 214.914†	88.8	73.7	145.61 µg/L	145.61 ppb	21:17:22
2	Pb 220.353†	131.8	38.7	9.4863 µg/L	9.4863 ppb	21:17:22

2	S 181.975 Axial†	44.5	27.8	115.16 µg/L	115.16 ppb	21:17:22
2	Sb 206.836†	32.0	10.3	9.4435 µg/L	9.4435 ppb	21:17:22
2	Se 196.026†	37.8	23.3	31.877 µg/L	31.877 ppb	21:17:22
2	SiO2†	2511.2	1059.0	212.06 µg/L	212.06 ppb	21:17:01
2	Si 251.611†	1616.7	1343.8	103.72 µg/L	103.72 ppb	21:17:01
2	Sn 189.927†	29.7	25.3	10.859 µg/L	10.859 ppb	21:17:22
2	Ti 334.940†	2319.7	2207.8	5.0010 µg/L	5.0010 ppb	21:17:01
2	Tl 190.801†	-8.6	13.5	18.179 µg/L	18.179 ppb	21:17:22
2	U 409.014†	590.2	598.5	50.764 µg/L	50.764 ppb	21:17:01
2	V 292.402†	431.8	533.3	5.4276 µg/L	5.4276 ppb	21:17:01
2	Zn 213.857†	954.9	465.2	10.915 µg/L	10.915 ppb	21:17:22
3	Sc RADIAL	58244.5	58244.5	98.6 %		21:15:53
3	Al 396.153Radial†	267.7	280.0	209.15 µg/L	209.15 ppb	21:15:53
3	Ca 317.933Radial†	418.2	231.0	211.88 µg/L	211.88 ppb	21:16:13
3	Fe 238.204 Radial†	28.1	13.1	112.44 µg/L	112.44 ppb	21:16:13
3	K 766.490 Radial†	422.6	230.0	158.15 µg/L	158.15 ppb	21:15:53
3	Mg 279.077 IEC†	45.9	34.4	334.98 µg/L	334.98 ppb	21:16:13
3	Na 589.592 Radial†	1426.0	971.9	317.74 µg/L	317.74 ppb	21:15:53
3	Sr 421.552†	551.3	517.5	5.0897 µg/L	5.0897 ppb	21:15:53
3	Sc 361.383	2071181.4	2071181.4	98.645 %		21:17:28
3	Y 371.029	1436162.0	1436162.0	98.672 %		21:17:28
3	Ag 328.068†	234.7	701.0	5.2665 µg/L	5.2665 ppb	21:17:34
3	As 188.979†	15.6	16.1	28.992 µg/L	28.992 ppb	21:17:54
3	B 249.677†	1459.8	1154.4	47.175 µg/L	47.175 ppb	21:17:34
3	Ba 233.527†	162.7	183.3	4.5003 µg/L	4.5003 ppb	21:17:54
3	Be 313.107†	3897.6	7710.0	4.6546 µg/L	4.6546 ppb	21:17:34
3	Cd 226.502†	24.5	161.4	4.0536 µg/L	4.0536 ppb	21:17:54
3	Co 228.616†	87.0	85.6	3.9641 µg/L	3.9641 ppb	21:17:54
3	Cr 267.716†	185.3	235.2	4.7995 µg/L	4.7995 ppb	21:17:34
3	Cu 324.752†	4376.3	1566.7	10.408 µg/L	10.408 ppb	21:17:34
3	Mn 257.610†	2707.4	3047.2	9.7012 µg/L	9.7012 ppb	21:17:34
3	Mo 202.031†	93.8	98.4	9.8684 µg/L	9.8684 ppb	21:17:54
3	Ni 231.604†	397.4	94.2	4.7570 µg/L	4.7570 ppb	21:17:54
3	P 214.914†	76.6	61.4	121.13 µg/L	121.13 ppb	21:17:54
3	Pb 220.353†	123.5	30.4	7.4641 µg/L	7.4641 ppb	21:17:54
3	S 181.975 Axial†	39.0	22.3	92.294 µg/L	92.294 ppb	21:17:54
3	Sb 206.836†	27.8	6.1	5.6139 µg/L	5.6139 ppb	21:17:54
3	Se 196.026†	47.6	33.2	45.482 µg/L	45.482 ppb	21:17:54
3	SiO2†	2440.9	990.1	198.26 µg/L	198.26 ppb	21:17:34
3	Si 251.611†	1532.4	1259.9	97.245 µg/L	97.245 ppb	21:17:34
3	Sn 189.927†	23.1	18.7	8.0229 µg/L	8.0229 ppb	21:17:54
3	Ti 334.940†	2183.5	2071.9	4.6891 µg/L	4.6891 ppb	21:17:34
3	Tl 190.801†	-5.3	16.9	22.678 µg/L	22.678 ppb	21:17:54
3	U 409.014†	509.5	517.3	43.867 µg/L	43.867 ppb	21:17:34
3	V 292.402†	361.2	462.2	4.7178 µg/L	4.7178 ppb	21:17:34
3	Zn 213.857†	893.4	403.7	9.4663 µg/L	9.4663 ppb	21:17:54

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2073685.3	98.764 %	0.1348			0.14%
Sc RADIAL	58446.8	99.0 %	0.33			0.34%
Y 371.029	1436971.1	98.728 %	0.0942			0.10%
Ag 328.068†	736.4	5.5340 µg/L	0.24894	5.5340 ppb	0.24894	4.50%
QC value within limits for Ag 328.068 Recovery = 110.68%						
Al 396.153Radial†	269.1	201.00 µg/L	8.529	201.00 ppb	8.529	4.24%
QC value within limits for Al 396.153Radial Recovery = 100.50%						
As 188.979†	17.3	31.138 µg/L	3.2305	31.138 ppb	3.2305	10.37%
QC value within limits for As 188.979 Recovery = 103.79%						
B 249.677†	1203.9	49.200 µg/L	1.7837	49.200 ppb	1.7837	3.63%
QC value within limits for B 249.677 Recovery = 98.40%						
Ba 233.527†	201.7	4.9518 µg/L	0.39562	4.9518 ppb	0.39562	7.99%
QC value within limits for Ba 233.527 Recovery = 99.04%						
Be 313.107†	8165.6	4.9297 µg/L	0.23820	4.9297 ppb	0.23820	4.83%
QC value within limits for Be 313.107 Recovery = 98.59%						
Ca 317.933Radial†	228.1	209.24 µg/L	4.355	209.24 ppb	4.355	2.08%
QC value within limits for Ca 317.933Radial Recovery = 104.62%						
Cd 226.502†	178.8	4.4920 µg/L	0.38420	4.4920 ppb	0.38420	8.55%
QC value within limits for Cd 226.502 Recovery = 89.84%						
Co 228.616†	100.4	4.6474 µg/L	0.84542	4.6474 ppb	0.84542	18.19%

Cr	267.716†	239.2	4.8819 µg/L	0.11286	4.8819 ppb	0.11286	2.31%
QC value within limits for Cr 267.716 Recovery = 97.64%							
Cu	324.752†	1606.8	10.674 µg/L	0.2654	10.674 ppb	0.2654	2.49%
QC value within limits for Cu 324.752 Recovery = 106.74%							
Fe	238.204 Radial†	12.5	107.33 µg/L	4.670	107.33 ppb	4.670	4.35%
QC value within limits for Fe 238.204 Radial Recovery = 107.33%							
K	766.490 Radial†	225.5	155.05 µg/L	13.579	155.05 ppb	13.579	8.76%
QC value within limits for K 766.490 Radial Recovery = 103.37%							
Mg	279.077 IEC†	32.3	314.12 µg/L	18.454	314.12 ppb	18.454	5.87%
QC value within limits for Mg 279.077 IEC Recovery = 104.71%							
Mn	257.610†	3212.5	10.228 µg/L	0.4560	10.228 ppb	0.4560	4.46%
QC value within limits for Mn 257.610 Recovery = 102.28%							
Mo	202.031†	100.5	10.074 µg/L	0.4788	10.074 ppb	0.4788	4.75%
QC value within limits for Mo 202.031 Recovery = 100.74%							
Na	589.592 Radial†	964.8	315.43 µg/L	3.714	315.43 ppb	3.714	1.18%
QC value within limits for Na 589.592 Radial Recovery = 105.14%							
Ni	231.604†	107.5	5.4268 µg/L	0.63497	5.4268 ppb	0.63497	11.70%
QC value within limits for Ni 231.604 Recovery = 108.54%							
P	214.914†	69.0	136.20 µg/L	13.187	136.20 ppb	13.187	9.68%
QC value within limits for P 214.914 Recovery = 90.80%							
Pb	220.353†	34.8	8.5398 µg/L	1.01723	8.5398 ppb	1.01723	11.91%
QC value within limits for Pb 220.353 Recovery = 85.40%							
S	181.975 Axial†	25.2	104.52 µg/L	11.515	104.52 ppb	11.515	11.02%
QC value within limits for S 181.975 Axial Recovery = 104.52%							
Sb	206.836†	9.6	8.8738 µg/L	3.01568	8.8738 ppb	3.01568	33.98%
QC value within limits for Sb 206.836 Recovery = 88.74%							
Se	196.026†	25.8	35.313 µg/L	8.9596	35.313 ppb	8.9596	25.37%
QC value within limits for Se 196.026 Recovery = 117.71%							
SiO2†		1044.4	209.13 µg/L	9.740	209.13 ppb	9.740	4.66%
QC value within limits for SiO2 Recovery = 98.18%							
Si	251.611†	1311.6	101.23 µg/L	3.489	101.23 ppb	3.489	3.45%
QC value within limits for Si 251.611 Recovery = 101.23%							
Sn	189.927†	20.7	8.8878 µg/L	1.71151	8.8878 ppb	1.71151	19.26%
QC value within limits for Sn 189.927 Recovery = 88.88%							
Sr	421.552†	509.8	5.0143 µg/L	0.09056	5.0143 ppb	0.09056	1.81%
QC value within limits for Sr 421.552 Recovery = 100.29%							
Ti	334.940†	2165.7	4.9041 µg/L	0.18646	4.9041 ppb	0.18646	3.80%
QC value within limits for Ti 334.940 Recovery = 98.08%							
Tl	190.801†	14.2	19.074 µg/L	3.2505	19.074 ppb	3.2505	17.04%
QC value within limits for Tl 190.801 Recovery = 95.37%							
U	409.014†	555.9	47.145 µg/L	3.4611	47.145 ppb	3.4611	7.34%
QC value within limits for U 409.014 Recovery = 94.29%							
V	292.402†	515.0	5.2446 µg/L	0.46328	5.2446 ppb	0.46328	8.83%
QC value within limits for V 292.402 Recovery = 104.89%							
Zn	213.857†	446.6	10.477 µg/L	0.8775	10.477 ppb	0.8775	8.38%
QC value within limits for Zn 213.857 Recovery = 104.77%							

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: IC5A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 2/20/2010 21:18:04

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: IC5A

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56819.2	56819.2	96.2 %		21:18:45
1	Al 396.153Radial†	663448.7	689430.9	515410 µg/L	515410 ppb	21:18:39
1	Ca 317.933Radial†	515921.4	535926.3	491590 µg/L	491590 ppb	21:18:39
1	Fe 238.204 Radial†	21482.2	22307.8	191490 µg/L	191490 ppb	21:18:45
1	K 766.490 Radial†	168.1	-23.7	-16.325 µg/L	-16.325 ppb	21:18:45
1	Mg 279.077 IEC†	48942.9	50846.9	494700 µg/L	494700 ppb	21:18:45
1	Na 589.592 Radial†	575.8	124.6	40.751 µg/L	40.751 ppb	21:18:45
1	Sr 421.552†	383.3	356.9	3.5102 µg/L	3.5102 ppb	21:18:45
1	Sc 361.383	1959635.9	1959635.9	93.332 %		21:19:18
1	Y 371.029	1348760.4	1348760.4	92.667 %		21:19:18
1	Ag 328.068†	-2471.8	-2185.3	-4.4145 µg/L	-4.4145 ppb	21:19:23
1	As 188.979†	-17.6	-18.6	-47.859 µg/L	-47.859 ppb	21:19:44
1	B 249.677†	807.2	539.4	-77.855 µg/L	-77.855 ppb	21:19:23
1	Ba 233.527†	259.9	296.8	7.2241 µg/L	7.2241 ppb	21:19:44
1	Be 313.107†	-4248.7	-793.4	-0.4893 µg/L	-0.4893 ppb	21:19:23
1	Cd 226.502†	409.4	575.2	-7.1705 µg/L	-7.1705 ppb	21:19:44
1	Co 228.616†	58.0	59.6	2.6931 µg/L	2.6931 ppb	21:19:44
1	Cr 267.716†	-77.6	-35.8	-0.7464 µg/L	-0.7464 ppb	21:19:44
1	Cu 324.752†	-1129.5	-4079.9	-0.4461 µg/L	-0.4461 ppb	21:19:23
1	Mn 257.610†	950.3	1320.7	9.8767 µg/L	9.8767 ppb	21:19:23
1	Mo 202.031†	-96.1	-99.6	-2.7058 µg/L	-2.7058 ppb	21:19:44
1	Ni 231.604†	172.4	-124.0	-3.7785 µg/L	-3.7785 ppb	21:19:44
1	P 214.914†	82.2	71.9	138.26 µg/L	138.26 ppb	21:19:44
1	Pb 220.353†	25.6	-67.3	4.5259 µg/L	4.5259 ppb	21:19:44
1	S 181.975 Axial†	39.8	25.4	105.27 µg/L	105.27 ppb	21:19:44
1	Sb 206.836†	45.7	26.9	-18.388 µg/L	-18.388 ppb	21:19:44
1	Se 196.026†	17.5	3.7	-48.894 µg/L	-48.894 ppb	21:19:44
1	SiO2†	1279.5	-113.5	-22.734 µg/L	-22.734 ppb	21:19:44
1	Si 251.611†	453.4	192.2	14.837 µg/L	14.837 ppb	21:19:44
1	Sn 189.927†	-65.6	-75.0	3.4240 µg/L	3.4240 ppb	21:19:44
1	Ti 334.940†	11042.3	11689.5	-4.6455 µg/L	-4.6455 ppb	21:19:23
1	Tl 190.801†	-36.3	-16.7	-1.6599 µg/L	-1.6599 ppb	21:19:44
1	U 409.014†	-77.2	-82.0	-63.564 µg/L	-63.564 ppb	21:19:23
1	V 292.402†	-2625.3	-2716.9	-4.4225 µg/L	-4.4225 ppb	21:19:23
1	Zn 213.857†	1555.9	1165.1	-9.5890 µg/L	-9.5890 ppb	21:19:44
2	Sc RADIAL	57074.7	57074.7	96.7 %		21:18:56
2	Al 396.153Radial†	663732.9	686639.5	513330 µg/L	513330 ppb	21:18:51
2	Ca 317.933Radial†	516332.9	533952.7	489780 µg/L	489780 ppb	21:18:51
2	Fe 238.204 Radial†	21585.3	22314.6	191550 µg/L	191550 ppb	21:18:56
2	K 766.490 Radial†	149.3	-43.9	-30.192 µg/L	-30.192 ppb	21:18:56
2	Mg 279.077 IEC†	49168.6	50852.8	494760 µg/L	494760 ppb	21:18:56
2	Na 589.592 Radial†	578.5	124.8	40.785 µg/L	40.785 ppb	21:18:56
2	Sr 421.552†	373.8	345.3	3.3960 µg/L	3.3960 ppb	21:18:56
2	Sc 361.383	1939757.2	1939757.2	92.386 %		21:19:50
2	Y 371.029	1335581.2	1335581.2	91.762 %		21:19:50
2	Ag 328.068†	-2478.6	-2219.8	-4.6699 µg/L	-4.6699 ppb	21:19:56
2	As 188.979†	-10.5	-11.1	-34.286 µg/L	-34.286 ppb	21:20:16
2	B 249.677†	780.0	518.8	-78.730 µg/L	-78.730 ppb	21:19:56
2	Ba 233.527†	269.1	309.6	7.5380 µg/L	7.5380 ppb	21:20:16
2	Be 313.107†	-4253.7	-845.4	-0.5216 µg/L	-0.5216 ppb	21:19:56
2	Cd 226.502†	422.3	593.7	-6.7140 µg/L	-6.7140 ppb	21:20:16
2	Co 228.616†	53.2	55.0	2.4766 µg/L	2.4766 ppb	21:20:16
2	Cr 267.716†	-89.6	-49.6	-1.0286 µg/L	-1.0286 ppb	21:20:16
2	Cu 324.752†	-1145.7	-4109.9	-0.6368 µg/L	-0.6368 ppb	21:19:56
2	Mn 257.610†	927.9	1306.9	9.8383 µg/L	9.8383 ppb	21:19:56
2	Mo 202.031†	-107.8	-113.3	-4.0775 µg/L	-4.0775 ppb	21:20:16
2	Ni 231.604†	141.2	-155.8	-5.3889 µg/L	-5.3889 ppb	21:20:16
2	P 214.914†	85.2	76.0	145.79 µg/L	145.79 ppb	21:20:16
2	Pb 220.353†	31.0	-61.3	5.8949 µg/L	5.8949 ppb	21:20:16

2	S 181.975 Axial†	38.7	24.6	102.13 µg/L	102.13 ppb	21:20:16
2	Sb 206.836†	47.0	28.7	-16.542 µg/L	-16.542 ppb	21:20:16
2	Se 196.026†	20.1	6.8	-44.081 µg/L	-44.081 ppb	21:20:16
2	SiO2†	1274.3	-105.0	-21.030 µg/L	-21.030 ppb	21:20:16
2	Si 251.611†	460.3	204.7	15.801 µg/L	15.801 ppb	21:20:16
2	Sn 189.927†	-76.9	-87.9	-2.0815 µg/L	-2.0815 ppb	21:20:16
2	Ti 334.940†	11870.4	12707.1	-2.3645 µg/L	-2.3645 ppb	21:19:56
2	Tl 190.801†	-46.1	-27.7	-16.388 µg/L	-16.388 ppb	21:20:16
2	U 409.014†	-49.4	-52.7	-60.971 µg/L	-60.971 ppb	21:19:56
2	V 292.402†	-2622.2	-2742.3	-4.6756 µg/L	-4.6756 ppb	21:19:56
2	Zn 213.857†	1556.5	1182.8	-9.1685 µg/L	-9.1685 ppb	21:20:16
3	Sc RADIAL	57166.4	57166.4	96.8 %		21:19:07
3	Al 396.153Radial†	665337.5	687194.8	513740 µg/L	513740 ppb	21:19:02
3	Ca 317.933Radial†	517835.0	534646.9	490410 µg/L	490410 ppb	21:19:02
3	Fe 238.204 Radial†	21673.8	22370.2	192030 µg/L	192030 ppb	21:19:07
3	K 766.490 Radial†	176.2	-16.4	-11.291 µg/L	-11.291 ppb	21:19:07
3	Mg 279.077 IEC†	49234.8	50839.6	494630 µg/L	494630 ppb	21:19:07
3	Na 589.592 Radial†	555.4	100.0	32.681 µg/L	32.681 ppb	21:19:07
3	Sr 421.552†	387.4	358.7	3.5283 µg/L	3.5283 ppb	21:19:07
3	Sc 361.383	1950951.0	1950951.0	92.919 %		21:20:22
3	Y 371.029	1342787.4	1342787.4	92.257 %		21:20:22
3	Ag 328.068†	-2511.8	-2240.1	-4.7858 µg/L	-4.7858 ppb	21:20:28
3	As 188.979†	-10.9	-11.5	-35.015 µg/L	-35.015 ppb	21:20:49
3	B 249.677†	758.6	490.9	-80.121 µg/L	-80.121 ppb	21:20:28
3	Ba 233.527†	269.1	308.0	7.4991 µg/L	7.4991 ppb	21:20:49
3	Be 313.107†	-4316.3	-886.4	-0.5454 µg/L	-0.5454 ppb	21:20:28
3	Cd 226.502†	437.0	606.9	-6.4355 µg/L	-6.4355 ppb	21:20:49
3	Co 228.616†	51.8	53.2	2.3986 µg/L	2.3986 ppb	21:20:49
3	Cr 267.716†	-94.8	-54.6	-1.1309 µg/L	-1.1309 ppb	21:20:49
3	Cu 324.752†	-1114.5	-4069.1	-0.3003 µg/L	-0.3003 ppb	21:20:28
3	Mn 257.610†	923.5	1296.5	9.8735 µg/L	9.8735 ppb	21:20:28
3	Mo 202.031†	-100.1	-104.4	-3.1665 µg/L	-3.1665 ppb	21:20:49
3	Ni 231.604†	153.4	-143.5	-4.7588 µg/L	-4.7588 ppb	21:20:49
3	P 214.914†	98.0	89.2	171.81 µg/L	171.81 ppb	21:20:49
3	Pb 220.353†	26.1	-66.7	4.5588 µg/L	4.5588 ppb	21:20:49
3	S 181.975 Axial†	32.5	17.7	73.342 µg/L	73.342 ppb	21:20:49
3	Sb 206.836†	50.2	31.9	-13.690 µg/L	-13.690 ppb	21:20:49
3	Se 196.026†	16.4	2.7	-48.480 µg/L	-48.480 ppb	21:20:49
3	SiO2†	1286.5	-99.8	-19.991 µg/L	-19.991 ppb	21:20:49
3	Si 251.611†	421.6	160.2	12.361 µg/L	12.361 ppb	21:20:49
3	Sn 189.927†	-53.7	-62.5	8.7246 µg/L	8.7246 ppb	21:20:49
3	Ti 334.940†	10959.8	11653.4	-4.7408 µg/L	-4.7408 ppb	21:20:28
3	Tl 190.801†	-49.9	-31.5	-21.446 µg/L	-21.446 ppb	21:20:49
3	U 409.014†	-70.3	-74.9	-62.961 µg/L	-62.961 ppb	21:20:28
3	V 292.402†	-2559.7	-2658.7	-3.7882 µg/L	-3.7882 ppb	21:20:28
3	Zn 213.857†	1572.6	1190.5	-9.0051 µg/L	-9.0051 ppb	21:20:49

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1950114.7	92.879 %		0.4746			0.51%
Sc RADIAL	57020.1	96.6 %		0.30			0.32%
Y 371.029	1342376.4	92.229 %		0.4534			0.49%
Ag 328.068†	-2215.0	-4.6234 µg/L		0.18995	-4.6234 ppb	0.18995	4.11%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	687755.1	514160 µg/L		1104.7	514160 ppb	1104.7	0.21%
QC value within limits for Al 396.153Radial Recovery = 102.83%							
As 188.979†	-13.7	-39.053 µg/L		7.6348	-39.053 ppb	7.6348	19.55%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	516.4	-78.902 µg/L		1.1426	-78.902 ppb	1.1426	1.45%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	304.8	7.4204 µg/L		0.17114	7.4204 ppb	0.17114	2.31%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-841.7	-0.5188 µg/L		0.02819	-0.5188 ppb	0.02819	5.43%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	534842.0	490590 µg/L		918.3	490590 ppb	918.3	0.19%
QC value within limits for Ca 317.933Radial Recovery = 98.12%							
Cd 226.502†	591.9	-6.7733 µg/L		0.37107	-6.7733 ppb	0.37107	5.48%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	55.9	2.5228 µg/L		0.15258	2.5228 ppb	0.15258	6.05%

QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	-46.7	-0.9686 µg/L	0.19914	-0.9686 ppb	0.19914	20.56%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	-4086.3	-0.4611 µg/L	0.16874	-0.4611 ppb	0.16874	36.60%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	22330.9	191690 µg/L	293.9	191690 ppb	293.9	0.15%		
QC value within limits for Fe 238.204 Radial Recovery = 95.85%									
K	766.490 Radial†	-28.0	-19.269 µg/L	9.7882	-19.269 ppb	9.7882	50.80%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	50846.4	494690 µg/L	64.9	494690 ppb	64.9	0.01%		
QC value within limits for Mg 279.077 IEC Recovery = 98.94%									
Mn	257.610†	1308.0	9.8628 µg/L	0.02134	9.8628 ppb	0.02134	0.22%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	-105.8	-3.3166 µg/L	0.69809	-3.3166 ppb	0.69809	21.05%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	116.5	38.072 µg/L	4.6692	38.072 ppb	4.6692	12.26%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	-141.1	-4.6421 µg/L	0.81155	-4.6421 ppb	0.81155	17.48%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	79.0	151.96 µg/L	17.606	151.96 ppb	17.606	11.59%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	-65.1	4.9932 µg/L	0.78104	4.9932 ppb	0.78104	15.64%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	22.6	93.582 µg/L	17.5980	93.582 ppb	17.5980	18.80%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	29.2	-16.207 µg/L	2.3667	-16.207 ppb	2.3667	14.60%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	4.4	-47.151 µg/L	2.6675	-47.151 ppb	2.6675	5.66%		
QC value within limits for Se 196.026 Recovery = Not calculated									
SiO2†		-106.1	-21.252 µg/L	1.3852	-21.252 ppb	1.3852	6.52%		
QC value within limits for SiO2 Recovery = Not calculated									
Si	251.611†	185.7	14.333 µg/L	1.7743	14.333 ppb	1.7743	12.38%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	-75.2	3.3557 µg/L	5.40337	3.3557 ppb	5.40337	161.02%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	353.6	3.4782 µg/L	0.07176	3.4782 ppb	0.07176	2.06%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	12016.7	-3.9169 µg/L	1.34528	-3.9169 ppb	1.34528	34.35%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-25.3	-13.165 µg/L	10.2795	-13.165 ppb	10.2795	78.08%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	-69.8	-62.498 µg/L	1.3566	-62.498 ppb	1.3566	2.17%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-2706.0	-4.2954 µg/L	0.45718	-4.2954 ppb	0.45718	10.64%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	1179.5	-9.2542 µg/L	0.30128	-9.2542 ppb	0.30128	3.26%		
QC value within limits for Zn 213.857 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 104

Date Collected: 2/20/2010 21:20:58

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56972.6	56972.6	96.5 %		21:21:37
1	Al 396.153Radial†	667700.7	691981.7	517310 µg/L	517310 ppb	21:21:32
1	Ca 317.933Radial†	516453.9	535035.1	490770 µg/L	490770 ppb	21:21:32
1	Fe 238.204 Radial†	21548.4	22316.4	191580 µg/L	191580 ppb	21:21:37
1	K 766.490 Radial†	7197.7	7261.0	4992.8 µg/L	4992.8 ppb	21:21:37
1	Mg 279.077 IEC†	49172.8	50948.3	495690 µg/L	495690 ppb	21:21:37
1	Na 589.592 Radial†	15775.0	15874.7	5189.9 µg/L	5189.9 ppb	21:21:37
1	Sr 421.552†	48706.0	50435.2	496.04 µg/L	496.04 ppb	21:21:37
1	Sc 361.383	1950890.0	1950890.0	92.916 %		21:22:11
1	Y 371.029	1344114.6	1344114.6	92.348 %		21:22:11
1	Ag 328.068†	28700.0	31351.3	249.04 µg/L	249.04 ppb	21:22:17
1	As 188.979†	248.2	267.4	465.90 µg/L	465.90 ppb	21:22:37
1	B 249.677†	12106.5	12704.0	420.50 µg/L	420.50 ppb	21:22:17
1	Ba 233.527†	18309.4	19723.7	484.19 µg/L	484.19 ppb	21:22:17
1	Be 313.107†	362856.0	394280.4	237.93 µg/L	237.93 ppb	21:22:11
1	Cd 226.502†	17002.7	18435.6	442.66 µg/L	442.66 ppb	21:22:17
1	Co 228.616†	8513.4	9159.9	423.51 µg/L	423.51 ppb	21:22:37
1	Cr 267.716†	21301.8	22973.3	468.81 µg/L	468.81 ppb	21:22:17
1	Cu 324.752†	72110.4	74738.7	522.41 µg/L	522.41 ppb	21:22:17
1	Mn 257.610†	135669.4	146316.0	471.39 µg/L	471.39 ppb	21:22:17
1	Mo 202.031†	4462.9	4806.5	488.87 µg/L	488.87 ppb	21:22:37
1	Ni 231.604†	7948.6	8246.0	418.73 µg/L	418.73 ppb	21:22:37
1	P 214.914†	1244.6	1323.2	2578.9 µg/L	2578.9 ppb	21:22:37
1	Pb 220.353†	1768.6	1808.7	466.25 µg/L	466.25 ppb	21:22:37
1	S 181.975 Axial†	619.0	648.9	2689.6 µg/L	2689.6 ppb	21:22:37
1	Sb 206.836†	562.9	583.7	492.74 µg/L	492.74 ppb	21:22:37
1	Se 196.026†	1589.8	1696.0	2269.0 µg/L	2269.0 ppb	21:22:37
1	SiO2†	50384.2	52741.3	10561 µg/L	10561 ppb	21:22:17
1	Si 251.611†	59987.1	64267.2	4960.4 µg/L	4960.4 ppb	21:22:17
1	Sn 189.927†	1013.7	1086.3	500.15 µg/L	500.15 ppb	21:22:37
1	Ti 334.940†	209590.3	225428.5	481.39 µg/L	481.39 ppb	21:22:17
1	Tl 190.801†	283.8	327.6	464.12 µg/L	464.12 ppb	21:22:37
1	U 409.014†	5253.6	5654.9	423.32 µg/L	423.32 ppb	21:22:17
1	V 292.402†	44010.3	47461.8	497.33 µg/L	497.33 ppb	21:22:17
1	Zn 213.857†	19739.7	20742.8	449.69 µg/L	449.69 ppb	21:22:17
2	Sc RADIAL	56486.9	56486.9	95.7 %		21:21:49
2	Al 396.153Radial†	665996.8	696150.6	520430 µg/L	520430 ppb	21:21:43
2	Ca 317.933Radial†	513896.2	536936.7	492540 µg/L	492540 ppb	21:21:43
2	Fe 238.204 Radial†	21339.9	22290.4	191350 µg/L	191350 ppb	21:21:49
2	K 766.490 Radial†	7195.3	7322.5	5035.1 µg/L	5035.1 ppb	21:21:49
2	Mg 279.077 IEC†	48865.9	51065.6	496840 µg/L	496840 ppb	21:21:49
2	Na 589.592 Radial†	15574.5	15805.8	5167.4 µg/L	5167.4 ppb	21:21:49
2	Sr 421.552†	48292.5	50437.0	496.06 µg/L	496.06 ppb	21:21:49
2	Sc 361.383	1928851.3	1928851.3	91.866 %		21:22:43
2	Y 371.029	1328576.4	1328576.4	91.281 %		21:22:43
2	Ag 328.068†	28877.8	31897.8	253.16 µg/L	253.16 ppb	21:22:50
2	As 188.979†	236.8	258.0	449.02 µg/L	449.02 ppb	21:23:10
2	B 249.677†	12225.8	12982.8	432.03 µg/L	432.03 ppb	21:22:50
2	Ba 233.527†	18385.3	20031.5	491.75 µg/L	491.75 ppb	21:22:50
2	Be 313.107†	358164.9	393636.0	237.53 µg/L	237.53 ppb	21:22:43
2	Cd 226.502†	17066.4	18714.0	449.70 µg/L	449.70 ppb	21:22:50
2	Co 228.616†	8445.4	9190.6	424.91 µg/L	424.91 ppb	21:23:10
2	Cr 267.716†	21470.0	23418.3	477.89 µg/L	477.89 ppb	21:22:50
2	Cu 324.752†	72376.8	75915.4	530.18 µg/L	530.18 ppb	21:22:50
2	Mn 257.610†	136127.7	148483.1	478.21 µg/L	478.21 ppb	21:22:50
2	Mo 202.031†	4432.6	4828.4	491.06 µg/L	491.06 ppb	21:23:10
2	Ni 231.604†	7911.3	8303.2	421.62 µg/L	421.62 ppb	21:23:10
2	P 214.914†	1258.9	1354.2	2640.7 µg/L	2640.7 ppb	21:23:10
2	Pb 220.353†	1783.3	1846.5	475.72 µg/L	475.72 ppb	21:23:10

2	S 181.975 Axial†	612.4	649.3	2691.5 µg/L	2691.5 ppb	21:23:10
2	Sb 206.836†	545.5	571.7	481.62 µg/L	481.62 ppb	21:23:10
2	Se 196.026†	1567.3	1691.1	2260.1 µg/L	2260.1 ppb	21:23:10
2	SiO2†	50752.3	53761.5	10766 µg/L	10766 ppb	21:22:50
2	Si 251.611†	60354.6	65404.9	5048.2 µg/L	5048.2 ppb	21:22:50
2	Sn 189.927†	1012.7	1097.7	505.18 µg/L	505.18 ppb	21:23:10
2	Ti 334.940†	211110.8	229661.0	490.95 µg/L	490.95 ppb	21:22:50
2	Tl 190.801†	268.4	314.3	446.50 µg/L	446.50 ppb	21:23:10
2	U 409.014†	5240.2	5704.9	427.49 µg/L	427.49 ppb	21:22:50
2	V 292.402†	44336.8	48358.4	506.22 µg/L	506.22 ppb	21:22:50
2	Zn 213.857†	19816.0	21068.6	457.30 µg/L	457.30 ppb	21:22:50
3	Sc RADIAL	56093.4	56093.4	95.0 %		21:22:00
3	Al 396.153Radial†	664211.5	699155.3	522670 µg/L	522670 ppb	21:21:54
3	Ca 317.933Radial†	511912.6	538644.4	494080 µg/L	494080 ppb	21:21:54
3	Fe 238.204 Radial†	21142.1	22238.7	190910 µg/L	190910 ppb	21:22:00
3	K 766.490 Radial†	7140.4	7317.6	5031.7 µg/L	5031.7 ppb	21:22:00
3	Mg 279.077 IEC†	48557.1	51098.9	497160 µg/L	497160 ppb	21:22:00
3	Na 589.592 Radial†	15560.1	15904.8	5199.7 µg/L	5199.7 ppb	21:22:00
3	Sr 421.552†	47868.4	50344.8	495.15 µg/L	495.15 ppb	21:22:00
3	Sc 361.383	1926645.3	1926645.3	91.761 %		21:23:16
3	Y 371.029	1326726.5	1326726.5	91.153 %		21:23:16
3	Ag 328.068†	28729.6	31772.3	252.18 µg/L	252.18 ppb	21:23:22
3	As 188.979†	238.4	260.1	452.54 µg/L	452.54 ppb	21:23:43
3	B 249.677†	12156.5	12922.5	429.79 µg/L	429.79 ppb	21:23:22
3	Ba 233.527†	18270.9	19929.7	489.25 µg/L	489.25 ppb	21:23:22
3	Be 313.107†	358197.5	394117.9	237.83 µg/L	237.83 ppb	21:23:16
3	Cd 226.502†	16931.2	18588.0	446.58 µg/L	446.58 ppb	21:23:22
3	Co 228.616†	8424.2	9178.0	424.34 µg/L	424.34 ppb	21:23:43
3	Cr 267.716†	21333.0	23295.8	475.39 µg/L	475.39 ppb	21:23:22
3	Cu 324.752†	72177.6	75788.5	529.28 µg/L	529.28 ppb	21:23:22
3	Mn 257.610†	135165.3	147604.0	475.34 µg/L	475.34 ppb	21:23:22
3	Mo 202.031†	4456.1	4859.5	494.16 µg/L	494.16 ppb	21:23:43
3	Ni 231.604†	7868.4	8266.2	419.75 µg/L	419.75 ppb	21:23:43
3	P 214.914†	1244.4	1339.9	2613.3 µg/L	2613.3 ppb	21:23:43
3	Pb 220.353†	1772.3	1836.6	473.45 µg/L	473.45 ppb	21:23:43
3	S 181.975 Axial†	608.5	645.8	2677.1 µg/L	2677.1 ppb	21:23:43
3	Sb 206.836†	554.9	582.6	491.50 µg/L	491.50 ppb	21:23:43
3	Se 196.026†	1574.7	1701.1	2271.9 µg/L	2271.9 ppb	21:23:43
3	SiO2†	50447.2	53492.3	10712 µg/L	10712 ppb	21:23:22
3	Si 251.611†	60006.1	65100.4	5024.7 µg/L	5024.7 ppb	21:23:22
3	Sn 189.927†	988.8	1072.9	494.66 µg/L	494.66 ppb	21:23:43
3	Ti 334.940†	209795.6	228490.8	488.29 µg/L	488.29 ppb	21:23:22
3	Tl 190.801†	270.5	317.0	450.03 µg/L	450.03 ppb	21:23:43
3	U 409.014†	5253.4	5725.9	429.24 µg/L	429.24 ppb	21:23:22
3	V 292.402†	44112.1	48168.7	504.31 µg/L	504.31 ppb	21:23:22
3	Zn 213.857†	19695.1	20961.5	454.79 µg/L	454.79 ppb	21:23:22

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1935462.2	92.181 %	0.6385			0.69%
Sc RADIAL	56517.6	95.7 %	0.75			0.78%
Y 371.029	1333139.1	91.594 %	0.6561			0.72%
Ag 328.068†	31673.8	251.46 µg/L	2.154	251.46 ppb	2.154	0.86%
QC value within limits for Ag 328.068 Recovery = 100.58%						
Al 396.153Radial†	695762.5	520140 µg/L	2693.2	520140 ppb	2693.2	0.52%
QC value within limits for Al 396.153Radial Recovery = 104.03%						
As 188.979†	261.8	455.82 µg/L	8.904	455.82 ppb	8.904	1.95%
QC value within limits for As 188.979 Recovery = 91.16%						
B 249.677†	12869.8	427.44 µg/L	6.116	427.44 ppb	6.116	1.43%
QC value within limits for B 249.677 Recovery = 85.49%						
Ba 233.527†	19895.0	488.39 µg/L	3.851	488.39 ppb	3.851	0.79%
QC value within limits for Ba 233.527 Recovery = 97.68%						
Be 313.107†	394011.4	237.76 µg/L	0.204	237.76 ppb	0.204	0.09%
QC value within limits for Be 313.107 Recovery = 95.11%						
Ca 317.933Radial†	536881.0	492460 µg/L	1656.6	492460 ppb	1656.6	0.34%
QC value within limits for Ca 317.933Radial Recovery = 98.49%						
Cd 226.502†	18579.2	446.31 µg/L	3.524	446.31 ppb	3.524	0.79%
QC value within limits for Cd 226.502 Recovery = 89.26%						
Co 228.616†	9176.2	424.25 µg/L	0.705	424.25 ppb	0.705	0.17%

Cr	267.716†	23229.2	474.03 µg/L	4.691	474.03 ppb	4.691	0.99%
Cu	324.752†	75480.9	527.29 µg/L	4.252	527.29 ppb	4.252	0.81%
Fe	238.204 Radial†	22281.8	191280 µg/L	339.4	191280 ppb	339.4	0.18%
K	766.490 Radial†	7300.4	5019.9 µg/L	23.52	5019.9 ppb	23.52	0.47%
Mg	279.077 IEC†	51037.6	496560 µg/L	770.4	496560 ppb	770.4	0.16%
Mn	257.610†	147467.7	474.98 µg/L	3.426	474.98 ppb	3.426	0.72%
Mo	202.031†	4831.5	491.36 µg/L	2.654	491.36 ppb	2.654	0.54%
Na	589.592 Radial†	15861.8	5185.7 µg/L	16.60	5185.7 ppb	16.60	0.32%
Ni	231.604†	8271.8	420.03 µg/L	1.463	420.03 ppb	1.463	0.35%
P	214.914†	1339.1	2611.0 µg/L	30.99	2611.0 ppb	30.99	1.19%
Pb	220.353†	1830.6	471.81 µg/L	4.941	471.81 ppb	4.941	1.05%
S	181.975 Axial†	648.0	2686.1 µg/L	7.86	2686.1 ppb	7.86	0.29%
Sb	206.836†	579.3	488.62 µg/L	6.092	488.62 ppb	6.092	1.25%
Se	196.026†	1696.1	2267.0 µg/L	6.15	2267.0 ppb	6.15	0.27%
SiO2†		53331.7	10680 µg/L	105.9	10680 ppb	105.9	0.99%
Si	251.611†	64924.2	5011.1 µg/L	45.46	5011.1 ppb	45.46	0.91%
Sn	189.927†	1085.6	500.00 µg/L	5.263	500.00 ppb	5.263	1.05%
Sr	421.552†	50405.7	495.75 µg/L	0.519	495.75 ppb	0.519	0.10%
Ti	334.940†	227860.1	486.88 µg/L	4.936	486.88 ppb	4.936	1.01%
Tl	190.801†	319.7	453.55 µg/L	9.321	453.55 ppb	9.321	2.06%
U	409.014†	5695.2	426.69 µg/L	3.040	426.69 ppb	3.040	0.71%
V	292.402†	47996.3	502.62 µg/L	4.677	502.62 ppb	4.677	0.93%
Zn	213.857†	20924.3	453.93 µg/L	3.877	453.93 ppb	3.877	0.85%

QC value within limits for Co 228.616 Recovery = 84.85%
 QC value within limits for Cr 267.716 Recovery = 94.81%
 QC value within limits for Cu 324.752 Recovery = 105.46%
 QC value within limits for Fe 238.204 Radial Recovery = 95.64%
 QC value within limits for K 766.490 Radial Recovery = 100.40%
 QC value within limits for Mg 279.077 IEC Recovery = 99.31%
 QC value within limits for Mn 257.610 Recovery = 95.00%
 QC value within limits for Mo 202.031 Recovery = 98.27%
 QC value within limits for Na 589.592 Radial Recovery = 103.71%
 QC value within limits for Ni 231.604 Recovery = 84.01%
 QC value within limits for P 214.914 Recovery = 104.44%
 QC value within limits for Pb 220.353 Recovery = 94.36%
 QC value within limits for S 181.975 Axial Recovery = 107.44%
 QC value within limits for Sb 206.836 Recovery = 97.72%
 QC value within limits for Se 196.026 Recovery = 90.68%
 QC value within limits for SiO2 Recovery = 99.86%
 QC value within limits for Si 251.611 Recovery = 100.22%
 QC value within limits for Sn 189.927 Recovery = 100.00%
 QC value within limits for Sr 421.552 Recovery = 99.15%
 QC value within limits for Ti 334.940 Recovery = 97.38%
 QC value within limits for Tl 190.801 Recovery = 90.71%
 QC value within limits for U 409.014 Recovery = 85.34%
 QC value within limits for V 292.402 Recovery = 100.52%
 QC value within limits for Zn 213.857 Recovery = 90.79%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: LR1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 105
 Date Collected: 2/20/2010 21:23:52
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56319.3	56319.3	95.4 %		21:24:32
1	Al 396.153Radial†	661176.1	693168.0	518210 µg/L	518210 ppb	21:24:27
1	Ca 317.933Radial†	511430.3	535976.8	491630 µg/L	491630 ppb	21:24:27
1	Fe 238.204 Radial†	51860.2	54353.5	466580 µg/L	466580 ppb	21:24:32
1	K 766.490 Radial†	33.2	-163.6	-112.50 µg/L	-112.50 ppb	21:24:32
1	Mg 279.077 IEC†	48662.4	51004.2	495930 µg/L	495930 ppb	21:24:32
1	Na 589.592 Radial†	1456053.1	1526013.2	498900 µg/L	498900 ppb	21:24:27
1	Sr 421.552†	539.0	523.7	5.1507 µg/L	5.1507 ppb	21:24:32
1	Sc 361.383	1911423.8	1911423.8	91.036 %		21:25:07
1	Y 371.029	1306810.1	1306810.1	89.785 %		21:25:07
1	Ag 328.068†	-4548.6	-4533.3	-4.9291 µg/L	-4.9291 ppb	21:25:12
1	As 188.979†	-17.6	-19.1	-32.763 µg/L	-32.763 ppb	21:25:33
1	B 249.677†	1331.4	1137.0	-196.95 µg/L	-196.95 ppb	21:25:12
1	Ba 233.527†	550.5	623.1	15.131 µg/L	15.131 ppb	21:25:33
1	Be 313.107†	-11562.8	-8942.5	-5.4150 µg/L	-5.4150 ppb	21:25:12
1	Cd 226.502†	1148.5	1398.2	-17.553 µg/L	-17.553 ppb	21:25:12
1	Co 228.616†	198.0	214.9	9.8562 µg/L	9.8562 ppb	21:25:33
1	Cr 267.716†	1.5	49.0	0.9514 µg/L	0.9514 ppb	21:25:33
1	Cu 324.752†	-8413.1	-12111.2	-15.485 µg/L	-15.485 ppb	21:25:12
1	Mn 257.610†	-5482.5	-5719.8	23.991 µg/L	23.991 ppb	21:25:07
1	Mo 202.031†	-187.8	-203.0	-2.6104 µg/L	-2.6104 ppb	21:25:33
1	Ni 231.604†	63.7	-238.7	-6.0095 µg/L	-6.0095 ppb	21:25:33
1	P 214.914†	259.3	268.6	312.54 µg/L	312.54 ppb	21:25:33
1	Pb 220.353†	137.1	55.8	10.569 µg/L	10.569 ppb	21:25:33
1	S 181.975 Axial†	31.6	17.4	72.183 µg/L	72.183 ppb	21:25:33
1	Sb 206.836†	36.0	17.4	-27.203 µg/L	-27.203 ppb	21:25:33
1	Se 196.026†	-135.6	-163.9	472.01 µg/L	472.01 ppb	21:25:33
1	SiO2†	1118.5	-255.7	-51.211 µg/L	-51.211 ppb	21:25:33
1	Si 251.611†	-273.7	-594.2	-45.863 µg/L	-45.863 ppb	21:25:33
1	Sn 189.927†	-53.7	-63.8	-20.924 µg/L	-20.924 ppb	21:25:33
1	Ti 334.940†	15108.6	16454.6	6.0720 µg/L	6.0720 ppb	21:25:12
1	Tl 190.801†	-47.7	-30.2	35.804 µg/L	35.804 ppb	21:25:33
1	U 409.014†	144507.5	158737.3	13376 µg/L	13376 ppb	21:25:12
1	V 292.402†	-7150.1	-7758.1	-7.9850 µg/L	-7.9850 ppb	21:25:12
1	Zn 213.857†	2868.1	2648.5	12.380 µg/L	12.380 ppb	21:25:33
2	Sc RADIAL	56307.2	56307.2	95.4 %		21:24:44
2	Al 396.153Radial†	660050.3	692136.2	517440 µg/L	517440 ppb	21:24:39
2	Ca 317.933Radial†	509132.0	533681.9	489530 µg/L	489530 ppb	21:24:39
2	Fe 238.204 Radial†	51640.2	54134.4	464700 µg/L	464700 ppb	21:24:44
2	K 766.490 Radial†	93.5	-100.3	-68.978 µg/L	-68.978 ppb	21:24:44
2	Mg 279.077 IEC†	48394.2	50734.0	493310 µg/L	493310 ppb	21:24:44
2	Na 589.592 Radial†	1453903.8	1524087.1	498270 µg/L	498270 ppb	21:24:39
2	Sr 421.552†	530.3	514.7	5.0620 µg/L	5.0620 ppb	21:24:44
2	Sc 361.383	1899083.9	1899083.9	90.448 %		21:25:39
2	Y 371.029	1299144.4	1299144.4	89.258 %		21:25:39
2	Ag 328.068†	-4569.6	-4589.1	-5.4734 µg/L	-5.4734 ppb	21:25:45
2	As 188.979†	-29.7	-32.6	-57.152 µg/L	-57.152 ppb	21:26:06
2	B 249.677†	1359.0	1177.1	-194.33 µg/L	-194.33 ppb	21:25:45
2	Ba 233.527†	547.5	623.6	15.141 µg/L	15.141 ppb	21:26:06
2	Be 313.107†	-11635.7	-9105.6	-5.5135 µg/L	-5.5135 ppb	21:25:45
2	Cd 226.502†	1224.3	1490.1	-15.026 µg/L	-15.026 ppb	21:25:45
2	Co 228.616†	198.8	217.3	9.9633 µg/L	9.9633 ppb	21:26:06
2	Cr 267.716†	-2.4	44.7	0.8631 µg/L	0.8631 ppb	21:26:06
2	Cu 324.752†	-8395.8	-12152.1	-16.018 µg/L	-16.018 ppb	21:25:45
2	Mn 257.610†	-5392.3	-5659.2	24.039 µg/L	24.039 ppb	21:25:39
2	Mo 202.031†	-191.0	-207.9	-3.1681 µg/L	-3.1681 ppb	21:26:06
2	Ni 231.604†	67.1	-234.4	-5.8181 µg/L	-5.8181 ppb	21:26:06
2	P 214.914†	286.9	301.0	378.33 µg/L	378.33 ppb	21:26:06
2	Pb 220.353†	141.4	61.5	11.934 µg/L	11.934 ppb	21:26:06

2	S 181.975 Axial†	26.3	11.8	48.887 µg/L	48.887 ppb	21:26:06
2	Sb 206.836†	32.3	13.6	-30.568 µg/L	-30.568 ppb	21:26:06
2	Se 196.026†	-161.8	-193.9	428.79 µg/L	428.79 ppb	21:26:06
2	SiO2†	1124.4	-241.3	-48.318 µg/L	-48.318 ppb	21:26:06
2	Si 251.611†	-285.4	-609.1	-47.011 µg/L	-47.011 ppb	21:26:06
2	Sn 189.927†	-49.2	-59.2	-19.057 µg/L	-19.057 ppb	21:26:06
2	Ti 334.940†	15009.5	16452.9	6.2422 µg/L	6.2422 ppb	21:25:45
2	Tl 190.801†	-46.2	-28.8	37.585 µg/L	37.585 ppb	21:26:06
2	U 409.014†	144309.1	159549.3	13445 µg/L	13445 ppb	21:25:45
2	V 292.402†	-7245.7	-7914.8	-9.6891 µg/L	-9.6891 ppb	21:25:45
2	Zn 213.857†	2873.8	2675.3	13.249 µg/L	13.249 ppb	21:26:06
3	Sc RADIAL	56293.2	56293.2	95.3 %		21:24:56
3	Al 396.153Radial†	663696.2	696133.0	520420 µg/L	520420 ppb	21:24:50
3	Ca 317.933Radial†	512414.1	537257.6	492810 µg/L	492810 ppb	21:24:50
3	Fe 238.204 Radial†	51778.0	54292.5	466060 µg/L	466060 ppb	21:24:56
3	K 766.490 Radial†	127.5	-64.6	-44.448 µg/L	-44.448 ppb	21:24:56
3	Mg 279.077 IEC†	48568.4	50929.4	495210 µg/L	495210 ppb	21:24:56
3	Na 589.592 Radial†	1463081.6	1534093.7	501540 µg/L	501540 ppb	21:24:50
3	Sr 421.552†	546.3	531.6	5.2284 µg/L	5.2284 ppb	21:24:56
3	Sc 361.383	1897183.6	1897183.6	90.358 %		21:26:12
3	Y 371.029	1297152.7	1297152.7	89.122 %		21:26:12
3	Ag 328.068†	-4551.0	-4573.6	-5.2757 µg/L	-5.2757 ppb	21:26:18
3	As 188.979†	-29.1	-31.9	-56.001 µg/L	-56.001 ppb	21:26:39
3	B 249.677†	1366.1	1186.4	-194.65 µg/L	-194.65 ppb	21:26:18
3	Ba 233.527†	566.2	645.0	15.663 µg/L	15.663 ppb	21:26:39
3	Be 313.107†	-11542.1	-9014.9	-5.4586 µg/L	-5.4586 ppb	21:26:18
3	Cd 226.502†	1196.3	1460.6	-15.924 µg/L	-15.924 ppb	21:26:18
3	Co 228.616†	193.4	211.4	9.6922 µg/L	9.6922 ppb	21:26:39
3	Cr 267.716†	-23.2	21.8	0.3941 µg/L	0.3941 ppb	21:26:39
3	Cu 324.752†	-8442.9	-12213.6	-16.237 µg/L	-16.237 ppb	21:26:18
3	Mn 257.610†	-5234.6	-5490.6	24.680 µg/L	24.680 ppb	21:26:12
3	Mo 202.031†	-201.3	-219.4	-4.2764 µg/L	-4.2764 ppb	21:26:39
3	Ni 231.604†	61.8	-240.2	-6.0921 µg/L	-6.0921 ppb	21:26:39
3	P 214.914†	283.4	297.4	371.05 µg/L	371.05 ppb	21:26:39
3	Pb 220.353†	126.8	45.5	8.0375 µg/L	8.0375 ppb	21:26:39
3	S 181.975 Axial†	36.6	23.3	96.417 µg/L	96.417 ppb	21:26:39
3	Sb 206.836†	40.4	22.6	-22.620 µg/L	-22.620 ppb	21:26:39
3	Se 196.026†	-154.3	-185.8	441.00 µg/L	441.00 ppb	21:26:39
3	SiO2†	1148.6	-213.2	-42.702 µg/L	-42.702 ppb	21:26:39
3	Si 251.611†	-280.9	-604.4	-46.648 µg/L	-46.648 ppb	21:26:39
3	Sn 189.927†	-44.9	-54.4	-16.967 µg/L	-16.967 ppb	21:26:39
3	Ti 334.940†	14850.0	16293.0	5.7807 µg/L	5.7807 ppb	21:26:18
3	Tl 190.801†	-56.3	-40.1	22.746 µg/L	22.746 ppb	21:26:39
3	U 409.014†	144838.3	160294.9	13508 µg/L	13508 ppb	21:26:18
3	V 292.402†	-7286.7	-7968.3	-10.002 µg/L	-10.002 ppb	21:26:18
3	Zn 213.857†	2875.2	2680.1	13.192 µg/L	13.192 ppb	21:26:39

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1902563.7	90.614 %	0.3682			0.41%
Sc RADIAL	56306.6	95.4 %	0.02			0.02%
Y 371.029	1301035.8	89.388 %	0.3503			0.39%
Ag 328.068†	-4565.3	-5.2261 µg/L	0.27555	-5.2261 ppb	0.27555	5.27%
Al 396.153Radial†	693812.4	518690 µg/L	1551.2	518690 ppb	1551.2	0.30%
QC value within limits for Al 396.153Radial Recovery = 103.74%						
As 188.979†	-27.9	-48.639 µg/L	13.7607	-48.639 ppb	13.7607	28.29%
B 249.677†	1166.8	-195.31 µg/L	1.428	-195.31 ppb	1.428	0.73%
Ba 233.527†	630.6	15.312 µg/L	0.3045	15.312 ppb	0.3045	1.99%
Be 313.107†	-9021.0	-5.4624 µg/L	0.04935	-5.4624 ppb	0.04935	0.90%
Ca 317.933Radial†	535638.8	491320 µg/L	1661.8	491320 ppb	1661.8	0.34%
QC value within limits for Ca 317.933Radial Recovery = 98.26%						
Cd 226.502†	1449.6	-16.168 µg/L	1.2808	-16.168 ppb	1.2808	7.92%
Co 228.616†	214.5	9.8373 µg/L	0.13654	9.8373 ppb	0.13654	1.39%
Cr 267.716†	38.5	0.7362 µg/L	0.29954	0.7362 ppb	0.29954	40.69%
Cu 324.752†	-12159.0	-15.913 µg/L	0.3867	-15.913 ppb	0.3867	2.43%
Fe 238.204 Radial†	54260.1	465780 µg/L	970.6	465780 ppb	970.6	0.21%
QC value within limits for Fe 238.204 Radial Recovery = 93.16%						
K 766.490 Radial†	-109.5	-75.310 µg/L	34.4673	-75.310 ppb	34.4673	45.77%
Mg 279.077 IEC†	50889.2	494820 µg/L	1356.9	494820 ppb	1356.9	0.27%

QC value within limits for Mg 279.077 IEC Recovery = 98.96%

Mn 257.610†	-5623.2	24.237 µg/L	0.3846	24.237 ppb	0.3846	1.59%
Mo 202.031†	-210.1	-3.3516 µg/L	0.84803	-3.3516 ppb	0.84803	25.30%
Na 589.592 Radial†	1528064.7	499570 µg/L	1735.8	499570 ppb	1735.8	0.35%

QC value within limits for Na 589.592 Radial Recovery = 99.91%

Ni 231.604†	-237.8	-5.9732 µg/L	0.14058	-5.9732 ppb	0.14058	2.35%
P 214.914†	289.0	353.97 µg/L	36.063	353.97 ppb	36.063	10.19%
Pb 220.353†	54.3	10.180 µg/L	1.9773	10.180 ppb	1.9773	19.42%
S 181.975 Axial†	17.5	72.496 µg/L	23.7669	72.496 ppb	23.7669	32.78%
Sb 206.836†	17.9	-26.797 µg/L	3.9894	-26.797 ppb	3.9894	14.89%
Se 196.026†	-181.2	447.27 µg/L	22.280	447.27 ppb	22.280	4.98%
SiO2†	-236.8	-47.410 µg/L	4.3267	-47.410 ppb	4.3267	9.13%
Si 251.611†	-602.6	-46.507 µg/L	0.5872	-46.507 ppb	0.5872	1.26%
Sn 189.927†	-59.1	-18.983 µg/L	1.9794	-18.983 ppb	1.9794	10.43%
Sr 421.552†	523.3	5.1470 µg/L	0.08328	5.1470 ppb	0.08328	1.62%
Ti 334.940†	16400.2	6.0316 µg/L	0.23335	6.0316 ppb	0.23335	3.87%
Tl 190.801†	-33.0	32.045 µg/L	8.1022	32.045 ppb	8.1022	25.28%
U 409.014†	159527.2	13443 µg/L	66.1	13443 ppb	66.1	0.49%

QC value less than the lower limit for U 409.014 Recovery = 89.62%

V 292.402†	-7880.4	-9.2255 µg/L	1.08567	-9.2255 ppb	1.08567	11.77%
Zn 213.857†	2668.0	12.941 µg/L	0.4861	12.941 ppb	0.4861	3.76%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/20/2010 21:26:48

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57570.1	57570.1	97.5 %		21:27:31
1	Al 396.153Radial†	354.6	372.3	71.948 µg/L	71.948 ppb	21:27:31
1	Ca 317.933Radial†	323.0	138.3	126.90 µg/L	126.90 ppb	21:27:51
1	Fe 238.204 Radial†	20.9	6.1	254.03 µg/L	254.03 ppb	21:27:51
1	K 766.490 Radial†	426369.9	437085.3	300550 µg/L	300550 ppb	21:27:25
1	Mg 279.077 IEC†	3.4	-8.6	85.087 µg/L	85.087 ppb	21:27:51
1	Na 589.592 Radial†	1212.7	770.0	251.74 µg/L	251.74 ppb	21:27:31
1	Sr 421.552†	975982.4	1000923.2	9844.3 µg/L	9844.3 ppb	21:27:25
1	Sc 361.383	2029765.1	2029765.1	96.672 %		21:29:22
1	Y 371.029	1394099.3	1394099.3	95.782 %		21:29:22
1	Ag 328.068†	-7470.5	-7264.5	12.428 µg/L	12.428 ppb	21:29:28
1	As 188.979†	5223.9	5404.0	9707.6 µg/L	9707.6 ppb	21:29:28
1	B 249.677†	116739.4	120432.3	4965.6 µg/L	4965.6 ppb	21:29:22
1	Ba 233.527†	575109.5	594924.2	14597 µg/L	14597 ppb	21:29:22
1	Be 313.107†	4646470.7	4810169.2	2901.2 µg/L	2901.2 ppb	21:29:12
1	Cd 226.502†	368833.4	381665.9	9613.5 µg/L	9613.5 ppb	21:29:22
1	Co 228.616†	198549.2	205381.1	9498.2 µg/L	9498.2 ppb	21:29:22
1	Cr 267.716†	1152796.9	1192525.5	24327 µg/L	24327 ppb	21:29:22
1	Cu 324.752†	2973051.4	3072519.3	20382 µg/L	20382 ppb	21:29:22
1	Mn 257.610†	2913350.0	3013935.2	9593.8 µg/L	9593.8 ppb	21:29:22
1	Mo 202.031†	96941.9	100282.1	10048 µg/L	10048 ppb	21:29:22
1	Ni 231.604†	185082.7	191144.9	9649.0 µg/L	9649.0 ppb	21:29:22
1	P 214.914†	7533.3	7776.4	13467 µg/L	13467 ppb	21:29:28
1	Pb 220.353†	99093.8	102410.0	25193 µg/L	25193 ppb	21:29:22
1	S 181.975 Axial†	12552.0	12966.8	53750 µg/L	53750 ppb	21:29:28
1	Sb 206.836†	11176.0	11538.6	10423 µg/L	10423 ppb	21:29:28
1	Se 196.026†	6976.8	7202.0	9866.5 µg/L	9866.5 ppb	21:29:28
1	SiO2†	482128.7	497240.0	99573 µg/L	99573 ppb	21:29:22
1	Si 251.611†	581728.1	601458.7	46423 µg/L	46423 ppb	21:29:22
1	Sn 189.927†	24049.3	24872.4	10636 µg/L	10636 ppb	21:29:28
1	Ti 334.940†	4256383.8	4402754.3	10014 µg/L	10014 ppb	21:29:12
1	Tl 190.801†	6983.3	7245.9	9779.9 µg/L	9779.9 ppb	21:29:28
1	U 409.014†	901.5	933.3	79.184 µg/L	79.184 ppb	21:29:22
1	V 292.402†	986603.2	1020659.8	10230 µg/L	10230 ppb	21:29:22
1	Zn 213.857†	597835.2	617911.8	14508 µg/L	14508 ppb	21:29:22
2	Sc RADIAL	57078.6	57078.6	96.7 %		21:28:03
2	Al 396.153Radial†	352.3	373.1	76.000 µg/L	76.000 ppb	21:28:03
2	Ca 317.933Radial†	312.2	129.9	119.19 µg/L	119.19 ppb	21:28:23
2	Fe 238.204 Radial†	17.3	2.5	220.00 µg/L	220.00 ppb	21:28:23
2	K 766.490 Radial†	423893.6	438289.0	301380 µg/L	301380 ppb	21:27:57
2	Mg 279.077 IEC†	2.7	-9.3	75.162 µg/L	75.162 ppb	21:28:23
2	Na 589.592 Radial†	1105.5	669.8	218.98 µg/L	218.98 ppb	21:28:03
2	Sr 421.552†	969342.4	1002673.6	9861.5 µg/L	9861.5 ppb	21:27:57
2	Sc 361.383	2028163.4	2028163.4	96.596 %		21:29:47
2	Y 371.029	1393408.8	1393408.8	95.735 %		21:29:47
2	Ag 328.068†	-7099.6	-6886.6	14.057 µg/L	14.057 ppb	21:29:53
2	As 188.979†	5031.0	5208.6	9356.2 µg/L	9356.2 ppb	21:29:53
2	B 249.677†	115607.6	119355.9	4920.7 µg/L	4920.7 ppb	21:29:47
2	Ba 233.527†	566441.9	586420.9	14388 µg/L	14388 ppb	21:29:47
2	Be 313.107†	4612573.7	4778873.4	2882.4 µg/L	2882.4 ppb	21:29:37
2	Cd 226.502†	363199.7	376134.9	9474.2 µg/L	9474.2 ppb	21:29:47
2	Co 228.616†	194824.0	201686.7	9327.1 µg/L	9327.1 ppb	21:29:47
2	Cr 267.716†	1125042.3	1164734.7	23760 µg/L	23760 ppb	21:29:47
2	Cu 324.752†	2916624.0	3016532.2	20010 µg/L	20010 ppb	21:29:47
2	Mn 257.610†	2861035.9	2962157.5	9429.0 µg/L	9429.0 ppb	21:29:47
2	Mo 202.031†	95232.3	98591.5	9878.5 µg/L	9878.5 ppb	21:29:47
2	Ni 231.604†	181755.8	187852.0	9482.8 µg/L	9482.8 ppb	21:29:47
2	P 214.914†	7167.0	7403.3	12755 µg/L	12755 ppb	21:29:53
2	Pb 220.353†	97865.0	101218.9	24900 µg/L	24900 ppb	21:29:47

2	S 181.975 Axial†	12058.1	12465.7	51673 µg/L	51673 ppb	21:29:53
2	Sb 206.836†	10663.3	11016.9	9950.7 µg/L	9950.7 ppb	21:29:53
2	Se 196.026†	6714.4	6936.0	9502.0 µg/L	9502.0 ppb	21:29:53
2	SiO2†	477940.5	493298.1	98783 µg/L	98783 ppb	21:29:47
2	Si 251.611†	576641.4	596667.9	46053 µg/L	46053 ppb	21:29:47
2	Sn 189.927†	22523.4	23312.4	9969.1 µg/L	9969.1 ppb	21:29:53
2	Ti 334.940†	4224180.4	4372893.1	9945.7 µg/L	9945.7 ppb	21:29:37
2	Tl 190.801†	6829.2	7092.1	9573.7 µg/L	9573.7 ppb	21:29:53
2	U 409.014†	845.2	875.8	74.310 µg/L	74.310 ppb	21:29:47
2	V 292.402†	968239.1	1002454.5	10047 µg/L	10047 ppb	21:29:47
2	Zn 213.857†	587539.9	607742.1	14269 µg/L	14269 ppb	21:29:47
3	Sc RADIAL	57562.2	57562.2	97.5 %		21:28:35
3	Al 396.153Radial†	336.7	354.1	87.622 µg/L	87.622 ppb	21:28:35
3	Ca 317.933Radial†	297.4	112.1	102.83 µg/L	102.83 ppb	21:28:55
3	Fe 238.204 Radial†	19.3	4.4	210.74 µg/L	210.74 ppb	21:28:55
3	K 766.490 Radial†	428234.2	439057.3	301900 µg/L	301900 ppb	21:28:29
3	Mg 279.077 IEC†	-0.2	-12.3	25.060 µg/L	25.060 ppb	21:28:55
3	Na 589.592 Radial†	1027.6	580.3	189.73 µg/L	189.73 ppb	21:28:35
3	Sr 421.552†	980045.3	1005227.6	9886.6 µg/L	9886.6 ppb	21:28:29
3	Sc 361.383	2036165.2	2036165.2	96.977 %		21:30:12
3	Y 371.029	1397984.2	1397984.2	96.049 %		21:30:12
3	Ag 328.068†	-6111.9	-5839.3	13.309 µg/L	13.309 ppb	21:30:17
3	As 188.979†	4468.8	4608.3	8278.2 µg/L	8278.2 ppb	21:30:17
3	B 249.677†	105724.6	108694.6	4478.9 µg/L	4478.9 ppb	21:30:12
3	Ba 233.527†	502450.4	518130.2	12713 µg/L	12713 ppb	21:30:12
3	Be 313.107†	4258535.6	4395034.4	2650.9 µg/L	2650.9 ppb	21:30:02
3	Cd 226.502†	321177.4	331325.2	8345.4 µg/L	8345.4 ppb	21:30:12
3	Co 228.616†	170352.2	175659.6	8122.5 µg/L	8122.5 ppb	21:30:12
3	Cr 267.716†	960792.7	990788.3	20212 µg/L	20212 ppb	21:30:12
3	Cu 324.752†	2556467.1	2633283.3	17468 µg/L	17468 ppb	21:30:12
3	Mn 257.610†	2509934.7	2588472.7	8239.5 µg/L	8239.5 ppb	21:30:12
3	Mo 202.031†	83435.6	86039.6	8620.8 µg/L	8620.8 ppb	21:30:12
3	Ni 231.604†	158831.9	163474.1	8252.2 µg/L	8252.2 ppb	21:30:12
3	P 214.914†	6202.0	6379.0	10964 µg/L	10964 ppb	21:30:17
3	Pb 220.353†	88046.6	90696.3	22311 µg/L	22311 ppb	21:30:12
3	S 181.975 Axial†	10674.1	10989.5	45554 µg/L	45554 ppb	21:30:17
3	Sb 206.836†	9290.3	9557.8	8638.2 µg/L	8638.2 ppb	21:30:17
3	Se 196.026†	5942.3	6112.6	8374.1 µg/L	8374.1 ppb	21:30:17
3	SiO2†	432835.4	444842.6	89080 µg/L	89080 ppb	21:30:12
3	Si 251.611†	522227.7	538212.2	41541 µg/L	41541 ppb	21:30:12
3	Sn 189.927†	19231.9	19826.6	8478.5 µg/L	8478.5 ppb	21:30:17
3	Ti 334.940†	3898845.7	4020232.3	9143.6 µg/L	9143.6 ppb	21:30:02
3	Tl 190.801†	6234.2	6450.8	8708.6 µg/L	8708.6 ppb	21:30:17
3	U 409.014†	735.3	758.9	64.395 µg/L	64.395 ppb	21:30:12
3	V 292.402†	844854.5	871284.9	8731.9 µg/L	8731.9 ppb	21:30:12
3	Zn 213.857†	517334.3	532957.9	12514 µg/L	12514 ppb	21:30:12

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2031364.6	96.749 %	0.2017			0.21%
Sc RADIAL	57403.6	97.2 %	0.48			0.49%
Y 371.029	1395164.1	95.856 %	0.1695			0.18%
Ag 328.068†	-6663.5	13.265 µg/L	0.8152	13.265 ppb	0.8152	6.15%
Al 396.153Radial†	366.5	78.523 µg/L	8.1361	78.523 ppb	8.1361	10.36%
As 188.979†	5073.6	9114.0 µg/L	744.83	9114.0 ppb	744.83	8.17%
QC value within limits for As 188.979 Recovery = 91.14%						
B 249.677†	116160.9	4788.4 µg/L	269.00	4788.4 ppb	269.00	5.62%
QC value within limits for B 249.677 Recovery = 95.77%						
Ba 233.527†	566491.8	13899 µg/L	1033.1	13899 ppb	1033.1	7.43%
QC value within limits for Ba 233.527 Recovery = 92.66%						
Be 313.107†	4661359.0	2811.5 µg/L	139.43	2811.5 ppb	139.43	4.96%
QC value within limits for Be 313.107 Recovery = 93.72%						
Ca 317.933Radial†	126.8	116.31 µg/L	12.291	116.31 ppb	12.291	10.57%
Cd 226.502†	363042.0	9144.4 µg/L	695.42	9144.4 ppb	695.42	7.60%
QC value within limits for Cd 226.502 Recovery = 91.44%						
Co 228.616†	194242.5	8982.6 µg/L	749.77	8982.6 ppb	749.77	8.35%
QC value less than the lower limit for Co 228.616 Recovery = 89.83%						
Cr 267.716†	1116016.2	22766 µg/L	2230.3	22766 ppb	2230.3	9.80%
QC value within limits for Cr 267.716 Recovery = 91.06%						

Cu 324.752†	2907444.9	19287 µg/L	1585.9	19287 ppb	1585.9	8.22%
QC value within limits for Cu 324.752 Recovery = 96.43%						
Fe 238.204 Radial†	4.4	228.26 µg/L	22.796	228.26 ppb	22.796	9.99%
K 766.490 Radial†	438143.9	301280 µg/L	683.5	301280 ppb	683.5	0.23%
QC value within limits for K 766.490 Radial Recovery = 100.43%						
Mg 279.077 IEC†	-10.1	61.770 µg/L	32.1767	61.770 ppb	32.1767	52.09%
Mn 257.610†	2854855.1	9087.5 µg/L	738.94	9087.5 ppb	738.94	8.13%
QC value within limits for Mn 257.610 Recovery = 90.87%						
Mo 202.031†	94971.1	9515.7 µg/L	779.62	9515.7 ppb	779.62	8.19%
QC value within limits for Mo 202.031 Recovery = 95.16%						
Na 589.592 Radial†	673.4	220.15 µg/L	31.021	220.15 ppb	31.021	14.09%
Ni 231.604†	180823.7	9128.0 µg/L	763.01	9128.0 ppb	763.01	8.36%
QC value within limits for Ni 231.604 Recovery = 91.28%						
P 214.914†	7186.3	12395 µg/L	1289.4	12395 ppb	1289.4	10.40%
QC value less than the lower limit for P 214.914 Recovery = 82.64%						
Pb 220.353†	98108.4	24135 µg/L	1585.8	24135 ppb	1585.8	6.57%
QC value within limits for Pb 220.353 Recovery = 96.54%						
S 181.975 Axial†	12140.7	50326 µg/L	4261.0	50326 ppb	4261.0	8.47%
QC value within limits for S 181.975 Axial Recovery = 100.65%						
Sb 206.836†	10704.4	9670.7 µg/L	924.95	9670.7 ppb	924.95	9.56%
QC value within limits for Sb 206.836 Recovery = 96.71%						
Se 196.026†	6750.2	9247.5 µg/L	778.07	9247.5 ppb	778.07	8.41%
QC value within limits for Se 196.026 Recovery = 92.48%						
SiO2†	478460.3	95812 µg/L	5843.4	95812 ppb	5843.4	6.10%
QC value less than the lower limit for SiO2 Recovery = 89.54%						
Si 251.611†	578779.6	44672 µg/L	2717.9	44672 ppb	2717.9	6.08%
QC value less than the lower limit for Si 251.611 Recovery = 89.34%						
Sn 189.927†	22670.5	9694.6 µg/L	1104.76	9694.6 ppb	1104.76	11.40%
QC value within limits for Sn 189.927 Recovery = 96.95%						
Sr 421.552†	1002941.5	9864.1 µg/L	21.29	9864.1 ppb	21.29	0.22%
QC value within limits for Sr 421.552 Recovery = 98.64%						
Ti 334.940†	4265293.2	9701.0 µg/L	483.88	9701.0 ppb	483.88	4.99%
QC value within limits for Ti 334.940 Recovery = 97.01%						
Tl 190.801†	6929.6	9354.1 µg/L	568.44	9354.1 ppb	568.44	6.08%
QC value within limits for Tl 190.801 Recovery = 93.54%						
U 409.014†	856.0	72.629 µg/L	7.5363	72.629 ppb	7.5363	10.38%
V 292.402†	964799.7	9669.7 µg/L	817.32	9669.7 ppb	817.32	8.45%
QC value within limits for V 292.402 Recovery = 96.70%						
Zn 213.857†	586203.9	13764 µg/L	1089.0	13764 ppb	1089.0	7.91%
QC value within limits for Zn 213.857 Recovery = 91.76%						
QC Failed. Continue with analysis.						

Sequence No.: 13
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/20/2010 21:30:27
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58258.0	58258.0	98.7 %		21:31:05
1	Al 396.153Radial†	6918.0	7020.0	5237.2 µg/L	5237.2 ppb	21:31:26
1	Ca 317.933Radial†	5814.9	5700.3	5228.7 µg/L	5228.7 ppb	21:31:26
1	Fe 238.204 Radial†	617.1	610.0	5247.5 µg/L	5247.5 ppb	21:31:26
1	K 766.490 Radial†	7653.7	7558.5	5197.4 µg/L	5197.4 ppb	21:31:05
1	Mg 279.077 IEC†	556.5	552.0	5375.6 µg/L	5375.6 ppb	21:31:26
1	Na 589.592 Radial†	31918.2	31874.9	10421 µg/L	10421 ppb	21:31:05
1	Sr 421.552†	49932.5	50564.6	497.31 µg/L	497.31 ppb	21:31:05
1	Sc 361.383	2055342.0	2055342.0	97.891 %		21:32:29
1	Y 371.029	1419555.7	1419555.7	97.531 %		21:32:29
1	Ag 328.068†	65831.4	67713.1	508.83 µg/L	508.83 ppb	21:32:35
1	As 188.979†	283.8	290.2	521.31 µg/L	521.31 ppb	21:32:55
1	B 249.677†	12674.3	12621.9	514.45 µg/L	514.45 ppb	21:32:35
1	Ba 233.527†	20512.3	20972.7	514.87 µg/L	514.87 ppb	21:32:35
1	Be 313.107†	822161.1	843637.0	509.31 µg/L	509.31 ppb	21:32:29
1	Cd 226.502†	19793.2	20356.3	512.15 µg/L	512.15 ppb	21:32:35
1	Co 228.616†	10945.4	11178.7	517.03 µg/L	517.03 ppb	21:32:35
1	Cr 267.716†	24904.8	25488.8	520.14 µg/L	520.14 ppb	21:32:35
1	Cu 324.752†	79044.9	77878.5	517.33 µg/L	517.33 ppb	21:32:35
1	Mn 257.610†	158354.9	162069.9	516.37 µg/L	516.37 ppb	21:32:29
1	Mo 202.031†	5194.6	5309.9	532.23 µg/L	532.23 ppb	21:32:55
1	Ni 231.604†	10266.4	10179.0	513.89 µg/L	513.89 ppb	21:32:35
1	P 214.914†	1294.8	1306.5	2548.2 µg/L	2548.2 ppb	21:32:55
1	Pb 220.353†	2218.3	2171.4	534.48 µg/L	534.48 ppb	21:32:55
1	S 181.975 Axial†	265.9	254.3	1054.3 µg/L	1054.3 ppb	21:32:55
1	Sb 206.836†	579.1	569.4	522.22 µg/L	522.22 ppb	21:32:55
1	Se 196.026†	398.8	392.4	545.68 µg/L	545.68 ppb	21:32:55
1	SiO2†	28465.2	27594.2	5525.8 µg/L	5525.8 ppb	21:32:35
1	Si 251.611†	33015.0	33432.9	2580.5 µg/L	2580.5 ppb	21:32:35
1	Sn 189.927†	1221.3	1242.9	531.57 µg/L	531.57 ppb	21:32:55
1	Ti 334.940†	221072.4	225694.7	512.98 µg/L	512.98 ppb	21:32:29
1	Tl 190.801†	353.3	383.1	518.22 µg/L	518.22 ppb	21:32:55
1	U 409.014†	5936.1	6064.7	513.62 µg/L	513.62 ppb	21:32:35
1	V 292.402†	50601.0	51787.4	518.73 µg/L	518.73 ppb	21:32:35
1	Zn 213.857†	22201.9	22178.4	519.77 µg/L	519.77 ppb	21:32:35
2	Sc RADIAL	58528.4	58528.4	99.1 %		21:31:31
2	Al 396.153Radial†	6911.1	6980.7	5207.8 µg/L	5207.8 ppb	21:31:52
2	Ca 317.933Radial†	5816.8	5675.0	5205.5 µg/L	5205.5 ppb	21:31:52
2	Fe 238.204 Radial†	621.0	611.1	5256.9 µg/L	5256.9 ppb	21:31:52
2	K 766.490 Radial†	7645.9	7514.9	5167.3 µg/L	5167.3 ppb	21:31:31
2	Mg 279.077 IEC†	562.3	555.2	5406.9 µg/L	5406.9 ppb	21:31:52
2	Na 589.592 Radial†	32154.9	31964.3	10450 µg/L	10450 ppb	21:31:31
2	Sr 421.552†	50256.5	50657.6	498.23 µg/L	498.23 ppb	21:31:31
2	Sc 361.383	2049002.3	2049002.3	97.589 %		21:33:02
2	Y 371.029	1415800.4	1415800.4	97.273 %		21:33:02
2	Ag 328.068†	66395.3	68499.1	514.72 µg/L	514.72 ppb	21:33:08
2	As 188.979†	281.3	288.5	518.30 µg/L	518.30 ppb	21:33:29
2	B 249.677†	12746.7	12736.2	519.12 µg/L	519.12 ppb	21:33:08
2	Ba 233.527†	20498.4	21023.3	516.12 µg/L	516.12 ppb	21:33:08
2	Be 313.107†	822769.6	846859.1	511.26 µg/L	511.26 ppb	21:33:02
2	Cd 226.502†	19891.6	20519.7	516.26 µg/L	516.26 ppb	21:33:08
2	Co 228.616†	10978.0	11246.7	520.17 µg/L	520.17 ppb	21:33:08
2	Cr 267.716†	24873.7	25535.7	521.10 µg/L	521.10 ppb	21:33:08
2	Cu 324.752†	79277.4	78366.6	520.57 µg/L	520.57 ppb	21:33:08
2	Mn 257.610†	158426.5	162643.8	518.20 µg/L	518.20 ppb	21:33:02
2	Mo 202.031†	5139.8	5270.1	528.25 µg/L	528.25 ppb	21:33:29
2	Ni 231.604†	10369.8	10317.4	520.88 µg/L	520.88 ppb	21:33:08
2	P 214.914†	1278.0	1293.4	2521.8 µg/L	2521.8 ppb	21:33:29
2	Pb 220.353†	2203.0	2162.6	532.31 µg/L	532.31 ppb	21:33:29

2	S 181.975 Axial†	260.6	249.8	1035.3 µg/L	1035.3 ppb	21:33:29
2	Sb 206.836†	590.6	583.1	534.60 µg/L	534.60 ppb	21:33:29
2	Se 196.026†	385.9	380.5	529.28 µg/L	529.28 ppb	21:33:29
2	SiO2†	28603.4	27825.8	5572.1 µg/L	5572.1 ppb	21:33:08
2	Si 251.611†	33225.8	33753.3	2605.2 µg/L	2605.2 ppb	21:33:08
2	Sn 189.927†	1218.5	1243.9	531.99 µg/L	531.99 ppb	21:33:29
2	Ti 334.940†	221391.6	226720.5	515.31 µg/L	515.31 ppb	21:33:02
2	Tl 190.801†	360.6	391.8	529.83 µg/L	529.83 ppb	21:33:29
2	U 409.014†	6004.7	6153.9	521.19 µg/L	521.19 ppb	21:33:08
2	V 292.402†	50812.9	52164.5	522.44 µg/L	522.44 ppb	21:33:08
2	Zn 213.857†	22254.7	22302.7	522.67 µg/L	522.67 ppb	21:33:08
3	Sc RADIAL	58868.7	58868.7	99.7 %		21:31:57
3	Al 396.153Radial†	6921.4	6950.7	5187.3 µg/L	5187.3 ppb	21:32:17
3	Ca 317.933Radial†	5823.1	5647.5	5180.2 µg/L	5180.2 ppb	21:32:17
3	Fe 238.204 Radial†	618.4	604.9	5202.2 µg/L	5202.2 ppb	21:32:17
3	K 766.490 Radial†	7742.9	7567.5	5203.6 µg/L	5203.6 ppb	21:31:57
3	Mg 279.077 IEC†	559.2	548.8	5343.2 µg/L	5343.2 ppb	21:32:17
3	Na 589.592 Radial†	32419.4	32042.1	10475 µg/L	10475 ppb	21:31:57
3	Sr 421.552†	50911.5	51021.5	501.81 µg/L	501.81 ppb	21:31:57
3	Sc 361.383	2043315.4	2043315.4	97.318 %		21:33:36
3	Y 371.029	1411646.9	1411646.9	96.988 %		21:33:36
3	Ag 328.068†	61998.6	64170.5	482.04 µg/L	482.04 ppb	21:33:41
3	As 188.979†	234.6	241.3	433.58 µg/L	433.58 ppb	21:34:02
3	B 249.677†	11861.3	11862.8	483.31 µg/L	483.31 ppb	21:33:41
3	Ba 233.527†	18520.3	19049.1	467.64 µg/L	467.64 ppb	21:33:41
3	Be 313.107†	758581.3	783248.1	472.86 µg/L	472.86 ppb	21:33:36
3	Cd 226.502†	17923.1	18553.7	466.74 µg/L	466.74 ppb	21:33:41
3	Co 228.616†	9807.5	10075.2	465.93 µg/L	465.93 ppb	21:33:41
3	Cr 267.716†	21574.8	22216.8	453.38 µg/L	453.38 ppb	21:33:41
3	Cu 324.752†	71081.7	70171.1	466.20 µg/L	466.20 ppb	21:33:41
3	Mn 257.610†	146406.7	150744.5	480.32 µg/L	480.32 ppb	21:33:36
3	Mo 202.031†	4257.5	4378.1	438.87 µg/L	438.87 ppb	21:34:02
3	Ni 231.604†	9243.2	9189.3	463.93 µg/L	463.93 ppb	21:33:41
3	P 214.914†	1085.3	1099.0	2139.6 µg/L	2139.6 ppb	21:34:02
3	Pb 220.353†	1894.5	1852.0	455.77 µg/L	455.77 ppb	21:34:02
3	S 181.975 Axial†	233.0	222.1	920.81 µg/L	920.81 ppb	21:34:02
3	Sb 206.836†	504.5	496.2	454.65 µg/L	454.65 ppb	21:34:02
3	Se 196.026†	333.2	327.4	456.46 µg/L	456.46 ppb	21:34:02
3	SiO2†	26341.3	25582.9	5123.0 µg/L	5123.0 ppb	21:33:41
3	Si 251.611†	30488.1	31034.9	2395.4 µg/L	2395.4 ppb	21:33:41
3	Sn 189.927†	988.1	1010.6	432.21 µg/L	432.21 ppb	21:34:02
3	Ti 334.940†	202773.8	208221.0	473.24 µg/L	473.24 ppb	21:33:36
3	Tl 190.801†	315.1	346.0	468.23 µg/L	468.23 ppb	21:34:02
3	U 409.014†	5246.0	5391.4	456.49 µg/L	456.49 ppb	21:33:41
3	V 292.402†	45024.2	46361.1	464.12 µg/L	464.12 ppb	21:33:41
3	Zn 213.857†	19886.7	19932.9	467.08 µg/L	467.08 ppb	21:33:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2049219.9	97.599 %	0.2865			0.29%
Sc RADIAL	58551.7	99.2 %	0.52			0.52%
Y 371.029	1415667.7	97.264 %	0.2718			0.28%
Ag 328.068†	66794.3	501.86 µg/L	17.414	501.86 ppb	17.414	3.47%
QC value within limits for Ag 328.068 Recovery = 100.37%						
Al 396.153Radial†	6983.8	5210.8 µg/L	25.08	5210.8 ppb	25.08	0.48%
QC value within limits for Al 396.153Radial Recovery = 104.22%						
As 188.979†	273.3	491.06 µg/L	49.809	491.06 ppb	49.809	10.14%
QC value within limits for As 188.979 Recovery = 98.21%						
B 249.677†	12407.0	505.63 µg/L	19.468	505.63 ppb	19.468	3.85%
QC value within limits for B 249.677 Recovery = 101.13%						
Ba 233.527†	20348.4	499.54 µg/L	27.638	499.54 ppb	27.638	5.53%
QC value within limits for Ba 233.527 Recovery = 99.91%						
Be 313.107†	824581.4	497.81 µg/L	21.631	497.81 ppb	21.631	4.35%
QC value within limits for Be 313.107 Recovery = 99.56%						
Ca 317.933Radial†	5674.3	5204.8 µg/L	24.26	5204.8 ppb	24.26	0.47%
QC value within limits for Ca 317.933Radial Recovery = 104.10%						
Cd 226.502†	19809.9	498.39 µg/L	27.480	498.39 ppb	27.480	5.51%
QC value within limits for Cd 226.502 Recovery = 99.68%						
Co 228.616†	10833.5	501.05 µg/L	30.448	501.05 ppb	30.448	6.08%

QC value within limits for Co 228.616 Recovery = 100.21%							
Cr	267.716†	24413.8	498.21 µg/L	38.826	498.21 ppb	38.826	7.79%
QC value within limits for Cr 267.716 Recovery = 99.64%							
Cu	324.752†	75472.1	501.37 µg/L	30.500	501.37 ppb	30.500	6.08%
QC value within limits for Cu 324.752 Recovery = 100.27%							
Fe	238.204 Radial†	608.7	5235.5 µg/L	29.27	5235.5 ppb	29.27	0.56%
QC value within limits for Fe 238.204 Radial Recovery = 104.71%							
K	766.490 Radial†	7547.0	5189.4 µg/L	19.38	5189.4 ppb	19.38	0.37%
QC value within limits for K 766.490 Radial Recovery = 103.79%							
Mg	279.077 IEC†	552.0	5375.2 µg/L	31.85	5375.2 ppb	31.85	0.59%
QC value within limits for Mg 279.077 IEC Recovery = 107.50%							
Mn	257.610†	158486.1	504.97 µg/L	21.363	504.97 ppb	21.363	4.23%
QC value within limits for Mn 257.610 Recovery = 100.99%							
Mo	202.031†	4986.1	499.78 µg/L	52.790	499.78 ppb	52.790	10.56%
QC value within limits for Mo 202.031 Recovery = 99.96%							
Na	589.592 Radial†	31960.4	10449 µg/L	27.3	10449 ppb	27.3	0.26%
QC value within limits for Na 589.592 Radial Recovery = 104.49%							
Ni	231.604†	9895.2	499.57 µg/L	31.060	499.57 ppb	31.060	6.22%
QC value within limits for Ni 231.604 Recovery = 99.91%							
P	214.914†	1233.0	2403.2 µg/L	228.67	2403.2 ppb	228.67	9.52%
QC value within limits for P 214.914 Recovery = 96.13%							
Pb	220.353†	2062.0	507.52 µg/L	44.832	507.52 ppb	44.832	8.83%
QC value within limits for Pb 220.353 Recovery = 101.50%							
S	181.975 Axial†	242.1	1003.5 µg/L	72.21	1003.5 ppb	72.21	7.20%
QC value within limits for S 181.975 Axial Recovery = 100.35%							
Sb	206.836†	549.6	503.82 µg/L	43.033	503.82 ppb	43.033	8.54%
QC value within limits for Sb 206.836 Recovery = 100.76%							
Se	196.026†	366.7	510.47 µg/L	47.489	510.47 ppb	47.489	9.30%
QC value within limits for Se 196.026 Recovery = 102.09%							
SiO2†		27001.0	5407.0 µg/L	247.02	5407.0 ppb	247.02	4.57%
QC value within limits for SiO2 Recovery = 101.11%							
Si	251.611†	32740.4	2527.0 µg/L	114.67	2527.0 ppb	114.67	4.54%
QC value within limits for Si 251.611 Recovery = 101.08%							
Sn	189.927†	1165.8	498.59 µg/L	57.483	498.59 ppb	57.483	11.53%
QC value within limits for Sn 189.927 Recovery = 99.72%							
Sr	421.552†	50747.9	499.12 µg/L	2.375	499.12 ppb	2.375	0.48%
QC value within limits for Sr 421.552 Recovery = 99.82%							
Ti	334.940†	220212.1	500.51 µg/L	23.646	500.51 ppb	23.646	4.72%
QC value within limits for Ti 334.940 Recovery = 100.10%							
Tl	190.801†	373.6	505.43 µg/L	32.736	505.43 ppb	32.736	6.48%
QC value within limits for Tl 190.801 Recovery = 101.09%							
U	409.014†	5870.0	497.10 µg/L	35.374	497.10 ppb	35.374	7.12%
QC value within limits for U 409.014 Recovery = 99.42%							
V	292.402†	50104.4	501.77 µg/L	32.656	501.77 ppb	32.656	6.51%
QC value within limits for V 292.402 Recovery = 100.35%							
Zn	213.857†	21471.3	503.17 µg/L	31.289	503.17 ppb	31.289	6.22%
QC value within limits for Zn 213.857 Recovery = 100.63%							

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 21:34:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57134.4	57134.4	96.8 %		21:34:44
1	Al 396.153Radial†	12.3	21.4	15.996 µg/L	15.996 ppb	21:34:44
1	Ca 317.933Radial†	226.6	41.2	37.828 µg/L	37.828 ppb	21:35:04
1	Fe 238.204 Radial†	16.2	1.4	11.796 µg/L	11.796 ppb	21:35:04
1	K 766.490 Radial†	325.0	137.5	94.513 µg/L	94.513 ppb	21:34:44
1	Mg 279.077 IEC†	13.3	1.6	15.841 µg/L	15.841 ppb	21:35:04
1	Na 589.592 Radial†	736.3	287.2	93.896 µg/L	93.896 ppb	21:34:44
1	Sr 421.552†	116.9	79.5	0.7816 µg/L	0.7816 ppb	21:34:44
1	Sc 361.383	2053403.3	2053403.3	97.798 %		21:36:06
1	Y 371.029	1422840.1	1422840.1	97.757 %		21:36:06
1	Ag 328.068†	-371.1	83.7	0.6280 µg/L	0.6280 ppb	21:36:12
1	As 188.979†	1.0	1.3	2.3692 µg/L	2.3692 ppb	21:36:33
1	B 249.677†	518.8	205.0	8.3831 µg/L	8.3831 ppb	21:36:33
1	Ba 233.527†	8.6	27.1	0.6651 µg/L	0.6651 ppb	21:36:33
1	Be 313.107†	-3351.1	332.3	0.2005 µg/L	0.2005 ppb	21:36:12
1	Cd 226.502†	-120.3	13.6	0.3419 µg/L	0.3419 ppb	21:36:33
1	Co 228.616†	13.8	11.5	0.5347 µg/L	0.5347 ppb	21:36:33
1	Cr 267.716†	20.8	68.7	1.4014 µg/L	1.4014 ppb	21:36:12
1	Cu 324.752†	3165.9	367.4	2.4389 µg/L	2.4389 ppb	21:36:12
1	Mn 257.610†	-152.9	146.3	0.4665 µg/L	0.4665 ppb	21:36:33
1	Mo 202.031†	9.9	13.5	1.3512 µg/L	1.3512 ppb	21:36:33
1	Ni 231.604†	324.4	23.0	1.1634 µg/L	1.1634 ppb	21:36:33
1	P 214.914†	16.0	0.2	0.1011 µg/L	0.1011 ppb	21:36:33
1	Pb 220.353†	124.8	32.8	8.0675 µg/L	8.0675 ppb	21:36:33
1	S 181.975 Axial†	18.1	1.2	4.8561 µg/L	4.8561 ppb	21:36:33
1	Sb 206.836†	24.5	3.0	2.7028 µg/L	2.7028 ppb	21:36:33
1	Se 196.026†	24.5	10.1	13.821 µg/L	13.821 ppb	21:36:33
1	SiO2†	1544.0	94.4	18.894 µg/L	18.894 ppb	21:36:12
1	Si 251.611†	374.6	89.6	6.9122 µg/L	6.9122 ppb	21:36:33
1	Sn 189.927†	7.1	2.6	1.0956 µg/L	1.0956 ppb	21:36:33
1	Ti 334.940†	371.2	237.9	0.5404 µg/L	0.5404 ppb	21:36:12
1	Tl 190.801†	-25.6	-4.0	-5.3134 µg/L	-5.3134 ppb	21:36:33
1	U 409.014†	9.7	10.7	0.9049 µg/L	0.9049 ppb	21:36:12
1	V 292.402†	-51.3	43.5	0.4466 µg/L	0.4466 ppb	21:36:12
1	Zn 213.857†	599.8	111.4	2.6177 µg/L	2.6177 ppb	21:36:33
2	Sc RADIAL	57584.4	57584.4	97.5 %		21:35:10
2	Al 396.153Radial†	5.4	14.3	10.634 µg/L	10.634 ppb	21:35:10
2	Ca 317.933Radial†	220.2	32.8	30.087 µg/L	30.087 ppb	21:35:30
2	Fe 238.204 Radial†	17.5	2.6	21.985 µg/L	21.985 ppb	21:35:30
2	K 766.490 Radial†	218.9	26.1	17.917 µg/L	17.917 ppb	21:35:10
2	Mg 279.077 IEC†	14.6	2.9	27.793 µg/L	27.793 ppb	21:35:30
2	Na 589.592 Radial†	662.7	205.7	67.259 µg/L	67.259 ppb	21:35:10
2	Sr 421.552†	77.0	37.6	0.3694 µg/L	0.3694 ppb	21:35:10
2	Sc 361.383	2045860.3	2045860.3	97.439 %		21:36:38
2	Y 371.029	1417907.7	1417907.7	97.418 %		21:36:38
2	Ag 328.068†	-375.1	78.2	0.5885 µg/L	0.5885 ppb	21:36:44
2	As 188.979†	4.9	5.3	9.5965 µg/L	9.5965 ppb	21:37:05
2	B 249.677†	501.2	188.9	7.7183 µg/L	7.7183 ppb	21:37:05
2	Ba 233.527†	10.7	29.3	0.7188 µg/L	0.7188 ppb	21:37:05
2	Be 313.107†	-3374.8	295.3	0.1781 µg/L	0.1781 ppb	21:36:44
2	Cd 226.502†	-126.7	6.5	0.1622 µg/L	0.1622 ppb	21:37:05
2	Co 228.616†	12.3	10.1	0.4656 µg/L	0.4656 ppb	21:37:05
2	Cr 267.716†	18.2	66.1	1.3478 µg/L	1.3478 ppb	21:36:44
2	Cu 324.752†	3217.3	432.2	2.8698 µg/L	2.8698 ppb	21:36:44
2	Mn 257.610†	-152.8	145.8	0.4659 µg/L	0.4659 ppb	21:37:05
2	Mo 202.031†	5.9	9.4	0.9444 µg/L	0.9444 ppb	21:37:05
2	Ni 231.604†	307.6	7.0	0.3538 µg/L	0.3538 ppb	21:37:05
2	P 214.914†	10.7	-5.3	-10.805 µg/L	-10.805 ppb	21:37:05
2	Pb 220.353†	109.4	17.5	4.3032 µg/L	4.3032 ppb	21:37:05

2	S 181.975 Axial†	16.6	-0.3	-1.1655 µg/L	-1.1655 ppb	21:37:05
2	Sb 206.836†	26.1	4.6	4.2202 µg/L	4.2202 ppb	21:37:05
2	Se 196.026†	17.6	3.0	4.1962 µg/L	4.1962 ppb	21:37:05
2	SiO2†	1544.4	100.6	20.146 µg/L	20.146 ppb	21:36:44
2	Si 251.611†	389.3	106.0	8.1841 µg/L	8.1841 ppb	21:37:05
2	Sn 189.927†	5.7	1.2	0.5057 µg/L	0.5057 ppb	21:37:05
2	Ti 334.940†	442.3	312.3	0.7085 µg/L	0.7085 ppb	21:36:44
2	Tl 190.801†	-22.1	-0.4	-0.5366 µg/L	-0.5366 ppb	21:37:05
2	U 409.014†	77.1	79.9	6.7734 µg/L	6.7734 ppb	21:36:44
2	V 292.402†	-36.4	58.6	0.5998 µg/L	0.5998 ppb	21:36:44
2	Zn 213.857†	604.7	118.6	2.7914 µg/L	2.7914 ppb	21:37:05
3	Sc RADIAL	57348.8	57348.8	97.1 %		21:35:36
3	Al 396.153Radial†	9.1	18.1	13.478 µg/L	13.478 ppb	21:35:36
3	Ca 317.933Radial†	222.5	36.1	33.128 µg/L	33.128 ppb	21:35:56
3	Fe 238.204 Radial†	17.6	2.7	23.399 µg/L	23.399 ppb	21:35:56
3	K 766.490 Radial†	272.0	81.6	56.131 µg/L	56.131 ppb	21:35:36
3	Mg 279.077 IEC†	15.3	3.6	35.472 µg/L	35.472 ppb	21:35:56
3	Na 589.592 Radial†	697.9	244.8	80.020 µg/L	80.020 ppb	21:35:36
3	Sr 421.552†	63.5	24.0	0.2364 µg/L	0.2364 ppb	21:35:36
3	Sc 361.383	2060878.4	2060878.4	98.154 %		21:37:11
3	Y 371.029	1428093.8	1428093.8	98.118 %		21:37:11
3	Ag 328.068†	-406.7	48.8	0.3697 µg/L	0.3697 ppb	21:37:16
3	As 188.979†	1.3	1.6	2.9013 µg/L	2.9013 ppb	21:37:37
3	B 249.677†	493.4	177.2	7.2381 µg/L	7.2381 ppb	21:37:37
3	Ba 233.527†	24.8	43.6	1.0692 µg/L	1.0692 ppb	21:37:37
3	Be 313.107†	-3499.3	193.8	0.1168 µg/L	0.1168 ppb	21:37:16
3	Cd 226.502†	-123.2	11.1	0.2773 µg/L	0.2773 ppb	21:37:37
3	Co 228.616†	10.7	8.3	0.3869 µg/L	0.3869 ppb	21:37:37
3	Cr 267.716†	-11.0	36.2	0.7393 µg/L	0.7393 ppb	21:37:16
3	Cu 324.752†	3123.2	312.2	2.0741 µg/L	2.0741 ppb	21:37:16
3	Mn 257.610†	-179.2	120.0	0.3838 µg/L	0.3838 ppb	21:37:37
3	Mo 202.031†	14.4	18.0	1.8034 µg/L	1.8034 ppb	21:37:37
3	Ni 231.604†	318.5	15.8	0.8000 µg/L	0.8000 ppb	21:37:37
3	P 214.914†	11.5	-4.5	-9.0965 µg/L	-9.0965 ppb	21:37:37
3	Pb 220.353†	118.2	25.6	6.2932 µg/L	6.2932 ppb	21:37:37
3	S 181.975 Axial†	15.5	-1.5	-6.0762 µg/L	-6.0762 ppb	21:37:37
3	Sb 206.836†	24.7	3.1	2.8299 µg/L	2.8299 ppb	21:37:37
3	Se 196.026†	19.1	4.5	6.1770 µg/L	6.1770 ppb	21:37:37
3	SiO2†	1494.4	38.1	7.6305 µg/L	7.6305 ppb	21:37:16
3	Si 251.611†	382.0	95.7	7.3845 µg/L	7.3845 ppb	21:37:37
3	Sn 189.927†	8.3	3.8	1.6138 µg/L	1.6138 ppb	21:37:37
3	Ti 334.940†	379.8	245.3	0.5555 µg/L	0.5555 ppb	21:37:16
3	Tl 190.801†	-21.3	0.6	0.7731 µg/L	0.7731 ppb	21:37:37
3	U 409.014†	46.7	48.4	4.0995 µg/L	4.0995 ppb	21:37:16
3	V 292.402†	-29.8	65.7	0.6722 µg/L	0.6722 ppb	21:37:16
3	Zn 213.857†	587.7	96.8	2.2748 µg/L	2.2748 ppb	21:37:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2053380.7	97.797 %	0.3576			0.37%
Sc RADIAL	57355.9	97.1 %	0.38			0.39%
Y 371.029	1422947.2	97.764 %	0.3500			0.36%
Ag 328.068†	70.2	0.5287 µg/L	0.13915	0.5287 ppb	0.13915	26.32%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	17.9	13.369 µg/L	2.6826	13.369 ppb	2.6826	20.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.8	4.9557 µg/L	4.02788	4.9557 ppb	4.02788	81.28%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	190.4	7.7798 µg/L	0.57496	7.7798 ppb	0.57496	7.39%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	33.3	0.8177 µg/L	0.21948	0.8177 ppb	0.21948	26.84%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	273.8	0.1651 µg/L	0.04331	0.1651 ppb	0.04331	26.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	36.7	33.681 µg/L	3.8999	33.681 ppb	3.8999	11.58%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.4	0.2605 µg/L	0.09104	0.2605 ppb	0.09104	34.95%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	10.0	0.4624 µg/L	0.07393	0.4624 ppb	0.07393	15.99%

QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	57.0	1.1628 µg/L	0.36776	1.1628 ppb	0.36776	31.63%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	370.6	2.4609 µg/L	0.39832	2.4609 ppb	0.39832	16.19%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	2.2	19.060 µg/L	6.3305	19.060 ppb	6.3305	33.21%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	81.7	56.187 µg/L	38.2981	56.187 ppb	38.2981	68.16%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	2.7	26.369 µg/L	9.8923	26.369 ppb	9.8923	37.52%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	137.4	0.4387 µg/L	0.04758	0.4387 ppb	0.04758	10.84%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	13.6	1.3663 µg/L	0.42970	1.3663 ppb	0.42970	31.45%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	245.9	80.392 µg/L	13.3222	80.392 ppb	13.3222	16.57%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	15.3	0.7724 µg/L	0.40552	0.7724 ppb	0.40552	52.50%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-3.2	-6.6003 µg/L	5.86613	-6.6003 ppb	5.86613	88.88%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	25.3	6.2213 µg/L	1.88319	6.2213 ppb	1.88319	30.27%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	-0.2	-0.7952 µg/L	5.47556	-0.7952 ppb	5.47556	688.55%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	3.6	3.2510 µg/L	0.84177	3.2510 ppb	0.84177	25.89%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	5.9	8.0648 µg/L	5.08269	8.0648 ppb	5.08269	63.02%		
QC value within limits for Se 196.026 Recovery = Not calculated									
SiO2†		77.7	15.557 µg/L	6.8931	15.557 ppb	6.8931	44.31%		
QC value within limits for SiO2 Recovery = Not calculated									
Si	251.611†	97.1	7.4936 µg/L	0.64290	7.4936 ppb	0.64290	8.58%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	2.5	1.0717 µg/L	0.55441	1.0717 ppb	0.55441	51.73%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	47.0	0.4625 µg/L	0.28430	0.4625 ppb	0.28430	61.47%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	265.1	0.6015 µg/L	0.09301	0.6015 ppb	0.09301	15.46%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-1.3	-1.6923 µg/L	3.20365	-1.6923 ppb	3.20365	189.31%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	46.3	3.9259 µg/L	2.93808	3.9259 ppb	2.93808	74.84%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	55.9	0.5728 µg/L	0.11519	0.5728 ppb	0.11519	20.11%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	108.9	2.5613 µg/L	0.26286	2.5613 ppb	0.26286	10.26%		
QC value within limits for Zn 213.857 Recovery = Not calculated									

All analyte(s) passed QC.

=====
Analysis Begun

Start Time: 2/20/2010 22:12:52

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\022010.SIF

Batch ID:

Results Data Set: 022010C

Results Library: c:\pe\optimal\Results\Results.mdb

=====
Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 2/20/2010 19:48:18

IEC File: 011510.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/20/2010 22:12:55

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56823.3	56823.3	96.2 %		22:13:29
1	Al 396.153Radial†	6779.6	7053.2	5262.2 µg/L	5262.2 ppb	22:13:29
1	Ca 317.933Radial†	5656.2	5684.2	5213.9 µg/L	5213.9 ppb	22:13:49
1	Fe 238.204 Radial†	612.3	620.8	5340.4 µg/L	5340.4 ppb	22:13:49

1	K 766.490 Radial†	7360.7	7449.9	5122.7 µg/L	5122.7 ppb	22:13:29
1	Mg 279.077 IEC†	551.2	560.7	5460.5 µg/L	5460.5 ppb	22:13:49
1	Na 589.592 Radial†	31464.7	32220.5	10534 µg/L	10534 ppb	22:13:29
1	Sr 421.552†	49272.3	51156.2	503.13 µg/L	503.13 ppb	22:13:29
1	Sc 361.383	2061302.8	2061302.8	98.174 %		22:14:53
1	Y 371.029	1421783.1	1421783.1	97.684 %		22:14:53
1	Ag 328.068†	65899.8	67588.3	507.89 µg/L	507.89 ppb	22:14:58
1	As 188.979†	280.7	286.2	514.11 µg/L	514.11 ppb	22:15:19
1	B 249.677†	12356.0	12260.3	499.60 µg/L	499.60 ppb	22:14:58
1	Ba 233.527†	20373.0	20770.2	509.90 µg/L	509.90 ppb	22:14:58
1	Be 313.107†	828097.3	847254.8	511.50 µg/L	511.50 ppb	22:14:53
1	Cd 226.502†	19746.1	20249.9	509.46 µg/L	509.46 ppb	22:14:58
1	Co 228.616†	10940.2	11141.1	515.28 µg/L	515.28 ppb	22:14:58
1	Cr 267.716†	24642.8	25148.5	513.20 µg/L	513.20 ppb	22:14:58
1	Cu 324.752†	78467.9	77057.3	511.90 µg/L	511.90 ppb	22:14:58
1	Mn 257.610†	159108.4	162369.6	517.34 µg/L	517.34 ppb	22:14:53
1	Mo 202.031†	5106.6	5204.9	521.71 µg/L	521.71 ppb	22:15:19
1	Ni 231.604†	10301.1	10184.0	514.15 µg/L	514.15 ppb	22:14:58
1	P 214.914†	1277.0	1284.6	2505.0 µg/L	2505.0 ppb	22:15:19
1	Pb 220.353†	2145.9	2091.0	514.68 µg/L	514.68 ppb	22:15:19
1	S 181.975 Axial†	265.3	253.0	1048.6 µg/L	1048.6 ppb	22:15:19
1	Sb 206.836†	574.3	562.9	516.17 µg/L	516.17 ppb	22:15:19
1	Se 196.026†	386.2	378.4	526.66 µg/L	526.66 ppb	22:15:19
1	SiO2†	28213.4	27253.6	5457.6 µg/L	5457.6 ppb	22:14:58
1	Si 251.611†	32765.5	33081.2	2553.3 µg/L	2553.3 ppb	22:14:58
1	Sn 189.927†	1207.9	1225.7	524.19 µg/L	524.19 ppb	22:15:19
1	Ti 334.940†	222142.4	226131.6	513.96 µg/L	513.96 ppb	22:14:53
1	Tl 190.801†	360.7	389.7	527.00 µg/L	527.00 ppb	22:15:19
1	U 409.014†	6010.5	6123.0	518.56 µg/L	518.56 ppb	22:14:58
1	V 292.402†	50504.7	51539.9	516.20 µg/L	516.20 ppb	22:14:58
1	Zn 213.857†	21927.1	21832.9	511.62 µg/L	511.62 ppb	22:14:58
2	Sc RADIAL	57242.8	57242.8	96.9 %		22:13:55
2	Al 396.153Radial†	6869.5	7094.3	5292.9 µg/L	5292.9 ppb	22:13:55
2	Ca 317.933Radial†	5669.5	5654.9	5187.0 µg/L	5187.0 ppb	22:14:15
2	Fe 238.204 Radial†	613.7	617.6	5312.2 µg/L	5312.2 ppb	22:14:15
2	K 766.490 Radial†	7451.6	7487.6	5148.6 µg/L	5148.6 ppb	22:13:55
2	Mg 279.077 IEC†	551.2	556.5	5419.6 µg/L	5419.6 ppb	22:14:15
2	Na 589.592 Radial†	31655.2	32177.4	10520 µg/L	10520 ppb	22:13:55
2	Sr 421.552†	49674.6	51196.1	503.52 µg/L	503.52 ppb	22:13:55
2	Sc 361.383	2034508.7	2034508.7	96.898 %		22:15:26
2	Y 371.029	1404777.1	1404777.1	96.516 %		22:15:26
2	Ag 328.068†	65111.9	67659.3	508.42 µg/L	508.42 ppb	22:15:32
2	As 188.979†	276.9	286.0	513.83 µg/L	513.83 ppb	22:15:52
2	B 249.677†	12217.6	12283.2	500.55 µg/L	500.55 ppb	22:15:32
2	Ba 233.527†	20109.4	20771.4	509.94 µg/L	509.94 ppb	22:15:32
2	Be 313.107†	818478.3	848436.6	512.21 µg/L	512.21 ppb	22:15:26
2	Cd 226.502†	19476.7	20236.8	509.13 µg/L	509.13 ppb	22:15:32
2	Co 228.616†	10743.6	11085.0	512.68 µg/L	512.68 ppb	22:15:32
2	Cr 267.716†	24304.7	25130.1	512.82 µg/L	512.82 ppb	22:15:32
2	Cu 324.752†	77516.2	77127.8	512.36 µg/L	512.36 ppb	22:15:32
2	Mn 257.610†	157296.9	162634.5	518.18 µg/L	518.18 ppb	22:15:26
2	Mo 202.031†	5051.7	5216.7	522.90 µg/L	522.90 ppb	22:15:52
2	Ni 231.604†	10117.7	10132.9	511.57 µg/L	511.57 ppb	22:15:32
2	P 214.914†	1275.0	1299.5	2534.8 µg/L	2534.8 ppb	22:15:52
2	Pb 220.353†	2141.4	2115.2	520.65 µg/L	520.65 ppb	22:15:52
2	S 181.975 Axial†	252.7	243.5	1009.5 µg/L	1009.5 ppb	22:15:52
2	Sb 206.836†	565.0	561.0	514.48 µg/L	514.48 ppb	22:15:52
2	Se 196.026†	378.8	376.0	523.29 µg/L	523.29 ppb	22:15:52
2	SiO2†	27857.1	27264.4	5459.7 µg/L	5459.7 ppb	22:15:32
2	Si 251.611†	32373.2	33116.0	2556.0 µg/L	2556.0 ppb	22:15:32
2	Sn 189.927†	1189.0	1222.4	522.77 µg/L	522.77 ppb	22:15:52
2	Ti 334.940†	219896.1	226793.3	515.47 µg/L	515.47 ppb	22:15:26
2	Tl 190.801†	352.9	386.4	522.65 µg/L	522.65 ppb	22:15:52
2	U 409.014†	5845.5	6033.3	510.95 µg/L	510.95 ppb	22:15:32
2	V 292.402†	49914.5	51608.3	516.88 µg/L	516.88 ppb	22:15:32
2	Zn 213.857†	21654.1	21845.3	511.92 µg/L	511.92 ppb	22:15:32
3	Sc RADIAL	57543.1	57543.1	97.5 %		22:14:20
3	Al 396.153Radial†	6877.7	7065.8	5273.5 µg/L	5273.5 ppb	22:14:20
3	Ca 317.933Radial†	5660.8	5615.5	5150.9 µg/L	5150.9 ppb	22:14:41
3	Fe 238.204 Radial†	610.5	611.1	5255.2 µg/L	5255.2 ppb	22:14:41
3	K 766.490 Radial†	7434.8	7430.3	5109.2 µg/L	5109.2 ppb	22:14:20

3	Mg 279.077 IEC†	551.8	554.1	5395.2 µg/L	5395.2 ppb	22:14:41
3	Na 589.592 Radial†	31802.3	32157.9	10513 µg/L	10513 ppb	22:14:20
3	Sr 421.552†	49999.8	51262.3	504.18 µg/L	504.18 ppb	22:14:20
3	Sc 361.383	2052108.6	2052108.6	97.737 %		22:15:59
3	Y 371.029	1416657.7	1416657.7	97.332 %		22:15:59
3	Ag 328.068†	61547.1	63435.6	476.51 µg/L	476.51 ppb	22:16:05
3	As 188.979†	236.3	242.1	434.90 µg/L	434.90 ppb	22:16:25
3	B 249.677†	11462.5	11402.5	464.44 µg/L	464.44 ppb	22:16:05
3	Ba 233.527†	18301.3	18743.5	460.13 µg/L	460.13 ppb	22:16:05
3	Be 313.107†	763518.1	784959.2	473.89 µg/L	473.89 ppb	22:15:59
3	Cd 226.502†	17660.5	18206.1	457.98 µg/L	457.98 ppb	22:16:05
3	Co 228.616†	9679.7	9901.3	457.87 µg/L	457.87 ppb	22:16:05
3	Cr 267.716†	21297.1	21837.7	445.64 µg/L	445.64 ppb	22:16:05
3	Cu 324.752†	70165.8	68921.1	457.92 µg/L	457.92 ppb	22:16:05
3	Mn 257.610†	147281.8	150995.3	481.12 µg/L	481.12 ppb	22:15:59
3	Mo 202.031†	4169.8	4269.7	428.01 µg/L	428.01 ppb	22:16:25
3	Ni 231.604†	9147.2	9050.4	456.92 µg/L	456.92 ppb	22:16:05
3	P 214.914†	1082.1	1090.9	2124.3 µg/L	2124.3 ppb	22:16:25
3	Pb 220.353†	1845.5	1793.4	441.36 µg/L	441.36 ppb	22:16:25
3	S 181.975 Axial†	228.0	216.0	895.36 µg/L	895.36 ppb	22:16:25
3	Sb 206.836†	479.1	468.0	428.82 µg/L	428.82 ppb	22:16:25
3	Se 196.026†	334.4	327.1	456.22 µg/L	456.22 ppb	22:16:25
3	SiO2†	25891.7	25006.9	5007.7 µg/L	5007.7 ppb	22:16:05
3	Si 251.611†	29967.0	30367.5	2343.9 µg/L	2343.9 ppb	22:16:05
3	Sn 189.927†	968.4	986.2	421.77 µg/L	421.77 ppb	22:16:25
3	Ti 334.940†	203768.6	208345.9	473.52 µg/L	473.52 ppb	22:15:59
3	Tl 190.801†	308.0	337.4	456.71 µg/L	456.71 ppb	22:16:25
3	U 409.014†	5292.0	5415.3	458.52 µg/L	458.52 ppb	22:16:05
3	V 292.402†	44442.9	45568.1	456.18 µg/L	456.18 ppb	22:16:05
3	Zn 213.857†	19577.7	19529.1	457.59 µg/L	457.59 ppb	22:16:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2049306.7	97.603 %	0.6484			0.66%
Sc RADIAL	57203.1	96.9 %	0.61			0.63%
Y 371.029	1414406.0	97.178 %	0.5994			0.62%
Ag 328.068†	66227.7	497.61 µg/L	18.269	497.61 ppb	18.269	3.67%
QC value within limits for Ag 328.068 Recovery = 99.52%						
Al 396.153Radial†	7071.1	5276.2 µg/L	15.52	5276.2 ppb	15.52	0.29%
QC value within limits for Al 396.153Radial Recovery = 105.52%						
As 188.979†	271.4	487.62 µg/L	45.651	487.62 ppb	45.651	9.36%
QC value within limits for As 188.979 Recovery = 97.52%						
B 249.677†	11982.0	488.19 µg/L	20.577	488.19 ppb	20.577	4.21%
QC value within limits for B 249.677 Recovery = 97.64%						
Ba 233.527†	20095.0	493.32 µg/L	28.745	493.32 ppb	28.745	5.83%
QC value within limits for Ba 233.527 Recovery = 98.66%						
Be 313.107†	826883.5	499.20 µg/L	21.921	499.20 ppb	21.921	4.39%
QC value within limits for Be 313.107 Recovery = 99.84%						
Ca 317.933Radial†	5651.5	5183.9 µg/L	31.64	5183.9 ppb	31.64	0.61%
QC value within limits for Ca 317.933Radial Recovery = 103.68%						
Cd 226.502†	19564.3	492.19 µg/L	29.625	492.19 ppb	29.625	6.02%
QC value within limits for Cd 226.502 Recovery = 98.44%						
Co 228.616†	10709.1	495.28 µg/L	32.420	495.28 ppb	32.420	6.55%
QC value within limits for Co 228.616 Recovery = 99.06%						
Cr 267.716†	24038.8	490.55 µg/L	38.896	490.55 ppb	38.896	7.93%
QC value within limits for Cr 267.716 Recovery = 98.11%						
Cu 324.752†	74368.7	494.06 µg/L	31.302	494.06 ppb	31.302	6.34%
QC value within limits for Cu 324.752 Recovery = 98.81%						
Fe 238.204 Radial†	616.5	5302.6 µg/L	43.37	5302.6 ppb	43.37	0.82%
QC value within limits for Fe 238.204 Radial Recovery = 106.05%						
K 766.490 Radial†	7456.0	5126.8 µg/L	20.03	5126.8 ppb	20.03	0.39%
QC value within limits for K 766.490 Radial Recovery = 102.54%						
Mg 279.077 IEC†	557.1	5425.1 µg/L	33.00	5425.1 ppb	33.00	0.61%
QC value within limits for Mg 279.077 IEC Recovery = 108.50%						
Mn 257.610†	158666.5	505.55 µg/L	21.156	505.55 ppb	21.156	4.18%
QC value within limits for Mn 257.610 Recovery = 101.11%						
Mo 202.031†	4897.1	490.87 µg/L	54.446	490.87 ppb	54.446	11.09%
QC value within limits for Mo 202.031 Recovery = 98.17%						
Na 589.592 Radial†	32185.2	10522 µg/L	10.5	10522 ppb	10.5	0.10%

QC value within limits for Na 589.592 Radial Recovery = 105.22%

Ni 231.604†	9789.1	494.21 µg/L	32.319	494.21 ppb	32.319	6.54%
QC value within limits for Ni 231.604 Recovery = 98.84%						
P 214.914†	1225.0	2388.0 µg/L	228.90	2388.0 ppb	228.90	9.59%
QC value within limits for P 214.914 Recovery = 95.52%						
Pb 220.353†	1999.9	492.23 µg/L	44.158	492.23 ppb	44.158	8.97%
QC value within limits for Pb 220.353 Recovery = 98.45%						
S 181.975 Axial†	237.5	984.47 µg/L	79.605	984.47 ppb	79.605	8.09%
QC value within limits for S 181.975 Axial Recovery = 98.45%						
Sb 206.836†	530.6	486.49 µg/L	49.951	486.49 ppb	49.951	10.27%
QC value within limits for Sb 206.836 Recovery = 97.30%						
Se 196.026†	360.5	502.06 µg/L	39.734	502.06 ppb	39.734	7.91%
QC value within limits for Se 196.026 Recovery = 100.41%						
SiO2†	26508.3	5308.3 µg/L	260.37	5308.3 ppb	260.37	4.90%
QC value within limits for SiO2 Recovery = 99.27%						
Si 251.611†	32188.2	2484.4 µg/L	121.71	2484.4 ppb	121.71	4.90%
QC value within limits for Si 251.611 Recovery = 99.38%						
Sn 189.927†	1144.7	489.58 µg/L	58.731	489.58 ppb	58.731	12.00%
QC value within limits for Sn 189.927 Recovery = 97.92%						
Sr 421.552†	51204.9	503.61 µg/L	0.527	503.61 ppb	0.527	0.10%
QC value within limits for Sr 421.552 Recovery = 100.72%						
Ti 334.940†	220423.6	500.98 µg/L	23.800	500.98 ppb	23.800	4.75%
QC value within limits for Ti 334.940 Recovery = 100.20%						
Tl 190.801†	371.1	502.12 µg/L	39.384	502.12 ppb	39.384	7.84%
QC value within limits for Tl 190.801 Recovery = 100.42%						
U 409.014†	5857.2	496.01 µg/L	32.692	496.01 ppb	32.692	6.59%
QC value within limits for U 409.014 Recovery = 99.20%						
V 292.402†	49572.1	496.42 µg/L	34.850	496.42 ppb	34.850	7.02%
QC value within limits for V 292.402 Recovery = 99.28%						
Zn 213.857†	21069.1	493.71 µg/L	31.280	493.71 ppb	31.280	6.34%
QC value within limits for Zn 213.857 Recovery = 98.74%						

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/20/2010 22:16:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56690.7	56690.7	96.0 %		22:17:07
1	Al 396.153Radial†	-16.2	-8.1	-6.0850 µg/L	-6.0850 ppb	22:17:07
1	Ca 317.933Radial†	187.6	2.4	2.1692 µg/L	2.1692 ppb	22:17:28
1	Fe 238.204 Radial†	14.2	-0.6	-4.8794 µg/L	-4.8794 ppb	22:17:28
1	K 766.490 Radial†	253.3	65.4	45.004 µg/L	45.004 ppb	22:17:07
1	Mg 279.077 IEC†	12.1	0.6	5.4377 µg/L	5.4377 ppb	22:17:28
1	Na 589.592 Radial†	501.2	48.3	15.796 µg/L	15.796 ppb	22:17:07
1	Sr 421.552†	52.2	13.1	0.1284 µg/L	0.1284 ppb	22:17:07
1	Sc 361.383	2044523.0	2044523.0	97.375 %		22:18:29
1	Y 371.029	1416244.4	1416244.4	97.304 %		22:18:29
1	Ag 328.068†	-376.8	76.2	0.5704 µg/L	0.5704 ppb	22:18:35
1	As 188.979†	-0.4	-0.1	-0.2510 µg/L	-0.2510 ppb	22:18:55
1	B 249.677†	369.4	53.8	2.2047 µg/L	2.2047 ppb	22:18:55
1	Ba 233.527†	-7.2	10.9	0.2687 µg/L	0.2687 ppb	22:18:55
1	Be 313.107†	-3638.5	22.2	0.0133 µg/L	0.0133 ppb	22:18:35
1	Cd 226.502†	-132.8	0.2	0.0051 µg/L	0.0051 ppb	22:18:55
1	Co 228.616†	-1.0	-3.6	-0.1674 µg/L	-0.1674 ppb	22:18:55
1	Cr 267.716†	-58.2	-12.3	-0.2514 µg/L	-0.2514 ppb	22:18:35
1	Cu 324.752†	2937.3	146.8	0.9729 µg/L	0.9729 ppb	22:18:35
1	Mn 257.610†	-281.5	13.5	0.0420 µg/L	0.0420 ppb	22:18:55
1	Mo 202.031†	1.3	4.7	0.4660 µg/L	0.4660 ppb	22:18:55
1	Ni 231.604†	297.6	-3.0	-0.1533 µg/L	-0.1533 ppb	22:18:55
1	P 214.914†	18.1	2.4	4.5665 µg/L	4.5665 ppb	22:18:55
1	Pb 220.353†	93.5	1.2	0.2968 µg/L	0.2968 ppb	22:18:55
1	S 181.975 Axial†	14.8	-2.1	-8.7907 µg/L	-8.7907 ppb	22:18:55
1	Sb 206.836†	30.0	8.7	7.9428 µg/L	7.9428 ppb	22:18:55
1	Se 196.026†	14.1	-0.5	-0.6684 µg/L	-0.6684 ppb	22:18:55
1	SiO2†	1435.5	-10.3	-2.0535 µg/L	-2.0535 ppb	22:18:35
1	Si 251.611†	314.0	28.9	2.2323 µg/L	2.2323 ppb	22:18:55
1	Sn 189.927†	3.1	-1.5	-0.6542 µg/L	-0.6542 ppb	22:18:55
1	Ti 334.940†	250.4	115.5	0.2624 µg/L	0.2624 ppb	22:18:35
1	Tl 190.801†	-18.8	3.0	3.9540 µg/L	3.9540 ppb	22:18:55
1	U 409.014†	-2.3	-1.6	-0.1352 µg/L	-0.1352 ppb	22:18:35
1	V 292.402†	-60.1	34.3	0.3418 µg/L	0.3418 ppb	22:18:35
1	Zn 213.857†	516.6	28.6	0.6744 µg/L	0.6744 ppb	22:18:55
2	Sc RADIAL	56718.4	56718.4	96.1 %		22:17:33
2	Al 396.153Radial†	-2.8	5.8	4.3005 µg/L	4.3005 ppb	22:17:33
2	Ca 317.933Radial†	197.7	12.8	11.737 µg/L	11.737 ppb	22:17:53
2	Fe 238.204 Radial†	14.6	-0.2	-1.3875 µg/L	-1.3875 ppb	22:17:53
2	K 766.490 Radial†	188.2	-2.4	-1.6769 µg/L	-1.6769 ppb	22:17:33
2	Mg 279.077 IEC†	9.3	-2.4	-23.345 µg/L	-23.345 ppb	22:17:53
2	Na 589.592 Radial†	507.7	54.8	17.905 µg/L	17.905 ppb	22:17:33
2	Sr 421.552†	60.1	21.2	0.2085 µg/L	0.2085 ppb	22:17:33
2	Sc 361.383	2044848.8	2044848.8	97.391 %		22:19:01
2	Y 371.029	1415277.2	1415277.2	97.237 %		22:19:01
2	Ag 328.068†	-435.9	15.6	0.1141 µg/L	0.1141 ppb	22:19:07
2	As 188.979†	-3.2	-3.0	-5.3653 µg/L	-5.3653 ppb	22:19:28
2	B 249.677†	353.2	37.2	1.5224 µg/L	1.5224 ppb	22:19:28
2	Ba 233.527†	-16.0	1.9	0.0468 µg/L	0.0468 ppb	22:19:28
2	Be 313.107†	-3616.2	45.8	0.0275 µg/L	0.0275 ppb	22:19:07
2	Cd 226.502†	-134.3	-1.3	-0.0313 µg/L	-0.0313 ppb	22:19:28
2	Co 228.616†	4.9	2.5	0.1147 µg/L	0.1147 ppb	22:19:28
2	Cr 267.716†	-54.1	-8.2	-0.1673 µg/L	-0.1673 ppb	22:19:07
2	Cu 324.752†	2929.6	138.3	0.9174 µg/L	0.9174 ppb	22:19:07
2	Mn 257.610†	-256.9	38.8	0.1242 µg/L	0.1242 ppb	22:19:28
2	Mo 202.031†	2.4	5.8	0.5761 µg/L	0.5761 ppb	22:19:28
2	Ni 231.604†	311.6	11.4	0.5740 µg/L	0.5740 ppb	22:19:28
2	P 214.914†	13.7	-2.1	-4.3406 µg/L	-4.3406 ppb	22:19:28
2	Pb 220.353†	88.8	-3.6	-0.8839 µg/L	-0.8839 ppb	22:19:28

2	S 181.975 Axial†	18.1	1.3	5.3479 µg/L	5.3479 ppb	22:19:28
2	Sb 206.836†	27.3	5.9	5.3724 µg/L	5.3724 ppb	22:19:28
2	Se 196.026†	22.0	7.6	10.407 µg/L	10.407 ppb	22:19:28
2	SiO2†	1478.5	33.7	6.7532 µg/L	6.7532 ppb	22:19:07
2	Si 251.611†	336.0	51.4	3.9704 µg/L	3.9704 ppb	22:19:28
2	Sn 189.927†	3.9	-0.7	-0.3194 µg/L	-0.3194 ppb	22:19:28
2	Ti 334.940†	256.3	121.5	0.2784 µg/L	0.2784 ppb	22:19:07
2	Tl 190.801†	-24.9	-3.3	-4.4510 µg/L	-4.4510 ppb	22:19:28
2	U 409.014†	-17.4	-17.1	-1.4524 µg/L	-1.4524 ppb	22:19:07
2	V 292.402†	-124.6	-32.0	-0.3138 µg/L	-0.3138 ppb	22:19:07
2	Zn 213.857†	518.6	30.5	0.7183 µg/L	0.7183 ppb	22:19:28
3	Sc RADIAL	56709.5	56709.5	96.0 %		22:17:59
3	Al 396.153Radial†	-10.8	-2.5	-1.8802 µg/L	-1.8802 ppb	22:17:59
3	Ca 317.933Radial†	198.6	13.8	12.681 µg/L	12.681 ppb	22:18:19
3	Fe 238.204 Radial†	14.2	-0.6	-5.3099 µg/L	-5.3099 ppb	22:18:19
3	K 766.490 Radial†	198.2	8.0	5.4794 µg/L	5.4794 ppb	22:17:59
3	Mg 279.077 IEC†	6.9	-4.9	-47.572 µg/L	-47.572 ppb	22:18:19
3	Na 589.592 Radial†	542.6	91.2	29.809 µg/L	29.809 ppb	22:17:59
3	Sr 421.552†	36.4	-3.4	-0.0338 µg/L	-0.0338 ppb	22:17:59
3	Sc 361.383	2051656.6	2051656.6	97.715 %		22:19:34
3	Y 371.029	1420449.0	1420449.0	97.593 %		22:19:34
3	Ag 328.068†	-390.0	64.0	0.4781 µg/L	0.4781 ppb	22:19:39
3	As 188.979†	3.1	3.4	6.1846 µg/L	6.1846 ppb	22:20:00
3	B 249.677†	351.8	34.5	1.4159 µg/L	1.4159 ppb	22:20:00
3	Ba 233.527†	-5.4	12.9	0.3153 µg/L	0.3153 ppb	22:20:00
3	Be 313.107†	-3585.3	89.7	0.0540 µg/L	0.0540 ppb	22:19:39
3	Cd 226.502†	-132.5	1.0	0.0254 µg/L	0.0254 ppb	22:20:00
3	Co 228.616†	0.5	-2.0	-0.0950 µg/L	-0.0950 ppb	22:20:00
3	Cr 267.716†	-26.6	20.2	0.4113 µg/L	0.4113 ppb	22:19:39
3	Cu 324.752†	2896.9	95.0	0.6292 µg/L	0.6292 ppb	22:19:39
3	Mn 257.610†	-277.2	18.9	0.0613 µg/L	0.0613 ppb	22:20:00
3	Mo 202.031†	0.9	4.2	0.4244 µg/L	0.4244 ppb	22:20:00
3	Ni 231.604†	316.1	14.9	0.7517 µg/L	0.7517 ppb	22:20:00
3	P 214.914†	9.2	-6.8	-13.569 µg/L	-13.569 ppb	22:20:00
3	Pb 220.353†	72.8	-20.3	-4.9887 µg/L	-4.9887 ppb	22:20:00
3	S 181.975 Axial†	17.0	0.1	0.5553 µg/L	0.5553 ppb	22:20:00
3	Sb 206.836†	21.1	-0.5	-0.4646 µg/L	-0.4646 ppb	22:20:00
3	Se 196.026†	13.9	-0.8	-1.0457 µg/L	-1.0457 ppb	22:20:00
3	SiO2†	1463.4	13.2	2.6405 µg/L	2.6405 ppb	22:19:39
3	Si 251.611†	318.4	32.3	2.4907 µg/L	2.4907 ppb	22:20:00
3	Sn 189.927†	0.9	-3.8	-1.6168 µg/L	-1.6168 ppb	22:20:00
3	Ti 334.940†	280.5	145.4	0.3348 µg/L	0.3348 ppb	22:19:39
3	Tl 190.801†	-23.1	-1.5	-1.9664 µg/L	-1.9664 ppb	22:20:00
3	U 409.014†	-89.3	-90.6	-7.6908 µg/L	-7.6908 ppb	22:19:39
3	V 292.402†	-84.2	9.9	0.0933 µg/L	0.0933 ppb	22:19:39
3	Zn 213.857†	513.7	23.8	0.5608 µg/L	0.5608 ppb	22:20:00

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2047009.5	97.494 %	0.1918			0.20%
Sc RADIAL	56706.2	96.0 %	0.02			0.02%
Y 371.029	1417323.5	97.378 %	0.1889			0.19%
Ag 328.068†	51.9	0.3875 µg/L	0.24123	0.3875 ppb	0.24123	62.25%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.6	-1.2215 µg/L	5.22398	-1.2215 ppb	5.22398	427.66%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.1	0.1894 µg/L	5.78751	0.1894 ppb	5.78751	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	41.9	1.7144 µg/L	0.42800	1.7144 ppb	0.42800	24.97%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	8.6	0.2103 µg/L	0.14350	0.2103 ppb	0.14350	68.25%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	52.6	0.0316 µg/L	0.02066	0.0316 ppb	0.02066	65.31%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.7	8.8624 µg/L	5.81566	8.8624 ppb	5.81566	65.62%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-0.0	-0.0003 µg/L	0.02873	-0.0003 ppb	0.02873	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.1	-0.0493 µg/L	0.14653	-0.0493 ppb	0.14653	297.51%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
		-0.1	-0.0025 µg/L	0.36078	-0.0025 ppb	0.36078 >999.9%
		QC value within limits for Cr 267.716	Recovery = Not calculated			
Cu	324.752†	126.7	0.8399 µg/L	0.18449	0.8399 ppb	0.18449 21.97%
		QC value within limits for Cu 324.752	Recovery = Not calculated			
Fe	238.204 Radial†	-0.4	-3.8589 µg/L	2.15113	-3.8589 ppb	2.15113 55.74%
		QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
K	766.490 Radial†	23.7	16.269 µg/L	25.1413	16.269 ppb	25.1413 154.54%
		QC value within limits for K 766.490 Radial	Recovery = Not calculated			
Mg	279.077 IEC†	-2.2	-21.826 µg/L	26.5375	-21.826 ppb	26.5375 121.58%
		QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
Mn	257.610†	23.7	0.0758 µg/L	0.04301	0.0758 ppb	0.04301 56.73%
		QC value within limits for Mn 257.610	Recovery = Not calculated			
Mo	202.031†	4.9	0.4888 µg/L	0.07837	0.4888 ppb	0.07837 16.03%
		QC value within limits for Mo 202.031	Recovery = Not calculated			
Na	589.592 Radial†	64.8	21.170 µg/L	7.5553	21.170 ppb	7.5553 35.69%
		QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
Ni	231.604†	7.7	0.3908 µg/L	0.47949	0.3908 ppb	0.47949 122.69%
		QC value within limits for Ni 231.604	Recovery = Not calculated			
P	214.914†	-2.2	-4.4478 µg/L	9.06832	-4.4478 ppb	9.06832 203.88%
		QC value within limits for P 214.914	Recovery = Not calculated			
Pb	220.353†	-7.6	-1.8586 µg/L	2.77430	-1.8586 ppb	2.77430 149.27%
		QC value within limits for Pb 220.353	Recovery = Not calculated			
S	181.975 Axial†	-0.2	-0.9625 µg/L	7.19044	-0.9625 ppb	7.19044 747.07%
		QC value within limits for S 181.975 Axial	Recovery = Not calculated			
Sb	206.836†	4.7	4.2835 µg/L	4.30813	4.2835 ppb	4.30813 100.57%
		QC value within limits for Sb 206.836	Recovery = Not calculated			
Se	196.026†	2.1	2.8976 µg/L	6.50604	2.8976 ppb	6.50604 224.53%
		QC value within limits for Se 196.026	Recovery = Not calculated			
SiO2†		12.2	2.4467 µg/L	4.40657	2.4467 ppb	4.40657 180.10%
		QC value within limits for SiO2	Recovery = Not calculated			
Si	251.611†	37.5	2.8978 µg/L	0.93785	2.8978 ppb	0.93785 32.36%
		QC value within limits for Si 251.611	Recovery = Not calculated			
Sn	189.927†	-2.0	-0.8635 µg/L	0.67354	-0.8635 ppb	0.67354 78.00%
		QC value within limits for Sn 189.927	Recovery = Not calculated			
Sr	421.552†	10.3	0.1010 µg/L	0.12347	0.1010 ppb	0.12347 122.23%
		QC value within limits for Sr 421.552	Recovery = Not calculated			
Ti	334.940†	127.5	0.2918 µg/L	0.03803	0.2918 ppb	0.03803 13.03%
		QC value within limits for Ti 334.940	Recovery = Not calculated			
Tl	190.801†	-0.6	-0.8211 µg/L	4.31796	-0.8211 ppb	4.31796 525.88%
		QC value within limits for Tl 190.801	Recovery = Not calculated			
U	409.014†	-36.4	-3.0928 µg/L	4.03610	-3.0928 ppb	4.03610 130.50%
		QC value within limits for U 409.014	Recovery = Not calculated			
V	292.402†	4.1	0.0404 µg/L	0.33099	0.0404 ppb	0.33099 818.81%
		QC value within limits for V 292.402	Recovery = Not calculated			
Zn	213.857†	27.7	0.6512 µg/L	0.08127	0.6512 ppb	0.08127 12.48%
		QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/20/2010 23:26:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56330.5	56330.5	95.4 %		23:27:25
1	Al 396.153Radial†	6838.9	7177.0	5354.4 µg/L	5354.4 ppb	23:27:25
1	Ca 317.933Radial†	5704.4	5786.2	5307.4 µg/L	5307.4 ppb	23:27:45
1	Fe 238.204 Radial†	620.2	634.6	5459.0 µg/L	5459.0 ppb	23:27:45
1	K 766.490 Radial†	7410.1	7568.7	5204.3 µg/L	5204.3 ppb	23:27:25
1	Mg 279.077 IEC†	556.6	571.3	5564.0 µg/L	5564.0 ppb	23:27:45
1	Na 589.592 Radial†	31622.1	32671.4	10681 µg/L	10681 ppb	23:27:25
1	Sr 421.552†	49311.4	51645.1	507.94 µg/L	507.94 ppb	23:27:25
1	Sc 361.383	2042292.5	2042292.5	97.269 %		23:28:48
1	Y 371.029	1408589.0	1408589.0	96.778 %		23:28:48
1	Ag 328.068†	66253.9	68577.2	515.32 µg/L	515.32 ppb	23:28:54
1	As 188.979†	289.0	297.4	534.28 µg/L	534.28 ppb	23:29:15
1	B 249.677†	12397.5	12420.1	506.09 µg/L	506.09 ppb	23:28:54
1	Ba 233.527†	20472.6	21065.8	517.16 µg/L	517.16 ppb	23:28:54
1	Be 313.107†	830688.1	857769.9	517.84 µg/L	517.84 ppb	23:28:48
1	Cd 226.502†	19841.6	20535.2	516.63 µg/L	516.63 ppb	23:28:54
1	Co 228.616†	11022.5	11329.4	524.00 µg/L	524.00 ppb	23:28:54
1	Cr 267.716†	24858.5	25603.8	522.49 µg/L	522.49 ppb	23:28:54
1	Cu 324.752†	78561.6	77897.6	517.49 µg/L	517.49 ppb	23:28:54
1	Mn 257.610†	159582.8	164365.9	523.70 µg/L	523.70 ppb	23:28:48
1	Mo 202.031†	5208.8	5358.4	537.10 µg/L	537.10 ppb	23:29:15
1	Ni 231.604†	10332.3	10313.8	520.70 µg/L	520.70 ppb	23:28:54
1	P 214.914†	1319.5	1340.3	2615.5 µg/L	2615.5 ppb	23:29:15
1	Pb 220.353†	2190.2	2156.9	530.93 µg/L	530.93 ppb	23:29:15
1	S 181.975 Axial†	264.7	254.8	1056.2 µg/L	1056.2 ppb	23:29:15
1	Sb 206.836†	575.3	569.3	522.18 µg/L	522.18 ppb	23:29:15
1	Se 196.026†	384.2	380.0	529.08 µg/L	529.08 ppb	23:29:15
1	SiO2†	28510.0	27826.0	5572.2 µg/L	5572.2 ppb	23:28:54
1	Si 251.611†	33161.7	33799.3	2608.7 µg/L	2608.7 ppb	23:28:54
1	Sn 189.927†	1234.2	1264.1	540.63 µg/L	540.63 ppb	23:29:15
1	Ti 334.940†	223294.7	229422.4	521.44 µg/L	521.44 ppb	23:28:48
1	Tl 190.801†	358.9	391.2	529.11 µg/L	529.11 ppb	23:29:15
1	U 409.014†	5987.0	6155.9	521.32 µg/L	521.32 ppb	23:28:54
1	V 292.402†	50717.1	52237.1	523.26 µg/L	523.26 ppb	23:28:54
1	Zn 213.857†	22060.8	22178.3	519.72 µg/L	519.72 ppb	23:28:54
2	Sc RADIAL	57430.1	57430.1	97.3 %		23:27:51
2	Al 396.153Radial†	6965.0	7169.4	5349.0 µg/L	5349.0 ppb	23:27:51
2	Ca 317.933Radial†	5725.6	5693.5	5222.5 µg/L	5222.5 ppb	23:28:11
2	Fe 238.204 Radial†	620.1	622.1	5351.7 µg/L	5351.7 ppb	23:28:11
2	K 766.490 Radial†	7476.9	7488.6	5149.3 µg/L	5149.3 ppb	23:27:51
2	Mg 279.077 IEC†	557.8	561.4	5467.4 µg/L	5467.4 ppb	23:28:11
2	Na 589.592 Radial†	32080.0	32507.6	10628 µg/L	10628 ppb	23:27:51
2	Sr 421.552†	50471.1	51847.8	509.93 µg/L	509.93 ppb	23:27:51
2	Sc 361.383	2054918.9	2054918.9	97.870 %		23:29:22
2	Y 371.029	1416762.5	1416762.5	97.339 %		23:29:22
2	Ag 328.068†	66701.2	68615.7	515.60 µg/L	515.60 ppb	23:29:27
2	As 188.979†	276.9	283.2	508.74 µg/L	508.74 ppb	23:29:48
2	B 249.677†	12524.2	12471.3	508.23 µg/L	508.23 ppb	23:29:27
2	Ba 233.527†	20631.2	21098.5	517.96 µg/L	517.96 ppb	23:29:27
2	Be 313.107†	832869.8	854751.6	516.02 µg/L	516.02 ppb	23:29:22
2	Cd 226.502†	19978.0	20549.3	517.00 µg/L	517.00 ppb	23:29:27
2	Co 228.616†	11072.2	11310.5	523.11 µg/L	523.11 ppb	23:29:27
2	Cr 267.716†	24957.6	25548.0	521.35 µg/L	521.35 ppb	23:29:27
2	Cu 324.752†	79210.4	78064.3	518.58 µg/L	518.58 ppb	23:29:27
2	Mn 257.610†	160168.0	163955.8	522.39 µg/L	522.39 ppb	23:29:22
2	Mo 202.031†	5111.5	5226.0	523.83 µg/L	523.83 ppb	23:29:48
2	Ni 231.604†	10393.7	10311.2	520.57 µg/L	520.57 ppb	23:29:27
2	P 214.914†	1303.1	1315.2	2565.2 µg/L	2565.2 ppb	23:29:48
2	Pb 220.353†	2156.7	2108.8	519.05 µg/L	519.05 ppb	23:29:48

2	S 181.975 Axial†	264.6	253.0	1048.9 µg/L	1048.9 ppb	23:29:48
2	Sb 206.836†	578.6	569.0	521.72 µg/L	521.72 ppb	23:29:48
2	Se 196.026†	377.1	370.3	515.54 µg/L	515.54 ppb	23:29:48
2	SiO2†	28873.1	28017.0	5610.4 µg/L	5610.4 ppb	23:29:27
2	Si 251.611†	33504.9	33940.4	2619.6 µg/L	2619.6 ppb	23:29:27
2	Sn 189.927†	1199.8	1221.2	522.28 µg/L	522.28 ppb	23:29:48
2	Ti 334.940†	223897.9	228628.2	519.64 µg/L	519.64 ppb	23:29:22
2	Tl 190.801†	354.0	383.9	519.36 µg/L	519.36 ppb	23:29:48
2	U 409.014†	6049.5	6181.9	523.56 µg/L	523.56 ppb	23:29:27
2	V 292.402†	51068.6	52275.8	523.53 µg/L	523.53 ppb	23:29:27
2	Zn 213.857†	22196.3	22177.3	519.71 µg/L	519.71 ppb	23:29:27
3	Sc RADIAL	56802.4	56802.4	96.2 %		23:28:16
3	Al 396.153Radial†	6911.2	7192.5	5368.1 µg/L	5368.1 ppb	23:28:16
3	Ca 317.933Radial†	5728.6	5761.7	5285.0 µg/L	5285.0 ppb	23:28:37
3	Fe 238.204 Radial†	622.1	631.2	5428.7 µg/L	5428.7 ppb	23:28:37
3	K 766.490 Radial†	7497.5	7594.9	5222.4 µg/L	5222.4 ppb	23:28:16
3	Mg 279.077 IEC†	558.5	568.5	5534.8 µg/L	5534.8 ppb	23:28:37
3	Na 589.592 Radial†	31884.2	32668.5	10680 µg/L	10680 ppb	23:28:16
3	Sr 421.552†	49822.6	51747.1	508.94 µg/L	508.94 ppb	23:28:16
3	Sc 361.383	2052647.1	2052647.1	97.762 %		23:29:55
3	Y 371.029	1416680.5	1416680.5	97.334 %		23:29:55
3	Ag 328.068†	62677.9	64575.7	485.09 µg/L	485.09 ppb	23:30:01
3	As 188.979†	239.9	245.7	441.47 µg/L	441.47 ppb	23:30:21
3	B 249.677†	11686.2	11628.2	473.60 µg/L	473.60 ppb	23:30:01
3	Ba 233.527†	18696.5	19142.8	469.94 µg/L	469.94 ppb	23:30:01
3	Be 313.107†	776698.6	798236.4	481.90 µg/L	481.90 ppb	23:29:55
3	Cd 226.502†	18058.3	18608.3	468.10 µg/L	468.10 ppb	23:30:01
3	Co 228.616†	9890.6	10114.5	467.73 µg/L	467.73 ppb	23:30:01
3	Cr 267.716†	21790.7	22336.9	455.83 µg/L	455.83 ppb	23:30:01
3	Cu 324.752†	71427.3	70192.6	466.38 µg/L	466.38 ppb	23:30:01
3	Mn 257.610†	149598.9	153325.9	488.56 µg/L	488.56 ppb	23:29:55
3	Mo 202.031†	4266.2	4367.2	437.78 µg/L	437.78 ppb	23:30:21
3	Ni 231.604†	9355.9	9261.4	467.58 µg/L	467.58 ppb	23:30:01
3	P 214.914†	1099.2	1108.1	2157.6 µg/L	2157.6 ppb	23:30:21
3	Pb 220.353†	1893.0	1841.5	453.20 µg/L	453.20 ppb	23:30:21
3	S 181.975 Axial†	234.1	222.2	920.91 µg/L	920.91 ppb	23:30:21
3	Sb 206.836†	487.3	476.4	436.43 µg/L	436.43 ppb	23:30:21
3	Se 196.026†	335.0	327.7	457.35 µg/L	457.35 ppb	23:30:21
3	SiO2†	26605.4	25730.0	5152.4 µg/L	5152.4 ppb	23:30:01
3	Si 251.611†	30897.0	31310.7	2416.7 µg/L	2416.7 ppb	23:30:01
3	Sn 189.927†	988.5	1006.4	430.43 µg/L	430.43 ppb	23:30:21
3	Ti 334.940†	207641.6	212253.0	482.39 µg/L	482.39 ppb	23:29:55
3	Tl 190.801†	318.3	347.8	470.71 µg/L	470.71 ppb	23:30:21
3	U 409.014†	5235.3	5355.9	453.44 µg/L	453.44 ppb	23:30:01
3	V 292.402†	45428.0	46563.9	466.15 µg/L	466.15 ppb	23:30:01
3	Zn 213.857†	19978.4	19933.7	467.07 µg/L	467.07 ppb	23:30:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2049952.8	97.634 %	0.3206			0.33%
Sc RADIAL	56854.3	96.3 %	0.93			0.97%
Y 371.029	1414010.7	97.150 %	0.3226			0.33%
Ag 328.068†	67256.2	505.34 µg/L	17.531	505.34 ppb	17.531	3.47%
QC value within limits for Ag 328.068 Recovery = 101.07%						
Al 396.153Radial†	7179.6	5357.2 µg/L	9.85	5357.2 ppb	9.85	0.18%
QC value within limits for Al 396.153Radial Recovery = 107.14%						
As 188.979†	275.4	494.83 µg/L	47.944	494.83 ppb	47.944	9.69%
QC value within limits for As 188.979 Recovery = 98.97%						
B 249.677†	12173.2	495.97 µg/L	19.407	495.97 ppb	19.407	3.91%
QC value within limits for B 249.677 Recovery = 99.19%						
Ba 233.527†	20435.7	501.69 µg/L	27.500	501.69 ppb	27.500	5.48%
QC value within limits for Ba 233.527 Recovery = 100.34%						
Be 313.107†	836919.3	505.26 µg/L	20.244	505.26 ppb	20.244	4.01%
QC value within limits for Be 313.107 Recovery = 101.05%						
Ca 317.933Radial†	5747.1	5271.6 µg/L	44.03	5271.6 ppb	44.03	0.84%
QC value within limits for Ca 317.933Radial Recovery = 105.43%						
Cd 226.502†	19897.6	500.58 µg/L	28.130	500.58 ppb	28.130	5.62%
QC value within limits for Cd 226.502 Recovery = 100.12%						
Co 228.616†	10918.1	504.95 µg/L	32.233	504.95 ppb	32.233	6.38%

Cr	267.716†	24496.3	499.89 µg/L	38.162	499.89 ppb	38.162	7.63%
Cu	324.752†	75384.8	500.82 µg/L	29.831	500.82 ppb	29.831	5.96%
Fe	238.204 Radial†	629.3	5413.1 µg/L	55.31	5413.1 ppb	55.31	1.02%
K	766.490 Radial†	7550.7	5192.0 µg/L	38.08	5192.0 ppb	38.08	0.73%
Mg	279.077 IEC†	567.1	5522.1 µg/L	49.58	5522.1 ppb	49.58	0.90%
Mn	257.610†	160549.2	511.55 µg/L	19.922	511.55 ppb	19.922	3.89%
Mo	202.031†	4983.8	499.57 µg/L	53.921	499.57 ppb	53.921	10.79%
Na	589.592 Radial†	32615.8	10663 µg/L	30.7	10663 ppb	30.7	0.29%
Ni	231.604†	9962.1	502.95 µg/L	30.630	502.95 ppb	30.630	6.09%
P	214.914†	1254.5	2446.1 µg/L	251.15	2446.1 ppb	251.15	10.27%
Pb	220.353†	2035.7	501.06 µg/L	41.871	501.06 ppb	41.871	8.36%
S	181.975 Axial†	243.3	1008.7 µg/L	76.11	1008.7 ppb	76.11	7.55%
Sb	206.836†	538.2	493.45 µg/L	49.373	493.45 ppb	49.373	10.01%
Se	196.026†	359.3	500.66 µg/L	38.110	500.66 ppb	38.110	7.61%
SiO2†		27191.0	5445.0 µg/L	254.09	5445.0 ppb	254.09	4.67%
Si	251.611†	33016.8	2548.4 µg/L	114.17	2548.4 ppb	114.17	4.48%
Sn	189.927†	1163.9	497.78 µg/L	59.044	497.78 ppb	59.044	11.86%
Sr	421.552†	51746.7	508.94 µg/L	0.997	508.94 ppb	0.997	0.20%
Ti	334.940†	223434.5	507.83 µg/L	22.043	507.83 ppb	22.043	4.34%
Tl	190.801†	374.3	506.39 µg/L	31.287	506.39 ppb	31.287	6.18%
U	409.014†	5897.9	499.44 µg/L	39.850	499.44 ppb	39.850	7.98%
V	292.402†	50358.9	504.31 µg/L	33.052	504.31 ppb	33.052	6.55%
Zn	213.857†	21429.8	502.16 µg/L	30.396	502.16 ppb	30.396	6.05%

QC value within limits for Co 228.616 Recovery = 100.99%

QC value within limits for Cr 267.716 Recovery = 99.98%

QC value within limits for Cu 324.752 Recovery = 100.16%

QC value within limits for Fe 238.204 Radial Recovery = 108.26%

QC value within limits for K 766.490 Radial Recovery = 103.84%

QC value greater than the upper limit for Mg 279.077 IEC Recovery = 110.44%

QC value within limits for Mn 257.610 Recovery = 102.31%

QC value within limits for Mo 202.031 Recovery = 99.91%

QC value within limits for Na 589.592 Radial Recovery = 106.63%

QC value within limits for Ni 231.604 Recovery = 100.59%

QC value within limits for P 214.914 Recovery = 97.84%

QC value within limits for Pb 220.353 Recovery = 100.21%

QC value within limits for S 181.975 Axial Recovery = 100.87%

QC value within limits for Sb 206.836 Recovery = 98.69%

QC value within limits for Se 196.026 Recovery = 100.13%

QC value within limits for SiO2 Recovery = 101.82%

QC value within limits for Si 251.611 Recovery = 101.93%

QC value within limits for Sn 189.927 Recovery = 99.56%

QC value within limits for Sr 421.552 Recovery = 101.79%

QC value within limits for Ti 334.940 Recovery = 101.57%

QC value within limits for Tl 190.801 Recovery = 101.28%

QC value within limits for U 409.014 Recovery = 99.89%

QC value within limits for V 292.402 Recovery = 100.86%

QC value within limits for Zn 213.857 Recovery = 100.43%

QC Failed. Continue with analysis.

Sequence No.: 10
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/20/2010 23:30:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56597.7	56597.7	95.9 %		23:31:03
1	Al 396.153Radial†	-0.8	7.9	5.8734 µg/L	5.8734 ppb	23:31:03
1	Ca 317.933Radial†	191.2	6.5	5.9558 µg/L	5.9558 ppb	23:31:24
1	Fe 238.204 Radial†	15.7	1.0	8.6808 µg/L	8.6808 ppb	23:31:24
1	K 766.490 Radial†	217.3	28.3	19.449 µg/L	19.449 ppb	23:31:03
1	Mg 279.077 IEC†	10.6	-1.0	-9.7422 µg/L	-9.7422 ppb	23:31:24
1	Na 589.592 Radial†	461.3	7.5	2.4505 µg/L	2.4505 ppb	23:31:03
1	Sr 421.552†	47.1	7.7	0.0761 µg/L	0.0761 ppb	23:31:03
1	Sc 361.383	2058481.8	2058481.8	98.040 %		23:32:26
1	Y 371.029	1425545.5	1425545.5	97.943 %		23:32:26
1	Ag 328.068†	-373.6	82.0	0.6126 µg/L	0.6126 ppb	23:32:31
1	As 188.979†	3.1	3.5	6.2164 µg/L	6.2164 ppb	23:32:52
1	B 249.677†	369.7	51.6	2.1077 µg/L	2.1077 ppb	23:32:52
1	Ba 233.527†	-15.2	2.8	0.0697 µg/L	0.0697 ppb	23:32:52
1	Be 313.107†	-3583.9	103.3	0.0623 µg/L	0.0623 ppb	23:32:31
1	Cd 226.502†	-146.6	-13.0	-0.3259 µg/L	-0.3259 ppb	23:32:52
1	Co 228.616†	0.9	-1.6	-0.0753 µg/L	-0.0753 ppb	23:32:52
1	Cr 267.716†	-55.1	-8.9	-0.1806 µg/L	-0.1806 ppb	23:32:31
1	Cu 324.752†	2905.9	94.2	0.6262 µg/L	0.6262 ppb	23:32:31
1	Mn 257.610†	-228.1	69.9	0.2241 µg/L	0.2241 ppb	23:32:52
1	Mo 202.031†	1.7	5.0	0.5026 µg/L	0.5026 ppb	23:32:52
1	Ni 231.604†	328.5	26.5	1.3383 µg/L	1.3383 ppb	23:32:52
1	P 214.914†	13.1	-2.9	-5.8038 µg/L	-5.8038 ppb	23:32:52
1	Pb 220.353†	89.3	-3.7	-0.9092 µg/L	-0.9092 ppb	23:32:52
1	S 181.975 Axial†	15.1	-1.8	-7.6484 µg/L	-7.6484 ppb	23:32:52
1	Sb 206.836†	26.8	5.2	4.7642 µg/L	4.7642 ppb	23:32:52
1	Se 196.026†	12.5	-2.2	-3.0313 µg/L	-3.0313 ppb	23:32:52
1	SiO2†	1531.2	77.4	15.504 µg/L	15.504 ppb	23:32:31
1	Si 251.611†	394.6	108.9	8.4067 µg/L	8.4067 ppb	23:32:52
1	Sn 189.927†	5.0	0.4	0.1651 µg/L	0.1651 ppb	23:32:52
1	Ti 334.940†	275.6	139.5	0.3181 µg/L	0.3181 ppb	23:32:31
1	Tl 190.801†	-21.0	0.8	1.1068 µg/L	1.1068 ppb	23:32:52
1	U 409.014†	-38.0	-38.0	-3.2223 µg/L	-3.2223 ppb	23:32:31
1	V 292.402†	-90.1	4.1	0.0416 µg/L	0.0416 ppb	23:32:31
1	Zn 213.857†	513.1	21.5	0.4997 µg/L	0.4997 ppb	23:32:52
2	Sc RADIAL	56998.6	56998.6	96.5 %		23:31:29
2	Al 396.153Radial†	-15.5	-7.3	-5.4832 µg/L	-5.4832 ppb	23:31:29
2	Ca 317.933Radial†	194.2	8.2	7.4814 µg/L	7.4814 ppb	23:31:49
2	Fe 238.204 Radial†	16.5	1.8	15.072 µg/L	15.072 ppb	23:31:49
2	K 766.490 Radial†	187.3	-4.4	-3.0096 µg/L	-3.0096 ppb	23:31:29
2	Mg 279.077 IEC†	14.0	2.4	23.405 µg/L	23.405 ppb	23:31:49
2	Na 589.592 Radial†	531.6	76.9	25.147 µg/L	25.147 ppb	23:31:29
2	Sr 421.552†	61.0	21.9	0.2150 µg/L	0.2150 ppb	23:31:29
2	Sc 361.383	2043982.4	2043982.4	97.350 %		23:32:58
2	Y 371.029	1414969.6	1414969.6	97.216 %		23:32:58
2	Ag 328.068†	-456.0	-5.3	-0.0372 µg/L	-0.0372 ppb	23:33:03
2	As 188.979†	4.4	4.8	8.5664 µg/L	8.5664 ppb	23:33:24
2	B 249.677†	375.8	60.6	2.4698 µg/L	2.4698 ppb	23:33:24
2	Ba 233.527†	-13.9	4.1	0.0996 µg/L	0.0996 ppb	23:33:24
2	Be 313.107†	-3641.4	18.3	0.0110 µg/L	0.0110 ppb	23:33:03
2	Cd 226.502†	-141.8	-9.0	-0.2292 µg/L	-0.2292 ppb	23:33:24
2	Co 228.616†	10.2	7.9	0.3668 µg/L	0.3668 ppb	23:33:24
2	Cr 267.716†	-34.4	12.0	0.2456 µg/L	0.2456 ppb	23:33:03
2	Cu 324.752†	2865.3	73.6	0.4901 µg/L	0.4901 ppb	23:33:03
2	Mn 257.610†	-238.1	58.0	0.1857 µg/L	0.1857 ppb	23:33:24
2	Mo 202.031†	2.0	5.3	0.5356 µg/L	0.5356 ppb	23:33:24
2	Ni 231.604†	301.1	0.6	0.0326 µg/L	0.0326 ppb	23:33:24
2	P 214.914†	16.4	0.6	1.1371 µg/L	1.1371 ppb	23:33:24
2	Pb 220.353†	86.5	-6.0	-1.4750 µg/L	-1.4750 ppb	23:33:24

2	S 181.975 Axial†	16.4	-0.4	-1.8512 µg/L	-1.8512 ppb	23:33:24
2	Sb 206.836†	26.0	4.6	4.2209 µg/L	4.2209 ppb	23:33:24
2	Se 196.026†	17.1	2.6	3.5596 µg/L	3.5596 ppb	23:33:24
2	SiO2†	1535.1	92.5	18.530 µg/L	18.530 ppb	23:33:03
2	Si 251.611†	409.0	126.6	9.7715 µg/L	9.7715 ppb	23:33:24
2	Sn 189.927†	3.7	-0.9	-0.3803 µg/L	-0.3803 ppb	23:33:24
2	Ti 334.940†	243.7	108.6	0.2453 µg/L	0.2453 ppb	23:33:03
2	Tl 190.801†	-24.0	-2.4	-3.2418 µg/L	-3.2418 ppb	23:33:24
2	U 409.014†	31.8	33.4	2.8340 µg/L	2.8340 ppb	23:33:03
2	V 292.402†	-76.9	17.0	0.1780 µg/L	0.1780 ppb	23:33:03
2	Zn 213.857†	520.4	32.6	0.7660 µg/L	0.7660 ppb	23:33:24
3	Sc RADIAL	56938.6	56938.6	96.4 %		23:31:55
3	Al 396.153Radial†	-11.1	-2.8	-2.0917 µg/L	-2.0917 ppb	23:31:55
3	Ca 317.933Radial†	197.6	12.0	10.967 µg/L	10.967 ppb	23:32:15
3	Fe 238.204 Radial†	14.8	0.0	0.0818 µg/L	0.0818 ppb	23:32:15
3	K 766.490 Radial†	158.3	-34.3	-23.568 µg/L	-23.568 ppb	23:31:55
3	Mg 279.077 IEC†	16.9	5.4	52.591 µg/L	52.591 ppb	23:32:15
3	Na 589.592 Radial†	520.3	65.8	21.512 µg/L	21.512 ppb	23:31:55
3	Sr 421.552†	35.8	-4.2	-0.0417 µg/L	-0.0417 ppb	23:31:55
3	Sc 361.383	2054454.8	2054454.8	97.848 %		23:33:30
3	Y 371.029	1422965.1	1422965.1	97.766 %		23:33:30
3	Ag 328.068†	-440.4	13.0	0.1001 µg/L	0.1001 ppb	23:33:35
3	As 188.979†	1.9	2.2	4.0082 µg/L	4.0082 ppb	23:33:56
3	B 249.677†	364.8	47.3	1.9353 µg/L	1.9353 ppb	23:33:56
3	Ba 233.527†	-14.0	4.1	0.1006 µg/L	0.1006 ppb	23:33:56
3	Be 313.107†	-3655.9	22.6	0.0135 µg/L	0.0135 ppb	23:33:35
3	Cd 226.502†	-153.0	-19.7	-0.4965 µg/L	-0.4965 ppb	23:33:56
3	Co 228.616†	2.8	0.3	0.0153 µg/L	0.0153 ppb	23:33:56
3	Cr 267.716†	-24.7	22.2	0.4529 µg/L	0.4529 ppb	23:33:35
3	Cu 324.752†	2916.6	111.0	0.7362 µg/L	0.7362 ppb	23:33:35
3	Mn 257.610†	-230.1	67.4	0.2123 µg/L	0.2123 ppb	23:33:56
3	Mo 202.031†	1.4	4.7	0.4718 µg/L	0.4718 ppb	23:33:56
3	Ni 231.604†	303.9	2.0	0.0999 µg/L	0.0999 ppb	23:33:56
3	P 214.914†	13.0	-2.9	-5.9281 µg/L	-5.9281 ppb	23:33:56
3	Pb 220.353†	84.4	-8.5	-2.1070 µg/L	-2.1070 ppb	23:33:56
3	S 181.975 Axial†	15.7	-1.3	-5.1940 µg/L	-5.1940 ppb	23:33:56
3	Sb 206.836†	20.6	-1.0	-0.9220 µg/L	-0.9220 ppb	23:33:56
3	Se 196.026†	18.0	3.4	4.5710 µg/L	4.5710 ppb	23:33:56
3	SiO2†	1537.6	87.0	17.424 µg/L	17.424 ppb	23:33:35
3	Si 251.611†	429.7	145.6	11.239 µg/L	11.239 ppb	23:33:56
3	Sn 189.927†	2.1	-2.5	-1.0841 µg/L	-1.0841 ppb	23:33:56
3	Ti 334.940†	313.1	178.3	0.4016 µg/L	0.4016 ppb	23:33:35
3	Tl 190.801†	-19.0	2.9	3.8293 µg/L	3.8293 ppb	23:33:56
3	U 409.014†	57.0	59.0	5.0081 µg/L	5.0081 ppb	23:33:35
3	V 292.402†	-48.7	46.2	0.4673 µg/L	0.4673 ppb	23:33:35
3	Zn 213.857†	511.5	20.8	0.4860 µg/L	0.4860 ppb	23:33:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2052306.3	97.746 %	0.3565			0.36%
Sc RADIAL	56845.0	96.3 %	0.37			0.38%
Y 371.029	1421160.1	97.642 %	0.3789			0.39%
Ag 328.068†	29.9	0.2252 µg/L	0.34250	0.2252 ppb	0.34250	152.10%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-0.7	-0.5672 µg/L	5.82978	-0.5672 ppb	5.82978	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.5	6.2637 µg/L	2.27951	6.2637 ppb	2.27951	36.39%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	53.2	2.1709 µg/L	0.27277	2.1709 ppb	0.27277	12.56%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.7	0.0899 µg/L	0.01757	0.0899 ppb	0.01757	19.54%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	48.1	0.0289 µg/L	0.02891	0.0289 ppb	0.02891	100.03%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	8.9	8.1348 µg/L	2.56885	8.1348 ppb	2.56885	31.58%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-13.9	-0.3505 µg/L	0.13534	-0.3505 ppb	0.13534	38.61%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.2	0.1023 µg/L	0.23353	0.1023 ppb	0.23353	228.35%

Cr	267.716†	8.5	0.1726 µg/L	0.32301	0.1726 ppb	0.32301	187.12%
	QC value within limits	for Cr 267.716	Recovery = Not calculated				
Cu	324.752†	92.9	0.6175 µg/L	0.12327	0.6175 ppb	0.12327	19.96%
	QC value within limits	for Cu 324.752	Recovery = Not calculated				
Fe	238.204 Radial†	0.9	7.9448 µg/L	7.52214	7.9448 ppb	7.52214	94.68%
	QC value within limits	for Fe 238.204 Radial	Recovery = Not calculated				
K	766.490 Radial†	-3.5	-2.3760 µg/L	21.51560	-2.3760 ppb	21.51560	905.54%
	QC value within limits	for K 766.490 Radial	Recovery = Not calculated				
Mg	279.077 IEC†	2.3	22.085 µg/L	31.1877	22.085 ppb	31.1877	141.22%
	QC value within limits	for Mg 279.077 IEC	Recovery = Not calculated				
Mn	257.610†	65.1	0.2074 µg/L	0.01965	0.2074 ppb	0.01965	9.48%
	QC value within limits	for Mn 257.610	Recovery = Not calculated				
Mo	202.031†	5.0	0.5033 µg/L	0.03194	0.5033 ppb	0.03194	6.35%
	QC value within limits	for Mo 202.031	Recovery = Not calculated				
Na	589.592 Radial†	50.1	16.370 µg/L	12.1907	16.370 ppb	12.1907	74.47%
	QC value within limits	for Na 589.592 Radial	Recovery = Not calculated				
Ni	231.604†	9.7	0.4903 µg/L	0.73516	0.4903 ppb	0.73516	149.95%
	QC value within limits	for Ni 231.604	Recovery = Not calculated				
P	214.914†	-1.7	-3.5316 µg/L	4.04367	-3.5316 ppb	4.04367	114.50%
	QC value within limits	for P 214.914	Recovery = Not calculated				
Pb	220.353†	-6.1	-1.4971 µg/L	0.59924	-1.4971 ppb	0.59924	40.03%
	QC value within limits	for Pb 220.353	Recovery = Not calculated				
S	181.975 Axial†	-1.2	-4.8979 µg/L	2.90991	-4.8979 ppb	2.90991	59.41%
	QC value within limits	for S 181.975 Axial	Recovery = Not calculated				
Sb	206.836†	2.9	2.6877 µg/L	3.13784	2.6877 ppb	3.13784	116.75%
	QC value within limits	for Sb 206.836	Recovery = Not calculated				
Se	196.026†	1.2	1.6998 µg/L	4.12830	1.6998 ppb	4.12830	242.88%
	QC value within limits	for Se 196.026	Recovery = Not calculated				
SiO2†		85.7	17.153 µg/L	1.5311	17.153 ppb	1.5311	8.93%
	QC value within limits	for SiO2	Recovery = Not calculated				
Si	251.611†	127.0	9.8056 µg/L	1.41621	9.8056 ppb	1.41621	14.44%
	QC value within limits	for Si 251.611	Recovery = Not calculated				
Sn	189.927†	-1.0	-0.4331 µg/L	0.62629	-0.4331 ppb	0.62629	144.61%
	QC value within limits	for Sn 189.927	Recovery = Not calculated				
Sr	421.552†	8.5	0.0831 µg/L	0.12853	0.0831 ppb	0.12853	154.64%
	QC value within limits	for Sr 421.552	Recovery = Not calculated				
Ti	334.940†	142.1	0.3217 µg/L	0.07819	0.3217 ppb	0.07819	24.30%
	QC value within limits	for Ti 334.940	Recovery = Not calculated				
Tl	190.801†	0.4	0.5648 µg/L	3.56656	0.5648 ppb	3.56656	631.50%
	QC value within limits	for Tl 190.801	Recovery = Not calculated				
U	409.014†	18.2	1.5399 µg/L	4.26509	1.5399 ppb	4.26509	276.97%
	QC value within limits	for U 409.014	Recovery = Not calculated				
V	292.402†	22.5	0.2290 µg/L	0.21738	0.2290 ppb	0.21738	94.94%
	QC value within limits	for V 292.402	Recovery = Not calculated				
Zn	213.857†	24.9	0.5839 µg/L	0.15784	0.5839 ppb	0.15784	27.03%
	QC value within limits	for Zn 213.857	Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/21/2010 00:03:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57415.5	57415.5	97.2 %		00:04:07
1	Al 396.153Radial†	6854.0	7057.1	5264.9 µg/L	5264.9 ppb	00:04:07
1	Ca 317.933Radial†	5695.7	5664.2	5195.6 µg/L	5195.6 ppb	00:04:27
1	Fe 238.204 Radial†	613.4	615.4	5293.7 µg/L	5293.7 ppb	00:04:27
1	K 766.490 Radial†	7454.4	7467.4	5134.7 µg/L	5134.7 ppb	00:04:07
1	Mg 279.077 IEC†	554.3	557.9	5433.5 µg/L	5433.5 ppb	00:04:27
1	Na 589.592 Radial†	31689.3	32114.3	10499 µg/L	10499 ppb	00:04:07
1	Sr 421.552†	49564.2	50928.4	500.89 µg/L	500.89 ppb	00:04:07
1	Sc 361.383	2064117.9	2064117.9	98.309 %		00:05:31
1	Y 371.029	1426502.9	1426502.9	98.009 %		00:05:31
1	Ag 328.068†	66769.1	68381.1	513.84 µg/L	513.84 ppb	00:05:36
1	As 188.979†	285.7	290.9	522.63 µg/L	522.63 ppb	00:05:57
1	B 249.677†	12494.0	12383.5	504.67 µg/L	504.67 ppb	00:05:36
1	Ba 233.527†	20677.2	21051.4	516.81 µg/L	516.81 ppb	00:05:36
1	Be 313.107†	826682.0	844664.8	509.93 µg/L	509.93 ppb	00:05:31
1	Cd 226.502†	20017.2	20498.2	515.72 µg/L	515.72 ppb	00:05:36
1	Co 228.616†	11069.1	11257.0	520.65 µg/L	520.65 ppb	00:05:36
1	Cr 267.716†	25065.6	25544.3	521.28 µg/L	521.28 ppb	00:05:36
1	Cu 324.752†	79232.5	77726.1	516.33 µg/L	516.33 ppb	00:05:36
1	Mn 257.610†	158863.3	161899.2	515.84 µg/L	515.84 ppb	00:05:31
1	Mo 202.031†	5190.0	5282.6	529.50 µg/L	529.50 ppb	00:05:57
1	Ni 231.604†	10438.8	10309.8	520.50 µg/L	520.50 ppb	00:05:36
1	P 214.914†	1302.3	1308.4	2552.2 µg/L	2552.2 ppb	00:05:57
1	Pb 220.353†	2189.3	2132.1	524.82 µg/L	524.82 ppb	00:05:57
1	S 181.975 Axial†	266.9	254.2	1053.7 µg/L	1053.7 ppb	00:05:57
1	Sb 206.836†	573.6	561.4	514.82 µg/L	514.82 ppb	00:05:57
1	Se 196.026†	389.5	381.2	530.42 µg/L	530.42 ppb	00:05:57
1	SiO2†	28760.8	27771.2	5561.2 µg/L	5561.2 ppb	00:05:36
1	Si 251.611†	33414.9	33696.3	2600.8 µg/L	2600.8 ppb	00:05:36
1	Sn 189.927†	1225.9	1242.3	531.29 µg/L	531.29 ppb	00:05:57
1	Ti 334.940†	221942.7	225619.8	512.80 µg/L	512.80 ppb	00:05:31
1	Tl 190.801†	360.6	389.0	526.07 µg/L	526.07 ppb	00:05:57
1	U 409.014†	6053.7	6158.6	521.59 µg/L	521.59 ppb	00:05:36
1	V 292.402†	51256.8	52234.8	523.15 µg/L	523.15 ppb	00:05:36
1	Zn 213.857†	22169.6	22049.1	516.69 µg/L	516.69 ppb	00:05:36
2	Sc RADIAL	57827.3	57827.3	97.9 %		00:04:33
2	Al 396.153Radial†	6893.7	7047.4	5258.0 µg/L	5258.0 ppb	00:04:33
2	Ca 317.933Radial†	5700.5	5627.4	5161.8 µg/L	5161.8 ppb	00:04:53
2	Fe 238.204 Radial†	615.8	613.3	5275.8 µg/L	5275.8 ppb	00:04:53
2	K 766.490 Radial†	7531.6	7491.7	5151.4 µg/L	5151.4 ppb	00:04:33
2	Mg 279.077 IEC†	548.6	548.1	5337.6 µg/L	5337.6 ppb	00:04:53
2	Na 589.592 Radial†	31949.3	32147.6	10510 µg/L	10510 ppb	00:04:33
2	Sr 421.552†	50012.1	51022.7	501.82 µg/L	501.82 ppb	00:04:33
2	Sc 361.383	2071786.3	2071786.3	98.674 %		00:06:04
2	Y 371.029	1431109.7	1431109.7	98.325 %		00:06:04
2	Ag 328.068†	66150.2	67502.5	507.24 µg/L	507.24 ppb	00:06:10
2	As 188.979†	278.9	283.0	508.37 µg/L	508.37 ppb	00:06:30
2	B 249.677†	12317.5	12157.6	495.43 µg/L	495.43 ppb	00:06:10
2	Ba 233.527†	20441.0	20734.1	509.02 µg/L	509.02 ppb	00:06:10
2	Be 313.107†	826922.1	841795.6	508.20 µg/L	508.20 ppb	00:06:04
2	Cd 226.502†	19844.2	20247.5	509.41 µg/L	509.41 ppb	00:06:10
2	Co 228.616†	10939.6	11084.1	512.64 µg/L	512.64 ppb	00:06:10
2	Cr 267.716†	24768.4	25148.7	513.20 µg/L	513.20 ppb	00:06:10
2	Cu 324.752†	78472.6	76657.6	509.24 µg/L	509.24 ppb	00:06:10
2	Mn 257.610†	159085.5	161526.3	514.65 µg/L	514.65 ppb	00:06:04
2	Mo 202.031†	5075.5	5147.1	515.92 µg/L	515.92 ppb	00:06:30
2	Ni 231.604†	10303.5	10133.4	511.59 µg/L	511.59 ppb	00:06:10
2	P 214.914†	1279.9	1280.9	2498.0 µg/L	2498.0 ppb	00:06:30
2	Pb 220.353†	2143.2	2077.3	511.29 µg/L	511.29 ppb	00:06:30

2	S 181.975 Axial†	263.1	249.3	1033.4 µg/L	1033.4 ppb	00:06:30
2	Sb 206.836†	565.6	551.1	505.33 µg/L	505.33 ppb	00:06:30
2	Se 196.026†	378.1	368.2	512.59 µg/L	512.59 ppb	00:06:30
2	SiO2†	28495.1	27393.7	5485.6 µg/L	5485.6 ppb	00:06:10
2	Si 251.611†	33093.1	33244.4	2565.9 µg/L	2565.9 ppb	00:06:10
2	Sn 189.927†	1196.1	1207.5	516.40 µg/L	516.40 ppb	00:06:30
2	Ti 334.940†	222052.0	224895.0	511.16 µg/L	511.16 ppb	00:06:04
2	Tl 190.801†	352.9	379.9	513.94 µg/L	513.94 ppb	00:06:30
2	U 409.014†	6014.3	6095.9	516.27 µg/L	516.27 ppb	00:06:10
2	V 292.402†	50766.2	51544.5	516.20 µg/L	516.20 ppb	00:06:10
2	Zn 213.857†	21962.1	21755.3	509.81 µg/L	509.81 ppb	00:06:10
3	Sc RADIAL	57722.0	57722.0	97.8 %		00:04:59
3	Al 396.153Radial†	6896.4	7063.0	5271.3 µg/L	5271.3 ppb	00:04:59
3	Ca 317.933Radial†	5715.0	5652.9	5185.2 µg/L	5185.2 ppb	00:05:19
3	Fe 238.204 Radial†	613.9	612.6	5268.1 µg/L	5268.1 ppb	00:05:19
3	K 766.490 Radial†	7377.9	7348.5	5052.9 µg/L	5052.9 ppb	00:04:59
3	Mg 279.077 IEC†	557.1	557.8	5430.6 µg/L	5430.6 ppb	00:05:19
3	Na 589.592 Radial†	31767.7	32021.4	10469 µg/L	10469 ppb	00:04:59
3	Sr 421.552†	49751.5	50849.4	500.11 µg/L	500.11 ppb	00:04:59
3	Sc 361.383	2057993.8	2057993.8	98.017 %		00:06:37
3	Y 371.029	1421787.4	1421787.4	97.685 %		00:06:37
3	Ag 328.068†	62121.2	63841.2	479.58 µg/L	479.58 ppb	00:06:43
3	As 188.979†	240.0	245.1	440.36 µg/L	440.36 ppb	00:07:03
3	B 249.677†	11580.9	11489.7	468.01 µg/L	468.01 ppb	00:06:43
3	Ba 233.527†	18574.3	18968.5	465.66 µg/L	465.66 ppb	00:06:43
3	Be 313.107†	767265.6	786548.6	474.85 µg/L	474.85 ppb	00:06:37
3	Cd 226.502†	17953.0	18452.8	464.20 µg/L	464.20 ppb	00:06:43
3	Co 228.616†	9804.2	10000.0	462.44 µg/L	462.44 ppb	00:06:43
3	Cr 267.716†	21658.9	22144.5	451.90 µg/L	451.90 ppb	00:06:43
3	Cu 324.752†	70892.5	69457.1	461.47 µg/L	461.47 ppb	00:06:43
3	Mn 257.610†	148137.6	151437.4	482.53 µg/L	482.53 ppb	00:06:37
3	Mo 202.031†	4229.1	4318.0	432.85 µg/L	432.85 ppb	00:07:03
3	Ni 231.604†	9286.8	9166.0	462.76 µg/L	462.76 ppb	00:06:43
3	P 214.914†	1094.8	1100.7	2143.4 µg/L	2143.4 ppb	00:07:03
3	Pb 220.353†	1866.2	1809.2	445.24 µg/L	445.24 ppb	00:07:03
3	S 181.975 Axial†	233.3	220.8	915.15 µg/L	915.15 ppb	00:07:03
3	Sb 206.836†	488.7	476.5	436.51 µg/L	436.51 ppb	00:07:03
3	Se 196.026†	335.8	327.6	456.89 µg/L	456.89 ppb	00:07:03
3	SiO2†	26439.5	25490.1	5104.4 µg/L	5104.4 ppb	00:06:43
3	Si 251.611†	30590.6	30916.1	2386.2 µg/L	2386.2 ppb	00:06:43
3	Sn 189.927†	983.9	999.0	427.28 µg/L	427.28 ppb	00:07:03
3	Ti 334.940†	205015.2	209021.6	475.05 µg/L	475.05 ppb	00:06:37
3	Tl 190.801†	319.1	347.7	470.58 µg/L	470.58 ppb	00:07:03
3	U 409.014†	5267.4	5374.7	455.06 µg/L	455.06 ppb	00:06:43
3	V 292.402†	45133.8	46142.9	461.92 µg/L	461.92 ppb	00:06:43
3	Zn 213.857†	19842.4	19742.0	462.58 µg/L	462.58 ppb	00:06:43

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2064632.7	98.333 %	0.3291			0.33%
Sc RADIAL	57654.9	97.6 %	0.36			0.37%
Y 371.029	1426466.7	98.006 %	0.3203			0.33%
Ag 328.068†	66574.9	500.22 µg/L	18.180	500.22 ppb	18.180	3.63%
QC value within limits for Ag 328.068 Recovery = 100.04%						
Al 396.153Radial†	7055.8	5264.8 µg/L	6.66	5264.8 ppb	6.66	0.13%
QC value within limits for Al 396.153Radial Recovery = 105.30%						
As 188.979†	273.0	490.46 µg/L	43.965	490.46 ppb	43.965	8.96%
QC value within limits for As 188.979 Recovery = 98.09%						
B 249.677†	12010.3	489.37 µg/L	19.067	489.37 ppb	19.067	3.90%
QC value within limits for B 249.677 Recovery = 97.87%						
Ba 233.527†	20251.3	497.16 µg/L	27.560	497.16 ppb	27.560	5.54%
QC value within limits for Ba 233.527 Recovery = 99.43%						
Be 313.107†	824336.3	497.66 µg/L	19.775	497.66 ppb	19.775	3.97%
QC value within limits for Be 313.107 Recovery = 99.53%						
Ca 317.933Radial†	5648.2	5180.9 µg/L	17.30	5180.9 ppb	17.30	0.33%
QC value within limits for Ca 317.933Radial Recovery = 103.62%						
Cd 226.502†	19732.8	496.44 µg/L	28.102	496.44 ppb	28.102	5.66%
QC value within limits for Cd 226.502 Recovery = 99.29%						
Co 228.616†	10780.4	498.58 µg/L	31.549	498.58 ppb	31.549	6.33%

QC value within limits for Co 228.616 Recovery = 99.72%					
Cr 267.716†	24279.2	495.46 µg/L	37.938	495.46 ppb	37.938 7.66%
QC value within limits for Cr 267.716 Recovery = 99.09%					
Cu 324.752†	74613.6	495.68 µg/L	29.835	495.68 ppb	29.835 6.02%
QC value within limits for Cu 324.752 Recovery = 99.14%					
Fe 238.204 Radial†	613.8	5279.2 µg/L	13.10	5279.2 ppb	13.10 0.25%
QC value within limits for Fe 238.204 Radial Recovery = 105.58%					
K 766.490 Radial†	7435.8	5113.0 µg/L	52.69	5113.0 ppb	52.69 1.03%
QC value within limits for K 766.490 Radial Recovery = 102.26%					
Mg 279.077 IEC†	554.6	5400.6 µg/L	54.55	5400.6 ppb	54.55 1.01%
QC value within limits for Mg 279.077 IEC Recovery = 108.01%					
Mn 257.610†	158287.7	504.34 µg/L	18.896	504.34 ppb	18.896 3.75%
QC value within limits for Mn 257.610 Recovery = 100.87%					
Mo 202.031†	4915.9	492.75 µg/L	52.321	492.75 ppb	52.321 10.62%
QC value within limits for Mo 202.031 Recovery = 98.55%					
Na 589.592 Radial†	32094.4	10493 µg/L	21.4	10493 ppb	21.4 0.20%
QC value within limits for Na 589.592 Radial Recovery = 104.93%					
Ni 231.604†	9869.7	498.28 µg/L	31.083	498.28 ppb	31.083 6.24%
QC value within limits for Ni 231.604 Recovery = 99.66%					
P 214.914†	1230.0	2397.9 µg/L	221.99	2397.9 ppb	221.99 9.26%
QC value within limits for P 214.914 Recovery = 95.91%					
Pb 220.353†	2006.2	493.78 µg/L	42.581	493.78 ppb	42.581 8.62%
QC value within limits for Pb 220.353 Recovery = 98.76%					
S 181.975 Axial†	241.4	1000.8 µg/L	74.84	1000.8 ppb	74.84 7.48%
QC value within limits for S 181.975 Axial Recovery = 100.08%					
Sb 206.836†	529.6	485.55 µg/L	42.736	485.55 ppb	42.736 8.80%
QC value within limits for Sb 206.836 Recovery = 97.11%					
Se 196.026†	359.0	499.97 µg/L	38.354	499.97 ppb	38.354 7.67%
QC value within limits for Se 196.026 Recovery = 99.99%					
SiO2†	26885.0	5383.7 µg/L	244.85	5383.7 ppb	244.85 4.55%
QC value within limits for SiO2 Recovery = 100.68%					
Si 251.611†	32618.9	2517.6 µg/L	115.15	2517.6 ppb	115.15 4.57%
QC value within limits for Si 251.611 Recovery = 100.71%					
Sn 189.927†	1149.6	491.66 µg/L	56.249	491.66 ppb	56.249 11.44%
QC value within limits for Sn 189.927 Recovery = 98.33%					
Sr 421.552†	50933.5	500.94 µg/L	0.853	500.94 ppb	0.853 0.17%
QC value within limits for Sr 421.552 Recovery = 100.19%					
Ti 334.940†	219845.5	499.67 µg/L	21.337	499.67 ppb	21.337 4.27%
QC value within limits for Ti 334.940 Recovery = 99.93%					
Tl 190.801†	372.2	503.53 µg/L	29.173	503.53 ppb	29.173 5.79%
QC value within limits for Tl 190.801 Recovery = 100.71%					
U 409.014†	5876.4	497.64 µg/L	36.969	497.64 ppb	36.969 7.43%
QC value within limits for U 409.014 Recovery = 99.53%					
V 292.402†	49974.1	500.42 µg/L	33.528	500.42 ppb	33.528 6.70%
QC value within limits for V 292.402 Recovery = 100.08%					
Zn 213.857†	21182.1	496.36 µg/L	29.454	496.36 ppb	29.454 5.93%
QC value within limits for Zn 213.857 Recovery = 99.27%					

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/21/2010 00:07:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56827.9	56827.9	96.2 %		00:07:46
1	Al 396.153Radial†	-11.9	-3.7	-2.7798 µg/L	-2.7798 ppb	00:07:46
1	Ca 317.933Radial†	191.0	5.4	4.9932 µg/L	4.9932 ppb	00:08:07
1	Fe 238.204 Radial†	17.6	2.9	25.038 µg/L	25.038 ppb	00:08:07
1	K 766.490 Radial†	227.0	37.5	25.770 µg/L	25.770 ppb	00:07:46
1	Mg 279.077 IEC†	5.0	-6.9	-67.444 µg/L	-67.444 ppb	00:08:07
1	Na 589.592 Radial†	474.5	19.3	6.3097 µg/L	6.3097 ppb	00:07:46
1	Sr 421.552†	52.2	12.9	0.1264 µg/L	0.1264 ppb	00:07:46
1	Sc 361.383	2048811.8	2048811.8	97.580 %		00:09:08
1	Y 371.029	1421637.4	1421637.4	97.674 %		00:09:08
1	Ag 328.068†	-402.5	50.6	0.3802 µg/L	0.3802 ppb	00:09:14
1	As 188.979†	0.1	0.4	0.6624 µg/L	0.6624 ppb	00:09:35
1	B 249.677†	345.4	28.5	1.1536 µg/L	1.1536 ppb	00:09:35
1	Ba 233.527†	-7.9	10.2	0.2511 µg/L	0.2511 ppb	00:09:35
1	Be 313.107†	-3529.5	141.9	0.0854 µg/L	0.0854 ppb	00:09:14
1	Cd 226.502†	-133.2	0.1	-0.0004 µg/L	-0.0004 ppb	00:09:35
1	Co 228.616†	2.6	0.1	0.0041 µg/L	0.0041 ppb	00:09:35
1	Cr 267.716†	-21.2	25.7	0.5236 µg/L	0.5236 ppb	00:09:14
1	Cu 324.752†	2883.1	84.9	0.5666 µg/L	0.5666 ppb	00:09:14
1	Mn 257.610†	-43.8	257.7	0.8263 µg/L	0.8263 ppb	00:09:35
1	Mo 202.031†	5.7	9.2	0.9218 µg/L	0.9218 ppb	00:09:35
1	Ni 231.604†	304.8	3.8	0.1904 µg/L	0.1904 ppb	00:09:35
1	P 214.914†	18.0	2.2	4.3058 µg/L	4.3058 ppb	00:09:35
1	Pb 220.353†	88.6	-4.0	-0.9893 µg/L	-0.9893 ppb	00:09:35
1	S 181.975 Axial†	19.6	2.8	11.780 µg/L	11.780 ppb	00:09:35
1	Sb 206.836†	20.5	-1.1	-1.0267 µg/L	-1.0267 ppb	00:09:35
1	Se 196.026†	17.3	2.7	3.8268 µg/L	3.8268 ppb	00:09:35
1	SiO2†	1591.3	146.4	29.313 µg/L	29.313 ppb	00:09:14
1	Si 251.611†	446.5	164.0	12.660 µg/L	12.660 ppb	00:09:35
1	Sn 189.927†	4.9	0.3	0.1048 µg/L	0.1048 ppb	00:09:35
1	Ti 334.940†	476.1	346.2	0.7928 µg/L	0.7928 ppb	00:09:14
1	Tl 190.801†	-23.9	-2.3	-3.0080 µg/L	-3.0080 ppb	00:09:35
1	U 409.014†	-26.8	-26.7	-2.2692 µg/L	-2.2692 ppb	00:09:14
1	V 292.402†	-78.6	15.5	0.1620 µg/L	0.1620 ppb	00:09:14
1	Zn 213.857†	511.1	21.8	0.5155 µg/L	0.5155 ppb	00:09:35
2	Sc RADIAL	56976.7	56976.7	96.5 %		00:08:12
2	Al 396.153Radial†	1.1	9.8	7.3287 µg/L	7.3287 ppb	00:08:12
2	Ca 317.933Radial†	188.1	2.0	1.7975 µg/L	1.7975 ppb	00:08:32
2	Fe 238.204 Radial†	17.2	2.4	20.850 µg/L	20.850 ppb	00:08:32
2	K 766.490 Radial†	220.2	29.8	20.496 µg/L	20.496 ppb	00:08:12
2	Mg 279.077 IEC†	13.3	1.7	16.748 µg/L	16.748 ppb	00:08:32
2	Na 589.592 Radial†	450.8	-6.5	-2.1321 µg/L	-2.1321 ppb	00:08:12
2	Sr 421.552†	23.3	-17.2	-0.1691 µg/L	-0.1691 ppb	00:08:12
2	Sc 361.383	2061213.2	2061213.2	98.170 %		00:09:41
2	Y 371.029	1429644.0	1429644.0	98.224 %		00:09:41
2	Ag 328.068†	-411.8	43.6	0.3297 µg/L	0.3297 ppb	00:09:46
2	As 188.979†	-3.2	-3.0	-5.4202 µg/L	-5.4202 ppb	00:10:07
2	B 249.677†	353.3	34.4	1.3935 µg/L	1.3935 ppb	00:10:07
2	Ba 233.527†	-7.9	10.3	0.2534 µg/L	0.2534 ppb	00:10:07
2	Be 313.107†	-3550.5	142.2	0.0855 µg/L	0.0855 ppb	00:09:46
2	Cd 226.502†	-138.6	-4.6	-0.1171 µg/L	-0.1171 ppb	00:10:07
2	Co 228.616†	3.1	0.6	0.0277 µg/L	0.0277 ppb	00:10:07
2	Cr 267.716†	-79.6	-33.6	-0.6859 µg/L	-0.6859 ppb	00:09:46
2	Cu 324.752†	2945.2	130.4	0.8681 µg/L	0.8681 ppb	00:09:46
2	Mn 257.610†	-43.7	258.0	0.8234 µg/L	0.8234 ppb	00:10:07
2	Mo 202.031†	0.2	3.6	0.3577 µg/L	0.3577 ppb	00:10:07
2	Ni 231.604†	309.5	6.7	0.3374 µg/L	0.3374 ppb	00:10:07
2	P 214.914†	9.6	-6.4	-12.836 µg/L	-12.836 ppb	00:10:07
2	Pb 220.353†	93.2	0.2	0.0620 µg/L	0.0620 ppb	00:10:07

2	S 181.975 Axial†	17.6	0.7	2.8242 µg/L	2.8242 ppb	00:10:07
2	Sb 206.836†	18.1	-3.7	-3.3805 µg/L	-3.3805 ppb	00:10:07
2	Se 196.026†	21.2	6.6	9.0772 µg/L	9.0772 ppb	00:10:07
2	SiO2†	1578.3	123.3	24.690 µg/L	24.690 ppb	00:09:46
2	Si 251.611†	447.3	162.1	12.510 µg/L	12.510 ppb	00:10:07
2	Sn 189.927†	4.9	0.3	0.1188 µg/L	0.1188 ppb	00:10:07
2	Ti 334.940†	549.0	417.6	0.9484 µg/L	0.9484 ppb	00:09:46
2	Tl 190.801†	-26.3	-4.5	-6.0444 µg/L	-6.0444 ppb	00:10:07
2	U 409.014†	-155.2	-157.4	-13.356 µg/L	-13.356 ppb	00:09:46
2	V 292.402†	-52.5	42.5	0.4101 µg/L	0.4101 ppb	00:09:46
2	Zn 213.857†	521.8	29.6	0.6944 µg/L	0.6944 ppb	00:10:07
3	Sc RADIAL	57148.0	57148.0	96.8 %		00:08:38
3	Al 396.153Radial†	-21.0	-13.0	-9.7230 µg/L	-9.7230 ppb	00:08:38
3	Ca 317.933Radial†	205.2	19.0	17.463 µg/L	17.463 ppb	00:08:58
3	Fe 238.204 Radial†	16.0	1.1	9.7862 µg/L	9.7862 ppb	00:08:58
3	K 766.490 Radial†	172.9	-19.7	-13.576 µg/L	-13.576 ppb	00:08:38
3	Mg 279.077 IEC†	11.6	-0.1	-1.3133 µg/L	-1.3133 ppb	00:08:58
3	Na 589.592 Radial†	491.4	34.0	11.119 µg/L	11.119 ppb	00:08:38
3	Sr 421.552†	45.6	5.8	0.0568 µg/L	0.0568 ppb	00:08:38
3	Sc 361.383	2058859.2	2058859.2	98.058 %		00:10:13
3	Y 371.029	1427504.8	1427504.8	98.078 %		00:10:13
3	Ag 328.068†	-407.6	47.4	0.3542 µg/L	0.3542 ppb	00:10:19
3	As 188.979†	-1.6	-1.4	-2.4452 µg/L	-2.4452 ppb	00:10:39
3	B 249.677†	345.6	27.0	1.1001 µg/L	1.1001 ppb	00:10:39
3	Ba 233.527†	-10.8	7.3	0.1793 µg/L	0.1793 ppb	00:10:39
3	Be 313.107†	-3550.4	138.1	0.0831 µg/L	0.0831 ppb	00:10:19
3	Cd 226.502†	-138.9	-5.0	-0.1281 µg/L	-0.1281 ppb	00:10:39
3	Co 228.616†	9.2	6.8	0.3141 µg/L	0.3141 ppb	00:10:39
3	Cr 267.716†	-26.7	20.2	0.4110 µg/L	0.4110 ppb	00:10:19
3	Cu 324.752†	2907.8	95.6	0.6357 µg/L	0.6357 ppb	00:10:19
3	Mn 257.610†	-111.8	188.6	0.6017 µg/L	0.6017 ppb	00:10:39
3	Mo 202.031†	-0.0	3.3	0.3311 µg/L	0.3311 ppb	00:10:39
3	Ni 231.604†	300.3	-2.4	-0.1200 µg/L	-0.1200 ppb	00:10:39
3	P 214.914†	13.4	-2.5	-5.1026 µg/L	-5.1026 ppb	00:10:39
3	Pb 220.353†	89.9	-3.1	-0.7731 µg/L	-0.7731 ppb	00:10:39
3	S 181.975 Axial†	17.6	0.6	2.6706 µg/L	2.6706 ppb	00:10:39
3	Sb 206.836†	21.6	-0.1	-0.0875 µg/L	-0.0875 ppb	00:10:39
3	Se 196.026†	20.9	6.3	8.6805 µg/L	8.6805 ppb	00:10:39
3	SiO2†	1581.5	128.5	25.723 µg/L	25.723 ppb	00:10:19
3	Si 251.611†	427.7	142.6	11.006 µg/L	11.006 ppb	00:10:39
3	Sn 189.927†	4.2	-0.4	-0.1884 µg/L	-0.1884 ppb	00:10:39
3	Ti 334.940†	552.9	422.2	0.9607 µg/L	0.9607 ppb	00:10:19
3	Tl 190.801†	-20.1	1.7	2.2786 µg/L	2.2786 ppb	00:10:39
3	U 409.014†	-1.8	-1.1	-0.0980 µg/L	-0.0980 ppb	00:10:19
3	V 292.402†	-97.2	-3.2	-0.0267 µg/L	-0.0267 ppb	00:10:19
3	Zn 213.857†	515.9	24.1	0.5685 µg/L	0.5685 ppb	00:10:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2056294.7	97.936 %	0.3137			0.32%
Sc RADIAL	56984.2	96.5 %	0.27			0.28%
Y 371.029	1426262.1	97.992 %	0.2848			0.29%
Ag 328.068†	47.2	0.3547 µg/L	0.02525	0.3547 ppb	0.02525	7.12%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-2.3	-1.7247 µg/L	8.57468	-1.7247 ppb	8.57468	497.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.3	-2.4010 µg/L	3.04154	-2.4010 ppb	3.04154	126.68%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	30.0	1.2158 µg/L	0.15625	1.2158 ppb	0.15625	12.85%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.3	0.2279 µg/L	0.04213	0.2279 ppb	0.04213	18.49%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	140.7	0.0847 µg/L	0.00138	0.0847 ppb	0.00138	1.63%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	8.8	8.0845 µg/L	8.27760	8.0845 ppb	8.27760	102.39%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-3.2	-0.0819 µg/L	0.07074	-0.0819 ppb	0.07074	86.42%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.5	0.1153 µg/L	0.17258	0.1153 ppb	0.17258	149.65%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	4.1 0.0829 µg/L	0.66815 0.0829 ppb	0.66815 805.80%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	103.6 0.6901 µg/L	0.15793 0.6901 ppb	0.15793 22.88%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	2.2 18.558 µg/L	7.8801 18.558 ppb	7.8801 42.46%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	15.8 10.897 µg/L	21.3573 10.897 ppb	21.3573 196.00%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.8 -17.336 µg/L	44.3242 -17.336 ppb	44.3242 255.67%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	234.8 0.7505 µg/L	0.12888 0.7505 ppb	0.12888 17.17%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	5.4 0.5369 µg/L	0.33365 0.5369 ppb	0.33365 62.15%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	15.6 5.0989 µg/L	6.70808 5.0989 ppb	6.70808 131.56%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	2.7 0.1359 µg/L	0.23349 0.1359 ppb	0.23349 171.78%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-2.2 -4.5444 µg/L	8.58475 -4.5444 ppb	8.58475 188.91%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-2.3 -0.5668 µg/L	0.55518 -0.5668 ppb	0.55518 97.95%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.4 5.7582 µg/L	5.21534 5.7582 ppb	5.21534 90.57%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-1.6 -1.4982 µg/L	1.69637 -1.4982 ppb	1.69637 113.23%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	5.2 7.1948 µg/L	2.92353 7.1948 ppb	2.92353 40.63%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	132.7 26.575 µg/L	2.4263 26.575 ppb	2.4263 9.13%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	156.2 12.059 µg/L	0.9143 12.059 ppb	0.9143 7.58%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	0.0 0.0117 µg/L	0.17349 0.0117 ppb	0.17349 >999.9%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	0.5 0.0047 µg/L	0.15451 0.0047 ppb	0.15451 >999.9%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	395.3 0.9007 µg/L	0.09358 0.9007 ppb	0.09358 10.39%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-1.7 -2.2579 µg/L	4.21187 -2.2579 ppb	4.21187 186.54%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-61.7 -5.2412 µg/L	7.11135 -5.2412 ppb	7.11135 135.68%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	18.3 0.1818 µg/L	0.21908 0.1818 ppb	0.21908 120.51%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	25.2 0.5928 µg/L	0.09190 0.5928 ppb	0.09190 15.50%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/21/2010 00:40:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57881.2	57881.2	98.0	%		00:40:54
1	Al 396.153Radial†	6874.3	7021.1	5238.1	µg/L	5238.1 ppb	00:40:54
1	Ca 317.933Radial†	5664.1	5584.9	5122.8	µg/L	5122.8 ppb	00:41:15
1	Fe 238.204 Radial†	610.6	607.5	5225.8	µg/L	5225.8 ppb	00:41:15
1	K 766.490 Radial†	7410.5	7360.9	5061.5	µg/L	5061.5 ppb	00:40:54
1	Mg 279.077 IEC†	547.1	546.0	5317.3	µg/L	5317.3 ppb	00:41:15
1	Na 589.592 Radial†	31642.9	31804.7	10398	µg/L	10398 ppb	00:40:54
1	Sr 421.552†	49374.6	50324.8	494.96	µg/L	494.96 ppb	00:40:54
1	Sc 361.383	2058449.1	2058449.1	98.039	%		00:42:18
1	Y 371.029	1422350.2	1422350.2	97.723	%		00:42:18
1	Ag 328.068†	65498.8	67272.4	505.50	µg/L	505.50 ppb	00:42:24
1	As 188.979†	278.6	284.5	511.07	µg/L	511.07 ppb	00:42:45
1	B 249.677†	12182.9	12101.1	493.14	µg/L	493.14 ppb	00:42:24
1	Ba 233.527†	20217.2	20640.0	506.71	µg/L	506.71 ppb	00:42:24
1	Be 313.107†	813128.2	833155.6	502.98	µg/L	502.98 ppb	00:42:18
1	Cd 226.502†	19525.0	20052.3	504.49	µg/L	504.49 ppb	00:42:24
1	Co 228.616†	10814.6	11028.4	510.08	µg/L	510.08 ppb	00:42:24
1	Cr 267.716†	24537.6	25075.9	511.72	µg/L	511.72 ppb	00:42:24
1	Cu 324.752†	77653.4	76337.4	507.11	µg/L	507.11 ppb	00:42:24
1	Mn 257.610†	156762.6	160201.6	510.43	µg/L	510.43 ppb	00:42:18
1	Mo 202.031†	5112.7	5218.3	523.05	µg/L	523.05 ppb	00:42:45
1	Ni 231.604†	10181.2	10076.3	508.71	µg/L	508.71 ppb	00:42:24
1	P 214.914†	1284.0	1293.5	2523.3	µg/L	2523.3 ppb	00:42:45
1	Pb 220.353†	2131.2	2079.0	511.75	µg/L	511.75 ppb	00:42:45
1	S 181.975 Axial†	258.7	246.5	1022.0	µg/L	1022.0 ppb	00:42:45
1	Sb 206.836†	562.1	551.2	505.59	µg/L	505.59 ppb	00:42:45
1	Se 196.026†	376.8	369.3	514.08	µg/L	514.08 ppb	00:42:45
1	SiO2†	28192.4	27272.0	5461.2	µg/L	5461.2 ppb	00:42:24
1	Si 251.611†	32691.3	33051.9	2551.1	µg/L	2551.1 ppb	00:42:24
1	Sn 189.927†	1202.0	1221.3	522.33	µg/L	522.33 ppb	00:42:45
1	Ti 334.940†	218714.5	222948.7	506.73	µg/L	506.73 ppb	00:42:18
1	Tl 190.801†	360.0	389.5	526.64	µg/L	526.64 ppb	00:42:45
1	U 409.014†	5957.1	6077.0	514.68	µg/L	514.68 ppb	00:42:24
1	V 292.402†	50130.9	51229.9	513.13	µg/L	513.13 ppb	00:42:24
1	Zn 213.857†	21705.2	21637.6	507.05	µg/L	507.05 ppb	00:42:24
2	Sc RADIAL	57384.3	57384.3	97.2	%		00:41:20
2	Al 396.153Radial†	6807.4	7013.0	5232.4	µg/L	5232.4 ppb	00:41:20
2	Ca 317.933Radial†	5637.9	5607.9	5143.9	µg/L	5143.9 ppb	00:41:41
2	Fe 238.204 Radial†	607.5	609.7	5244.8	µg/L	5244.8 ppb	00:41:41
2	K 766.490 Radial†	7386.7	7401.9	5089.7	µg/L	5089.7 ppb	00:41:20
2	Mg 279.077 IEC†	550.0	553.8	5393.5	µg/L	5393.5 ppb	00:41:41
2	Na 589.592 Radial†	31475.5	31912.0	10433	µg/L	10433 ppb	00:41:20
2	Sr 421.552†	49051.1	50428.2	495.97	µg/L	495.97 ppb	00:41:20
2	Sc 361.383	2075281.0	2075281.0	98.840	%		00:42:52
2	Y 371.029	1432661.4	1432661.4	98.432	%		00:42:52
2	Ag 328.068†	65552.1	66784.5	501.84	µg/L	501.84 ppb	00:42:57
2	As 188.979†	275.4	278.9	501.05	µg/L	501.05 ppb	00:43:18
2	B 249.677†	12290.4	12109.1	493.45	µg/L	493.45 ppb	00:42:57
2	Ba 233.527†	20250.0	20506.0	503.42	µg/L	503.42 ppb	00:42:57
2	Be 313.107†	815905.2	829238.2	500.62	µg/L	500.62 ppb	00:42:52
2	Cd 226.502†	19614.8	19981.6	502.71	µg/L	502.71 ppb	00:42:57
2	Co 228.616†	10794.9	10919.0	505.00	µg/L	505.00 ppb	00:42:57
2	Cr 267.716†	24518.7	24853.8	507.19	µg/L	507.19 ppb	00:42:57
2	Cu 324.752†	77695.4	75737.4	503.13	µg/L	503.13 ppb	00:42:57
2	Mn 257.610†	156827.5	158970.4	506.51	µg/L	506.51 ppb	00:42:52
2	Mo 202.031†	5025.0	5087.3	509.92	µg/L	509.92 ppb	00:43:18
2	Ni 231.604†	10201.7	10012.8	505.50	µg/L	505.50 ppb	00:42:57
2	P 214.914†	1256.2	1254.7	2446.5	µg/L	2446.5 ppb	00:43:18
2	Pb 220.353†	2112.1	2042.1	502.65	µg/L	502.65 ppb	00:43:18

2	S 181.975 Axial†	257.4	243.1	1007.6 µg/L	1007.6 ppb	00:43:18
2	Sb 206.836†	561.0	545.5	500.16 µg/L	500.16 ppb	00:43:18
2	Se 196.026†	373.0	362.4	504.55 µg/L	504.55 ppb	00:43:18
2	SiO2†	28219.5	27066.3	5420.0 µg/L	5420.0 ppb	00:42:57
2	Si 251.611†	32775.0	32866.0	2536.7 µg/L	2536.7 ppb	00:42:57
2	Sn 189.927†	1183.0	1192.2	509.88 µg/L	509.88 ppb	00:43:18
2	Ti 334.940†	219319.0	221750.9	504.00 µg/L	504.00 ppb	00:42:52
2	Tl 190.801†	346.1	372.4	503.80 µg/L	503.80 ppb	00:43:18
2	U 409.014†	5900.4	5970.4	505.63 µg/L	505.63 ppb	00:42:57
2	V 292.402†	50215.4	50900.7	509.75 µg/L	509.75 ppb	00:42:57
2	Zn 213.857†	21723.0	21476.0	503.25 µg/L	503.25 ppb	00:42:57
3	Sc RADIAL	57362.8	57362.8	97.2 %		00:41:46
3	Al 396.153Radial†	6816.6	7025.1	5243.1 µg/L	5243.1 ppb	00:41:46
3	Ca 317.933Radial†	5637.3	5609.5	5145.4 µg/L	5145.4 ppb	00:42:07
3	Fe 238.204 Radial†	607.4	609.8	5244.1 µg/L	5244.1 ppb	00:42:07
3	K 766.490 Radial†	7349.2	7366.2	5065.1 µg/L	5065.1 ppb	00:41:46
3	Mg 279.077 IEC†	550.3	554.3	5396.8 µg/L	5396.8 ppb	00:42:07
3	Na 589.592 Radial†	31396.3	31842.5	10410 µg/L	10410 ppb	00:41:46
3	Sr 421.552†	48853.4	50243.6	494.16 µg/L	494.16 ppb	00:41:46
3	Sc 361.383	2057125.1	2057125.1	97.975 %		00:43:25
3	Y 371.029	1420790.7	1420790.7	97.616 %		00:43:25
3	Ag 328.068†	61278.1	63007.4	473.31 µg/L	473.31 ppb	00:43:31
3	As 188.979†	237.3	242.5	435.64 µg/L	435.64 ppb	00:43:51
3	B 249.677†	11357.0	11266.2	458.87 µg/L	458.87 ppb	00:43:31
3	Ba 233.527†	18273.7	18669.6	458.32 µg/L	458.32 ppb	00:43:31
3	Be 313.107†	755469.0	774838.7	467.78 µg/L	467.78 ppb	00:43:25
3	Cd 226.502†	17664.9	18166.6	456.99 µg/L	456.99 ppb	00:43:31
3	Co 228.616†	9661.2	9858.3	455.89 µg/L	455.89 ppb	00:43:31
3	Cr 267.716†	21236.1	21722.3	443.29 µg/L	443.29 ppb	00:43:31
3	Cu 324.752†	69937.5	68513.0	455.21 µg/L	455.21 ppb	00:43:31
3	Mn 257.610†	145958.9	149277.5	475.65 µg/L	475.65 ppb	00:43:25
3	Mo 202.031†	4159.4	4248.6	425.90 µg/L	425.90 ppb	00:43:51
3	Ni 231.604†	9107.2	8986.7	453.71 µg/L	453.71 ppb	00:43:31
3	P 214.914†	1072.9	1078.8	2100.5 µg/L	2100.5 ppb	00:43:51
3	Pb 220.353†	1836.4	1779.6	437.96 µg/L	437.96 ppb	00:43:51
3	S 181.975 Axial†	229.3	216.7	898.33 µg/L	898.33 ppb	00:43:51
3	Sb 206.836†	477.3	465.1	426.09 µg/L	426.09 ppb	00:43:51
3	Se 196.026†	334.1	326.0	454.62 µg/L	454.62 ppb	00:43:51
3	SiO2†	25997.3	25050.1	5016.3 µg/L	5016.3 ppb	00:43:31
3	Si 251.611†	30110.7	30439.3	2349.4 µg/L	2349.4 ppb	00:43:31
3	Sn 189.927†	967.9	983.2	420.48 µg/L	420.48 ppb	00:43:51
3	Ti 334.940†	201941.0	205972.2	468.12 µg/L	468.12 ppb	00:43:25
3	Tl 190.801†	313.7	342.4	463.38 µg/L	463.38 ppb	00:43:51
3	U 409.014†	5162.9	5270.3	446.21 µg/L	446.21 ppb	00:43:31
3	V 292.402†	44408.7	45422.3	454.70 µg/L	454.70 ppb	00:43:31
3	Zn 213.857†	19499.7	19400.7	454.58 µg/L	454.58 ppb	00:43:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2063618.4	98.285 %	0.4821			0.49%
Sc RADIAL	57542.8	97.5 %	0.50			0.51%
Y 371.029	1425267.4	97.924 %	0.4432			0.45%
Ag 328.068†	65688.1	493.55 µg/L	17.625	493.55 ppb	17.625	3.57%
QC value within limits for Ag 328.068 Recovery = 98.71%						
Al 396.153Radial†	7019.7	5237.9 µg/L	5.39	5237.9 ppb	5.39	0.10%
QC value within limits for Al 396.153Radial Recovery = 104.76%						
As 188.979†	268.6	482.59 µg/L	40.964	482.59 ppb	40.964	8.49%
QC value within limits for As 188.979 Recovery = 96.52%						
B 249.677†	11825.5	481.82 µg/L	19.878	481.82 ppb	19.878	4.13%
QC value within limits for B 249.677 Recovery = 96.36%						
Ba 233.527†	19938.5	489.48 µg/L	27.038	489.48 ppb	27.038	5.52%
QC value within limits for Ba 233.527 Recovery = 97.90%						
Be 313.107†	812410.8	490.46 µg/L	19.679	490.46 ppb	19.679	4.01%
QC value within limits for Be 313.107 Recovery = 98.09%						
Ca 317.933Radial†	5600.8	5137.4 µg/L	12.66	5137.4 ppb	12.66	0.25%
QC value within limits for Ca 317.933Radial Recovery = 102.75%						
Cd 226.502†	19400.1	488.06 µg/L	26.928	488.06 ppb	26.928	5.52%
QC value within limits for Cd 226.502 Recovery = 97.61%						
Co 228.616†	10601.9	490.32 µg/L	29.930	490.32 ppb	29.930	6.10%

QC value within limits for Co 228.616 Recovery = 98.06%							
Cr 267.716†	23884.0	487.40 µg/L	38.266	487.40 ppb	38.266	7.85%	
QC value within limits for Cr 267.716 Recovery = 97.48%							
Cu 324.752†	73529.3	488.48 µg/L	28.885	488.48 ppb	28.885	5.91%	
QC value within limits for Cu 324.752 Recovery = 97.70%							
Fe 238.204 Radial†	609.0	5238.2 µg/L	10.73	5238.2 ppb	10.73	0.20%	
QC value within limits for Fe 238.204 Radial Recovery = 104.76%							
K 766.490 Radial†	7376.3	5072.1 µg/L	15.33	5072.1 ppb	15.33	0.30%	
QC value within limits for K 766.490 Radial Recovery = 101.44%							
Mg 279.077 IEC†	551.4	5369.2 µg/L	45.00	5369.2 ppb	45.00	0.84%	
QC value within limits for Mg 279.077 IEC Recovery = 107.38%							
Mn 257.610†	156149.8	497.53 µg/L	19.046	497.53 ppb	19.046	3.83%	
QC value within limits for Mn 257.610 Recovery = 99.51%							
Mo 202.031†	4851.4	486.29 µg/L	52.714	486.29 ppb	52.714	10.84%	
QC value within limits for Mo 202.031 Recovery = 97.26%							
Na 589.592 Radial†	31853.1	10414 µg/L	17.8	10414 ppb	17.8	0.17%	
QC value within limits for Na 589.592 Radial Recovery = 104.14%							
Ni 231.604†	9691.9	489.31 µg/L	30.871	489.31 ppb	30.871	6.31%	
QC value within limits for Ni 231.604 Recovery = 97.86%							
P 214.914†	1209.0	2356.7 µg/L	225.22	2356.7 ppb	225.22	9.56%	
QC value within limits for P 214.914 Recovery = 94.27%							
Pb 220.353†	1966.9	484.12 µg/L	40.236	484.12 ppb	40.236	8.31%	
QC value within limits for Pb 220.353 Recovery = 96.82%							
S 181.975 Axial†	235.4	975.97 µg/L	67.623	975.97 ppb	67.623	6.93%	
QC value within limits for S 181.975 Axial Recovery = 97.60%							
Sb 206.836†	520.6	477.28 µg/L	44.414	477.28 ppb	44.414	9.31%	
QC value within limits for Sb 206.836 Recovery = 95.46%							
Se 196.026†	352.6	491.09 µg/L	31.935	491.09 ppb	31.935	6.50%	
QC value within limits for Se 196.026 Recovery = 98.22%							
SiO2†	26462.8	5299.2 µg/L	245.85	5299.2 ppb	245.85	4.64%	
QC value within limits for SiO2 Recovery = 99.10%							
Si 251.611†	32119.1	2479.1 µg/L	112.51	2479.1 ppb	112.51	4.54%	
QC value within limits for Si 251.611 Recovery = 99.16%							
Sn 189.927†	1132.2	484.23 µg/L	55.558	484.23 ppb	55.558	11.47%	
QC value within limits for Sn 189.927 Recovery = 96.85%							
Sr 421.552†	50332.2	495.03 µg/L	0.910	495.03 ppb	0.910	0.18%	
QC value within limits for Sr 421.552 Recovery = 99.01%							
Ti 334.940†	216890.6	492.95 µg/L	21.551	492.95 ppb	21.551	4.37%	
QC value within limits for Ti 334.940 Recovery = 98.59%							
Tl 190.801†	368.1	497.94 µg/L	32.034	497.94 ppb	32.034	6.43%	
QC value within limits for Tl 190.801 Recovery = 99.59%							
U 409.014†	5772.6	488.84 µg/L	37.191	488.84 ppb	37.191	7.61%	
QC value within limits for U 409.014 Recovery = 97.77%							
V 292.402†	49184.3	492.53 µg/L	32.800	492.53 ppb	32.800	6.66%	
QC value within limits for V 292.402 Recovery = 98.51%							
Zn 213.857†	20838.1	488.30 µg/L	29.259	488.30 ppb	29.259	5.99%	
QC value within limits for Zn 213.857 Recovery = 97.66%							

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/21/2010 00:44:02

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56896.4	56896.4	96.4 %		00:44:34
1	Al 396.153Radial†	-29.0	-21.4	-16.015 µg/L	-16.015 ppb	00:44:34
1	Ca 317.933Radial†	186.7	0.8	0.7488 µg/L	0.7488 ppb	00:44:55
1	Fe 238.204 Radial†	16.7	2.0	17.106 µg/L	17.106 ppb	00:44:55
1	K 766.490 Radial†	181.9	-9.6	-6.5992 µg/L	-6.5992 ppb	00:44:34
1	Mg 279.077 IEC†	9.8	-1.9	-18.464 µg/L	-18.464 ppb	00:44:55
1	Na 589.592 Radial†	456.3	-0.2	-0.0705 µg/L	-0.0705 ppb	00:44:34
1	Sr 421.552†	51.5	12.0	0.1185 µg/L	0.1185 ppb	00:44:34
1	Sc 361.383	2073373.1	2073373.1	98.749 %		00:45:57
1	Y 371.029	1437404.4	1437404.4	98.758 %		00:45:57
1	Ag 328.068†	-433.1	24.5	0.1815 µg/L	0.1815 ppb	00:46:02
1	As 188.979†	4.2	4.5	8.0821 µg/L	8.0821 ppb	00:46:23
1	B 249.677†	342.9	21.7	0.8791 µg/L	0.8791 ppb	00:46:23
1	Ba 233.527†	-15.6	2.6	0.0632 µg/L	0.0632 ppb	00:46:23
1	Be 313.107†	-3530.6	183.6	0.1108 µg/L	0.1108 ppb	00:46:02
1	Cd 226.502†	-146.9	-12.2	-0.3078 µg/L	-0.3078 ppb	00:46:23
1	Co 228.616†	3.0	0.5	0.0217 µg/L	0.0217 ppb	00:46:23
1	Cr 267.716†	-64.7	-18.2	-0.3707 µg/L	-0.3707 ppb	00:46:02
1	Cu 324.752†	2872.3	39.0	0.2609 µg/L	0.2609 ppb	00:46:02
1	Mn 257.610†	-233.0	66.7	0.2152 µg/L	0.2152 ppb	00:46:23
1	Mo 202.031†	5.1	8.5	0.8533 µg/L	0.8533 ppb	00:46:23
1	Ni 231.604†	305.4	0.6	0.0317 µg/L	0.0317 ppb	00:46:23
1	P 214.914†	12.9	-3.1	-6.2855 µg/L	-6.2855 ppb	00:46:23
1	Pb 220.353†	84.7	-9.0	-2.2213 µg/L	-2.2213 ppb	00:46:23
1	S 181.975 Axial†	17.8	0.7	2.8936 µg/L	2.8936 ppb	00:46:23
1	Sb 206.836†	20.5	-1.4	-1.2500 µg/L	-1.2500 ppb	00:46:23
1	Se 196.026†	13.2	-1.6	-2.1416 µg/L	-2.1416 ppb	00:46:23
1	SiO2†	1510.2	44.9	8.9960 µg/L	8.9960 ppb	00:46:02
1	Si 251.611†	398.1	109.7	8.4643 µg/L	8.4643 ppb	00:46:23
1	Sn 189.927†	3.6	-1.1	-0.4635 µg/L	-0.4635 ppb	00:46:23
1	Ti 334.940†	199.4	60.3	0.1385 µg/L	0.1385 ppb	00:46:02
1	Tl 190.801†	-19.6	2.4	3.2210 µg/L	3.2210 ppb	00:46:23
1	U 409.014†	-43.8	-43.6	-3.7052 µg/L	-3.7052 ppb	00:46:02
1	V 292.402†	-130.2	-35.8	-0.3505 µg/L	-0.3505 ppb	00:46:02
1	Zn 213.857†	511.9	16.4	0.3872 µg/L	0.3872 ppb	00:46:23
2	Sc RADIAL	56812.6	56812.6	96.2 %		00:45:00
2	Al 396.153Radial†	-8.2	0.1	0.1128 µg/L	0.1128 ppb	00:45:00
2	Ca 317.933Radial†	185.7	0.0	0.0285 µg/L	0.0285 ppb	00:45:21
2	Fe 238.204 Radial†	13.6	-1.2	-10.584 µg/L	-10.584 ppb	00:45:21
2	K 766.490 Radial†	174.4	-17.1	-11.774 µg/L	-11.774 ppb	00:45:00
2	Mg 279.077 IEC†	7.5	-4.3	-42.175 µg/L	-42.175 ppb	00:45:21
2	Na 589.592 Radial†	444.6	-11.7	-3.8255 µg/L	-3.8255 ppb	00:45:00
2	Sr 421.552†	46.5	7.0	0.0689 µg/L	0.0689 ppb	00:45:00
2	Sc 361.383	2065404.0	2065404.0	98.370 %		00:46:29
2	Y 371.029	1431739.7	1431739.7	98.368 %		00:46:29
2	Ag 328.068†	-456.2	-0.7	-0.0036 µg/L	-0.0036 ppb	00:46:34
2	As 188.979†	1.1	1.4	2.5097 µg/L	2.5097 ppb	00:46:55
2	B 249.677†	343.1	23.3	0.9591 µg/L	0.9591 ppb	00:46:55
2	Ba 233.527†	-18.7	-0.7	-0.0162 µg/L	-0.0162 ppb	00:46:55
2	Be 313.107†	-3596.1	103.2	0.0622 µg/L	0.0622 ppb	00:46:34
2	Cd 226.502†	-131.1	3.3	0.0844 µg/L	0.0844 ppb	00:46:55
2	Co 228.616†	7.9	5.5	0.2517 µg/L	0.2517 ppb	00:46:55
2	Cr 267.716†	-76.0	-29.9	-0.6087 µg/L	-0.6087 ppb	00:46:34
2	Cu 324.752†	2833.6	10.9	0.0706 µg/L	0.0706 ppb	00:46:34
2	Mn 257.610†	-227.8	71.0	0.2262 µg/L	0.2262 ppb	00:46:55
2	Mo 202.031†	-4.7	-1.5	-0.1461 µg/L	-0.1461 ppb	00:46:55
2	Ni 231.604†	306.0	2.4	0.1232 µg/L	0.1232 ppb	00:46:55
2	P 214.914†	10.9	-5.1	-10.181 µg/L	-10.181 ppb	00:46:55
2	Pb 220.353†	78.8	-14.6	-3.6015 µg/L	-3.6015 ppb	00:46:55

2	S 181.975 Axial†	17.3	0.3	1.2946 µg/L	1.2946 ppb	00:46:55
2	Sb 206.836†	25.4	3.7	3.4016 µg/L	3.4016 ppb	00:46:55
2	Se 196.026†	17.0	2.3	3.1238 µg/L	3.1238 ppb	00:46:55
2	SiO2†	1516.5	57.3	11.468 µg/L	11.468 ppb	00:46:34
2	Si 251.611†	398.3	111.4	8.5984 µg/L	8.5984 ppb	00:46:55
2	Sn 189.927†	4.2	-0.4	-0.1825 µg/L	-0.1825 ppb	00:46:55
2	Ti 334.940†	291.1	154.2	0.3541 µg/L	0.3541 ppb	00:46:34
2	Tl 190.801†	-18.8	3.1	4.1166 µg/L	4.1166 ppb	00:46:55
2	U 409.014†	6.1	7.0	0.5913 µg/L	0.5913 ppb	00:46:34
2	V 292.402†	-62.1	32.9	0.3220 µg/L	0.3220 ppb	00:46:34
2	Zn 213.857†	508.8	15.3	0.3633 µg/L	0.3633 ppb	00:46:55
3	Sc RADIAL	56934.4	56934.4	96.4 %		00:45:26
3	Al 396.153Radial†	-15.3	-7.1	-5.3436 µg/L	-5.3436 ppb	00:45:26
3	Ca 317.933Radial†	188.9	2.9	2.6763 µg/L	2.6763 ppb	00:45:47
3	Fe 238.204 Radial†	15.5	0.7	6.2831 µg/L	6.2831 ppb	00:45:47
3	K 766.490 Radial†	197.0	5.9	4.0896 µg/L	4.0896 ppb	00:45:26
3	Mg 279.077 IEC†	15.3	3.8	36.639 µg/L	36.639 ppb	00:45:47
3	Na 589.592 Radial†	443.2	-14.0	-4.5928 µg/L	-4.5928 ppb	00:45:26
3	Sr 421.552†	51.4	11.9	0.1174 µg/L	0.1174 ppb	00:45:26
3	Sc 361.383	2075668.4	2075668.4	98.859 %		00:47:01
3	Y 371.029	1439968.1	1439968.1	98.934 %		00:47:01
3	Ag 328.068†	-392.6	66.0	0.4947 µg/L	0.4947 ppb	00:47:07
3	As 188.979†	-4.5	-4.3	-7.7675 µg/L	-7.7675 ppb	00:47:27
3	B 249.677†	338.1	16.6	0.6735 µg/L	0.6735 ppb	00:47:27
3	Ba 233.527†	-15.2	3.0	0.0732 µg/L	0.0732 ppb	00:47:27
3	Be 313.107†	-3468.6	250.2	0.1510 µg/L	0.1510 ppb	00:47:07
3	Cd 226.502†	-140.5	-5.5	-0.1398 µg/L	-0.1398 ppb	00:47:27
3	Co 228.616†	-1.4	-4.0	-0.1860 µg/L	-0.1860 ppb	00:47:27
3	Cr 267.716†	-67.3	-20.7	-0.4221 µg/L	-0.4221 ppb	00:47:07
3	Cu 324.752†	2855.7	18.9	0.1264 µg/L	0.1264 ppb	00:47:07
3	Mn 257.610†	-240.4	59.4	0.1885 µg/L	0.1885 ppb	00:47:27
3	Mo 202.031†	2.3	5.6	0.5634 µg/L	0.5634 ppb	00:47:27
3	Ni 231.604†	304.7	-0.4	-0.0189 µg/L	-0.0189 ppb	00:47:27
3	P 214.914†	9.0	-7.1	-14.198 µg/L	-14.198 ppb	00:47:27
3	Pb 220.353†	83.4	-10.4	-2.5635 µg/L	-2.5635 ppb	00:47:27
3	S 181.975 Axial†	18.2	1.1	4.7095 µg/L	4.7095 ppb	00:47:27
3	Sb 206.836†	19.4	-2.5	-2.2840 µg/L	-2.2840 ppb	00:47:27
3	Se 196.026†	23.9	9.2	12.607 µg/L	12.607 ppb	00:47:27
3	SiO2†	1508.4	41.5	8.3010 µg/L	8.3010 ppb	00:47:07
3	Si 251.611†	400.3	111.4	8.5957 µg/L	8.5957 ppb	00:47:27
3	Sn 189.927†	-0.3	-5.1	-2.1635 µg/L	-2.1635 ppb	00:47:27
3	Ti 334.940†	221.9	82.8	0.1855 µg/L	0.1855 ppb	00:47:07
3	Tl 190.801†	-20.4	1.6	2.1244 µg/L	2.1244 ppb	00:47:27
3	U 409.014†	-38.3	-38.0	-3.2256 µg/L	-3.2256 ppb	00:47:07
3	V 292.402†	-60.6	34.7	0.3442 µg/L	0.3442 ppb	00:47:07
3	Zn 213.857†	511.1	15.1	0.3541 µg/L	0.3541 ppb	00:47:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2071481.9	98.659 %	0.2566			0.26%
Sc RADIAL	56881.2	96.3 %	0.11			0.11%
Y 371.029	1436370.7	98.687 %	0.2893			0.29%
Ag 328.068†	29.9	0.2242 µg/L	0.25188	0.2242 ppb	0.25188	112.33%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-9.5	-7.0820 µg/L	8.20331	-7.0820 ppb	8.20331	115.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.5	0.9414 µg/L	8.04035	0.9414 ppb	8.04035	854.06%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	20.5	0.8372 µg/L	0.14733	0.8372 ppb	0.14733	17.60%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	1.6	0.0401 µg/L	0.04900	0.0401 ppb	0.04900	122.31%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	179.0	0.1080 µg/L	0.04449	0.1080 ppb	0.04449	41.19%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.3	1.1512 µg/L	1.36898	1.1512 ppb	1.36898	118.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-4.8	-0.1211 µg/L	0.19680	-0.1211 ppb	0.19680	162.56%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.6	0.0291 µg/L	0.21895	0.0291 ppb	0.21895	751.75%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated				
	-22.9	-0.4672 µg/L	0.12520	-0.4672 ppb	0.12520	26.80%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated				
	22.9	0.1526 µg/L	0.09782	0.1526 ppb	0.09782	64.09%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated				
	0.5	4.2682 µg/L	13.95442	4.2682 ppb	13.95442	326.94%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated				
	-6.9	-4.7612 µg/L	8.08983	-4.7612 ppb	8.08983	169.91%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated				
	-0.8	-7.9998 µg/L	40.43557	-7.9998 ppb	40.43557	505.46%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated				
	65.7	0.2099 µg/L	0.01941	0.2099 ppb	0.01941	9.25%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated				
	4.2	0.4235 µg/L	0.51419	0.4235 ppb	0.51419	121.41%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated				
	-8.7	-2.8296 µg/L	2.42002	-2.8296 ppb	2.42002	85.53%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated				
	0.9	0.0453 µg/L	0.07199	0.0453 ppb	0.07199	158.86%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated				
	-5.1	-10.222 µg/L	3.9565	-10.222 ppb	3.9565	38.71%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated				
	-11.4	-2.7954 µg/L	0.71873	-2.7954 ppb	0.71873	25.71%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated				
	0.7	2.9659 µg/L	1.70856	2.9659 ppb	1.70856	57.61%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated				
	-0.1	-0.0442 µg/L	3.02857	-0.0442 ppb	3.02857	>999.9%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated				
	3.3	4.5299 µg/L	7.47441	4.5299 ppb	7.47441	165.00%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated				
	47.9	9.5882 µg/L	1.66428	9.5882 ppb	1.66428	17.36%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated				
	110.8	8.5528 µg/L	0.07667	8.5528 ppb	0.07667	0.90%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated				
	-2.2	-0.9365 µg/L	1.07188	-0.9365 ppb	1.07188	114.45%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated				
	10.3	0.1016 µg/L	0.02835	0.1016 ppb	0.02835	27.91%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated				
	99.1	0.2260 µg/L	0.11335	0.2260 ppb	0.11335	50.14%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated				
	2.4	3.1540 µg/L	0.99778	3.1540 ppb	0.99778	31.64%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated				
	-24.9	-2.1132 µg/L	2.35439	-2.1132 ppb	2.35439	111.41%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated				
	10.6	0.1052 µg/L	0.39487	0.1052 ppb	0.39487	375.26%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated				
	15.6	0.3682 µg/L	0.01710	0.3682 ppb	0.01710	4.64%
All analyte(s) passed QC.						

Sequence No.: 40

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/21/2010 01:19:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57636.1	57636.1	97.6	%		01:20:30
1	Al 396.153Radial†	6955.2	7133.7	5322.3	µg/L	5322.3 ppb	01:20:30
1	Ca 317.933Radial†	5685.4	5631.3	5165.4	µg/L	5165.4 ppb	01:20:50
1	Fe 238.204 Radial†	615.3	615.0	5290.1	µg/L	5290.1 ppb	01:20:50
1	K 766.490 Radial†	7506.3	7491.2	5151.1	µg/L	5151.1 ppb	01:20:30
1	Mg 279.077 IEC†	551.1	552.5	5380.5	µg/L	5380.5 ppb	01:20:50
1	Na 589.592 Radial†	31863.0	32167.5	10516	µg/L	10516 ppb	01:20:30
1	Sr 421.552†	49924.1	51102.0	502.60	µg/L	502.60 ppb	01:20:30
1	Sc 361.383	2075657.0	2075657.0	98.858	%		01:21:54
1	Y 371.029	1434036.8	1434036.8	98.526	%		01:21:54
1	Ag 328.068†	66183.0	67410.6	506.56	µg/L	506.56 ppb	01:21:59
1	As 188.979†	286.3	289.9	520.90	µg/L	520.90 ppb	01:22:20
1	B 249.677†	12361.7	12179.0	496.30	µg/L	496.30 ppb	01:21:59
1	Ba 233.527†	20502.0	20757.1	509.58	µg/L	509.58 ppb	01:21:59
1	Be 313.107†	830255.8	843605.1	509.29	µg/L	509.29 ppb	01:21:54
1	Cd 226.502†	19831.6	20197.3	508.14	µg/L	508.14 ppb	01:21:59
1	Co 228.616†	10974.0	11098.2	513.30	µg/L	513.30 ppb	01:21:59
1	Cr 267.716†	24826.6	25160.8	513.45	µg/L	513.45 ppb	01:21:59
1	Cu 324.752†	78508.8	76546.0	508.50	µg/L	508.50 ppb	01:21:59
1	Mn 257.610†	159314.6	161457.4	514.43	µg/L	514.43 ppb	01:21:54
1	Mo 202.031†	5193.0	5256.3	526.87	µg/L	526.87 ppb	01:22:20
1	Ni 231.604†	10307.1	10117.5	510.79	µg/L	510.79 ppb	01:21:59
1	P 214.914†	1307.2	1306.0	2548.2	µg/L	2548.2 ppb	01:22:20
1	Pb 220.353†	2173.4	2103.7	517.85	µg/L	517.85 ppb	01:22:20
1	S 181.975 Axial†	261.2	246.9	1023.5	µg/L	1023.5 ppb	01:22:20
1	Sb 206.836†	583.8	568.4	521.31	µg/L	521.31 ppb	01:22:20
1	Se 196.026†	386.2	375.7	522.89	µg/L	522.89 ppb	01:22:20
1	SiO2†	28521.1	27366.1	5480.1	µg/L	5480.1 ppb	01:21:59
1	Si 251.611†	33186.5	33276.3	2568.4	µg/L	2568.4 ppb	01:21:59
1	Sn 189.927†	1222.7	1232.1	526.92	µg/L	526.92 ppb	01:22:20
1	Ti 334.940†	223276.9	225714.3	513.02	µg/L	513.02 ppb	01:21:54
1	Tl 190.801†	359.4	385.8	521.78	µg/L	521.78 ppb	01:22:20
1	U 409.014†	6011.0	6081.2	515.02	µg/L	515.02 ppb	01:21:59
1	V 292.402†	50817.6	51500.6	515.85	µg/L	515.85 ppb	01:21:59
1	Zn 213.857†	22006.4	21758.7	509.89	µg/L	509.89 ppb	01:21:59
2	Sc RADIAL	57890.5	57890.5	98.0	%		01:20:56
2	Al 396.153Radial†	6993.2	7141.2	5328.0	µg/L	5328.0 ppb	01:20:56
2	Ca 317.933Radial†	5738.6	5659.9	5191.6	µg/L	5191.6 ppb	01:21:16
2	Fe 238.204 Radial†	613.0	609.8	5246.0	µg/L	5246.0 ppb	01:21:16
2	K 766.490 Radial†	7519.6	7471.0	5137.2	µg/L	5137.2 ppb	01:20:56
2	Mg 279.077 IEC†	551.3	550.2	5358.8	µg/L	5358.8 ppb	01:21:16
2	Na 589.592 Radial†	31933.6	32096.1	10493	µg/L	10493 ppb	01:20:56
2	Sr 421.552†	50192.0	51150.5	503.08	µg/L	503.08 ppb	01:20:56
2	Sc 361.383	2072531.3	2072531.3	98.709	%		01:22:27
2	Y 371.029	1429823.2	1429823.2	98.237	%		01:22:27
2	Ag 328.068†	66103.9	67431.4	506.72	µg/L	506.72 ppb	01:22:33
2	As 188.979†	277.5	281.4	505.61	µg/L	505.61 ppb	01:22:53
2	B 249.677†	12413.4	12250.2	499.24	µg/L	499.24 ppb	01:22:33
2	Ba 233.527†	20489.7	20776.0	510.05	µg/L	510.05 ppb	01:22:33
2	Be 313.107†	828998.8	843598.2	509.29	µg/L	509.29 ppb	01:22:27
2	Cd 226.502†	19821.6	20217.4	508.65	µg/L	508.65 ppb	01:22:33
2	Co 228.616†	10976.1	11117.0	514.16	µg/L	514.16 ppb	01:22:33
2	Cr 267.716†	24910.7	25283.9	515.96	µg/L	515.96 ppb	01:22:33
2	Cu 324.752†	78735.1	76895.0	510.81	µg/L	510.81 ppb	01:22:33
2	Mn 257.610†	159177.7	161561.8	514.76	µg/L	514.76 ppb	01:22:27
2	Mo 202.031†	5127.8	5198.2	521.04	µg/L	521.04 ppb	01:22:53
2	Ni 231.604†	10379.5	10206.6	515.29	µg/L	515.29 ppb	01:22:33
2	P 214.914†	1289.7	1290.4	2516.8	µg/L	2516.8 ppb	01:22:53
2	Pb 220.353†	2157.1	2090.5	514.57	µg/L	514.57 ppb	01:22:53

2	S 181.975 Axial†	264.1	250.2	1037.3 µg/L	1037.3 ppb	01:22:53
2	Sb 206.836†	566.2	551.5	505.71 µg/L	505.71 ppb	01:22:53
2	Se 196.026†	387.9	378.0	525.91 µg/L	525.91 ppb	01:22:53
2	SiO2†	28684.0	27574.7	5521.9 µg/L	5521.9 ppb	01:22:33
2	Si 251.611†	33340.4	33482.8	2584.3 µg/L	2584.3 ppb	01:22:33
2	Sn 189.927†	1212.7	1223.9	523.41 µg/L	523.41 ppb	01:22:53
2	Ti 334.940†	223296.3	226074.6	513.84 µg/L	513.84 ppb	01:22:27
2	Tl 190.801†	354.0	380.9	515.26 µg/L	515.26 ppb	01:22:53
2	U 409.014†	6031.4	6111.0	517.55 µg/L	517.55 ppb	01:22:33
2	V 292.402†	50925.7	51687.6	517.65 µg/L	517.65 ppb	01:22:33
2	Zn 213.857†	22096.6	21883.6	512.82 µg/L	512.82 ppb	01:22:33
3	Sc RADIAL	57793.0	57793.0	97.9 %		01:21:22
3	Al 396.153Radial†	6955.2	7114.4	5309.8 µg/L	5309.8 ppb	01:21:22
3	Ca 317.933Radial†	5739.0	5670.2	5201.1 µg/L	5201.1 ppb	01:21:42
3	Fe 238.204 Radial†	613.9	611.8	5261.7 µg/L	5261.7 ppb	01:21:42
3	K 766.490 Radial†	7386.3	7347.8	5052.5 µg/L	5052.5 ppb	01:21:22
3	Mg 279.077 IEC†	556.3	556.2	5415.4 µg/L	5415.4 ppb	01:21:42
3	Na 589.592 Radial†	31872.6	32088.7	10491 µg/L	10491 ppb	01:21:22
3	Sr 421.552†	50014.9	51055.9	502.15 µg/L	502.15 ppb	01:21:22
3	Sc 361.383	2076428.2	2076428.2	98.895 %		01:23:00
3	Y 371.029	1433371.9	1433371.9	98.481 %		01:23:00
3	Ag 328.068†	62511.2	63673.0	478.32 µg/L	478.32 ppb	01:23:06
3	As 188.979†	238.5	241.4	433.77 µg/L	433.77 ppb	01:23:27
3	B 249.677†	11652.4	11457.1	466.68 µg/L	466.68 ppb	01:23:06
3	Ba 233.527†	18718.0	18945.5	465.09 µg/L	465.09 ppb	01:23:06
3	Be 313.107†	772345.2	784735.3	473.75 µg/L	473.75 ppb	01:23:00
3	Cd 226.502†	18085.5	18424.2	463.47 µg/L	463.47 ppb	01:23:06
3	Co 228.616†	9919.7	10028.0	463.73 µg/L	463.73 ppb	01:23:06
3	Cr 267.716†	21781.1	22071.9	450.42 µg/L	450.42 ppb	01:23:06
3	Cu 324.752†	71348.5	69276.2	460.27 µg/L	460.27 ppb	01:23:06
3	Mn 257.610†	148951.7	150918.9	480.88 µg/L	480.88 ppb	01:23:00
3	Mo 202.031†	4236.6	4287.2	429.77 µg/L	429.77 ppb	01:23:27
3	Ni 231.604†	9327.2	9122.8	460.57 µg/L	460.57 ppb	01:23:06
3	P 214.914†	1090.2	1086.2	2114.7 µg/L	2114.7 ppb	01:23:27
3	Pb 220.353†	1869.4	1795.6	441.88 µg/L	441.88 ppb	01:23:27
3	S 181.975 Axial†	227.0	212.2	879.58 µg/L	879.58 ppb	01:23:27
3	Sb 206.836†	485.3	468.6	429.29 µg/L	429.29 ppb	01:23:27
3	Se 196.026†	335.4	324.2	452.18 µg/L	452.18 ppb	01:23:27
3	SiO2†	26683.7	25497.5	5105.9 µg/L	5105.9 ppb	01:23:06
3	Si 251.611†	30858.0	30909.4	2385.7 µg/L	2385.7 ppb	01:23:06
3	Sn 189.927†	995.4	1001.8	428.44 µg/L	428.44 ppb	01:23:27
3	Ti 334.940†	207019.0	209190.9	475.44 µg/L	475.44 ppb	01:23:00
3	Tl 190.801†	310.6	336.3	455.30 µg/L	455.30 ppb	01:23:27
3	U 409.014†	5280.5	5340.3	452.14 µg/L	452.14 ppb	01:23:06
3	V 292.402†	45436.2	46040.0	460.87 µg/L	460.87 ppb	01:23:06
3	Zn 213.857†	19912.3	19632.9	460.02 µg/L	460.02 ppb	01:23:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2074872.2	98.821 %	0.0983			0.10%
Sc RADIAL	57773.2	97.8 %	0.22			0.22%
Y 371.029	1432410.6	98.415 %	0.1556			0.16%
Ag 328.068†	66171.7	497.20 µg/L	16.352	497.20 ppb	16.352	3.29%
QC value within limits for Ag 328.068 Recovery = 99.44%						
Al 396.153Radial†	7129.8	5320.0 µg/L	9.29	5320.0 ppb	9.29	0.17%
QC value within limits for Al 396.153Radial Recovery = 106.40%						
As 188.979†	270.9	486.76 µg/L	46.523	486.76 ppb	46.523	9.56%
QC value within limits for As 188.979 Recovery = 97.35%						
B 249.677†	11962.1	487.40 µg/L	18.010	487.40 ppb	18.010	3.69%
QC value within limits for B 249.677 Recovery = 97.48%						
Ba 233.527†	20159.5	494.91 µg/L	25.822	494.91 ppb	25.822	5.22%
QC value within limits for Ba 233.527 Recovery = 98.98%						
Be 313.107†	823979.5	497.44 µg/L	20.518	497.44 ppb	20.518	4.12%
QC value within limits for Be 313.107 Recovery = 99.49%						
Ca 317.933Radial†	5653.8	5186.0 µg/L	18.52	5186.0 ppb	18.52	0.36%
QC value within limits for Ca 317.933Radial Recovery = 103.72%						
Cd 226.502†	19613.0	493.42 µg/L	25.937	493.42 ppb	25.937	5.26%
QC value within limits for Cd 226.502 Recovery = 98.68%						
Co 228.616†	10747.8	497.07 µg/L	28.869	497.07 ppb	28.869	5.81%

QC value within limits for Co 228.616 Recovery = 99.41%						
Cr 267.716†	24172.2	493.28 µg/L	37.135	493.28 ppb	37.135	7.53%
QC value within limits for Cr 267.716 Recovery = 98.66%						
Cu 324.752†	74239.0	493.19 µg/L	28.534	493.19 ppb	28.534	5.79%
QC value within limits for Cu 324.752 Recovery = 98.64%						
Fe 238.204 Radial†	612.2	5265.9 µg/L	22.35	5265.9 ppb	22.35	0.42%
QC value within limits for Fe 238.204 Radial Recovery = 105.32%						
K 766.490 Radial†	7436.7	5113.6 µg/L	53.38	5113.6 ppb	53.38	1.04%
QC value within limits for K 766.490 Radial Recovery = 102.27%						
Mg 279.077 IEC†	553.0	5384.9 µg/L	28.57	5384.9 ppb	28.57	0.53%
QC value within limits for Mg 279.077 IEC Recovery = 107.70%						
Mn 257.610†	157979.4	503.36 µg/L	19.466	503.36 ppb	19.466	3.87%
QC value within limits for Mn 257.610 Recovery = 100.67%						
Mo 202.031†	4913.9	492.56 µg/L	54.457	492.56 ppb	54.457	11.06%
QC value within limits for Mo 202.031 Recovery = 98.51%						
Na 589.592 Radial†	32117.4	10500 µg/L	14.2	10500 ppb	14.2	0.14%
QC value within limits for Na 589.592 Radial Recovery = 105.00%						
Ni 231.604†	9815.6	495.55 µg/L	30.373	495.55 ppb	30.373	6.13%
QC value within limits for Ni 231.604 Recovery = 99.11%						
P 214.914†	1227.5	2393.2 µg/L	241.73	2393.2 ppb	241.73	10.10%
QC value within limits for P 214.914 Recovery = 95.73%						
Pb 220.353†	1996.6	491.43 µg/L	42.943	491.43 ppb	42.943	8.74%
QC value within limits for Pb 220.353 Recovery = 98.29%						
S 181.975 Axial†	236.5	980.13 µg/L	87.356	980.13 ppb	87.356	8.91%
QC value within limits for S 181.975 Axial Recovery = 98.01%						
Sb 206.836†	529.5	485.44 µg/L	49.251	485.44 ppb	49.251	10.15%
QC value within limits for Sb 206.836 Recovery = 97.09%						
Se 196.026†	359.3	500.33 µg/L	41.727	500.33 ppb	41.727	8.34%
QC value within limits for Se 196.026 Recovery = 100.07%						
SiO2†	26812.8	5369.3 µg/L	229.06	5369.3 ppb	229.06	4.27%
QC value within limits for SiO2 Recovery = 100.41%						
Si 251.611†	32556.2	2512.8 µg/L	110.36	2512.8 ppb	110.36	4.39%
QC value within limits for Si 251.611 Recovery = 100.51%						
Sn 189.927†	1152.6	492.92 µg/L	55.871	492.92 ppb	55.871	11.33%
QC value within limits for Sn 189.927 Recovery = 98.58%						
Sr 421.552†	51102.8	502.61 µg/L	0.465	502.61 ppb	0.465	0.09%
QC value within limits for Sr 421.552 Recovery = 100.52%						
Ti 334.940†	220326.6	500.77 µg/L	21.940	500.77 ppb	21.940	4.38%
QC value within limits for Ti 334.940 Recovery = 100.15%						
Tl 190.801†	367.7	497.45 µg/L	36.643	497.45 ppb	36.643	7.37%
QC value within limits for Tl 190.801 Recovery = 99.49%						
U 409.014†	5844.2	494.91 µg/L	37.055	494.91 ppb	37.055	7.49%
QC value within limits for U 409.014 Recovery = 98.98%						
V 292.402†	49742.7	498.12 µg/L	32.277	498.12 ppb	32.277	6.48%
QC value within limits for V 292.402 Recovery = 99.62%						
Zn 213.857†	21091.7	494.24 µg/L	29.675	494.24 ppb	29.675	6.00%
QC value within limits for Zn 213.857 Recovery = 98.85%						

All analyte(s) passed QC.

Sequence No.: 41
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/21/2010 01:23:37
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57129.8	57129.8	96.8 %		01:24:09
1	Al 396.153Radial†	3.2	12.0	8.9366 µg/L	8.9366 ppb	01:24:09
1	Ca 317.933Radial†	192.3	5.7	5.2506 µg/L	5.2506 ppb	01:24:30
1	Fe 238.204 Radial†	17.3	2.5	21.504 µg/L	21.504 ppb	01:24:30
1	K 766.490 Radial†	212.2	21.0	14.420 µg/L	14.420 ppb	01:24:09
1	Mg 279.077 IEC†	9.8	-1.9	-18.972 µg/L	-18.972 ppb	01:24:30
1	Na 589.592 Radial†	489.8	32.5	10.633 µg/L	10.633 ppb	01:24:09
1	Sr 421.552†	6.3	-34.9	-0.3429 µg/L	-0.3429 ppb	01:24:09
1	Sc 361.383	2077058.7	2077058.7	98.925 %		01:25:32
1	Y 371.029	1438364.8	1438364.8	98.824 %		01:25:32
1	Ag 328.068†	-347.2	112.2	0.8415 µg/L	0.8415 ppb	01:25:37
1	As 188.979†	2.3	2.6	4.7000 µg/L	4.7000 ppb	01:25:58
1	B 249.677†	352.1	30.5	1.2354 µg/L	1.2354 ppb	01:25:58
1	Ba 233.527†	4.8	23.2	0.5684 µg/L	0.5684 ppb	01:25:58
1	Be 313.107†	-3477.9	243.1	0.1465 µg/L	0.1465 ppb	01:25:37
1	Cd 226.502†	-133.7	1.5	0.0354 µg/L	0.0354 ppb	01:25:58
1	Co 228.616†	5.5	3.0	0.1376 µg/L	0.1376 ppb	01:25:58
1	Cr 267.716†	-47.0	-0.2	-0.0030 µg/L	-0.0030 ppb	01:25:37
1	Cu 324.752†	2876.2	37.7	0.2534 µg/L	0.2534 ppb	01:25:37
1	Mn 257.610†	-147.7	153.3	0.4915 µg/L	0.4915 ppb	01:25:58
1	Mo 202.031†	-1.7	1.6	0.1627 µg/L	0.1627 ppb	01:25:58
1	Ni 231.604†	317.1	11.9	0.5999 µg/L	0.5999 ppb	01:25:58
1	P 214.914†	13.0	-3.1	-6.1302 µg/L	-6.1302 ppb	01:25:58
1	Pb 220.353†	88.2	-5.6	-1.3909 µg/L	-1.3909 ppb	01:25:58
1	S 181.975 Axial†	15.8	-1.3	-5.4652 µg/L	-5.4652 ppb	01:25:58
1	Sb 206.836†	21.9	0.0	0.0189 µg/L	0.0189 ppb	01:25:58
1	Se 196.026†	18.3	3.5	4.8552 µg/L	4.8552 ppb	01:25:58
1	SiO2†	1541.9	74.2	14.860 µg/L	14.860 ppb	01:25:37
1	Si 251.611†	473.0	184.6	14.252 µg/L	14.252 ppb	01:25:58
1	Sn 189.927†	5.2	0.5	0.2135 µg/L	0.2135 ppb	01:25:58
1	Ti 334.940†	513.3	377.2	0.8596 µg/L	0.8596 ppb	01:25:37
1	Tl 190.801†	-22.3	-0.3	-0.4006 µg/L	-0.4006 ppb	01:25:58
1	U 409.014†	31.3	32.4	2.7423 µg/L	2.7423 ppb	01:25:37
1	V 292.402†	-45.8	49.8	0.4988 µg/L	0.4988 ppb	01:25:37
1	Zn 213.857†	524.6	28.4	0.6672 µg/L	0.6672 ppb	01:25:58
2	Sc RADIAL	56868.8	56868.8	96.3 %		01:24:35
2	Al 396.153Radial†	4.8	13.7	10.252 µg/L	10.252 ppb	01:24:35
2	Ca 317.933Radial†	196.9	11.5	10.524 µg/L	10.524 ppb	01:24:56
2	Fe 238.204 Radial†	16.0	1.2	10.470 µg/L	10.470 ppb	01:24:56
2	K 766.490 Radial†	155.2	-37.2	-25.608 µg/L	-25.608 ppb	01:24:35
2	Mg 279.077 IEC†	10.3	-1.4	-13.855 µg/L	-13.855 ppb	01:24:56
2	Na 589.592 Radial†	436.5	-20.5	-6.6996 µg/L	-6.6996 ppb	01:24:35
2	Sr 421.552†	18.4	-22.3	-0.2189 µg/L	-0.2189 ppb	01:24:35
2	Sc 361.383	2075497.9	2075497.9	98.851 %		01:26:04
2	Y 371.029	1437390.5	1437390.5	98.757 %		01:26:04
2	Ag 328.068†	-446.0	11.9	0.0879 µg/L	0.0879 ppb	01:26:10
2	As 188.979†	-1.8	-1.6	-2.8461 µg/L	-2.8461 ppb	01:26:30
2	B 249.677†	362.2	40.9	1.6698 µg/L	1.6698 ppb	01:26:30
2	Ba 233.527†	1.7	20.1	0.4913 µg/L	0.4913 ppb	01:26:30
2	Be 313.107†	-3468.2	250.3	0.1509 µg/L	0.1509 ppb	01:26:10
2	Cd 226.502†	-148.9	-14.1	-0.3545 µg/L	-0.3545 ppb	01:26:30
2	Co 228.616†	8.2	5.7	0.2649 µg/L	0.2649 ppb	01:26:30
2	Cr 267.716†	-33.9	13.1	0.2673 µg/L	0.2673 ppb	01:26:10
2	Cu 324.752†	2841.3	4.6	0.0322 µg/L	0.0322 ppb	01:26:10
2	Mn 257.610†	-155.1	145.7	0.4657 µg/L	0.4657 ppb	01:26:30
2	Mo 202.031†	3.3	6.6	0.6658 µg/L	0.6658 ppb	01:26:30
2	Ni 231.604†	314.3	9.3	0.4718 µg/L	0.4718 ppb	01:26:30
2	P 214.914†	6.9	-9.3	-18.519 µg/L	-18.519 ppb	01:26:30
2	Pb 220.353†	82.7	-11.1	-2.7391 µg/L	-2.7391 ppb	01:26:30

2	S 181.975 Axial†	19.7	2.6	10.963 µg/L	10.963 ppb	01:26:30
2	Sb 206.836†	27.9	6.1	5.5563 µg/L	5.5563 ppb	01:26:30
2	Se 196.026†	13.3	-1.5	-2.0829 µg/L	-2.0829 ppb	01:26:30
2	SiO2†	1549.9	83.6	16.733 µg/L	16.733 ppb	01:26:10
2	Si 251.611†	476.7	188.7	14.566 µg/L	14.566 ppb	01:26:30
2	Sn 189.927†	2.0	-2.7	-1.1388 µg/L	-1.1388 ppb	01:26:30
2	Ti 334.940†	506.7	370.9	0.8449 µg/L	0.8449 ppb	01:26:10
2	Tl 190.801†	-21.4	0.6	0.7474 µg/L	0.7474 ppb	01:26:30
2	U 409.014†	-9.6	-8.9	-0.7605 µg/L	-0.7605 ppb	01:26:10
2	V 292.402†	-117.8	-23.2	-0.2234 µg/L	-0.2234 ppb	01:26:10
2	Zn 213.857†	523.8	27.9	0.6576 µg/L	0.6576 ppb	01:26:30
3	Sc RADIAL	57048.5	57048.5	96.6 %		01:25:01
3	Al 396.153Radial†	-7.7	0.8	0.5641 µg/L	0.5641 ppb	01:25:01
3	Ca 317.933Radial†	194.3	8.1	7.4721 µg/L	7.4721 ppb	01:25:22
3	Fe 238.204 Radial†	15.3	0.5	4.1055 µg/L	4.1055 ppb	01:25:22
3	K 766.490 Radial†	188.7	-3.1	-2.1461 µg/L	-2.1461 ppb	01:25:01
3	Mg 279.077 IEC†	10.3	-1.4	-13.342 µg/L	-13.342 ppb	01:25:22
3	Na 589.592 Radial†	464.0	6.5	2.1154 µg/L	2.1154 ppb	01:25:01
3	Sr 421.552†	36.7	-3.4	-0.0333 µg/L	-0.0333 ppb	01:25:01
3	Sc 361.383	2073475.7	2073475.7	98.754 %		01:26:36
3	Y 371.029	1437389.9	1437389.9	98.757 %		01:26:36
3	Ag 328.068†	-395.7	62.5	0.4707 µg/L	0.4707 ppb	01:26:42
3	As 188.979†	1.0	1.3	2.3836 µg/L	2.3836 ppb	01:27:02
3	B 249.677†	357.5	36.5	1.4904 µg/L	1.4904 ppb	01:27:02
3	Ba 233.527†	-7.1	11.1	0.2745 µg/L	0.2745 ppb	01:27:02
3	Be 313.107†	-3512.1	202.4	0.1219 µg/L	0.1219 ppb	01:26:42
3	Cd 226.502†	-130.9	4.1	0.1034 µg/L	0.1034 ppb	01:27:02
3	Co 228.616†	6.3	3.8	0.1738 µg/L	0.1738 ppb	01:27:02
3	Cr 267.716†	-68.5	-22.0	-0.4472 µg/L	-0.4472 ppb	01:26:42
3	Cu 324.752†	2820.3	-13.9	-0.0915 µg/L	-0.0915 ppb	01:26:42
3	Mn 257.610†	-178.7	121.6	0.3883 µg/L	0.3883 ppb	01:27:02
3	Mo 202.031†	4.1	7.5	0.7505 µg/L	0.7505 ppb	01:27:02
3	Ni 231.604†	318.8	14.2	0.7155 µg/L	0.7155 ppb	01:27:02
3	P 214.914†	5.9	-10.2	-20.374 µg/L	-20.374 ppb	01:27:02
3	Pb 220.353†	83.4	-10.4	-2.5468 µg/L	-2.5468 ppb	01:27:02
3	S 181.975 Axial†	15.1	-2.1	-8.5153 µg/L	-8.5153 ppb	01:27:02
3	Sb 206.836†	15.7	-6.2	-5.6783 µg/L	-5.6783 ppb	01:27:02
3	Se 196.026†	16.7	2.0	2.7080 µg/L	2.7080 ppb	01:27:02
3	SiO2†	1566.8	102.2	20.467 µg/L	20.467 ppb	01:26:42
3	Si 251.611†	490.6	203.2	15.685 µg/L	15.685 ppb	01:27:02
3	Sn 189.927†	4.2	-0.5	-0.2088 µg/L	-0.2088 ppb	01:27:02
3	Ti 334.940†	557.3	422.6	0.9624 µg/L	0.9624 ppb	01:26:42
3	Tl 190.801†	-19.3	2.7	3.5890 µg/L	3.5890 ppb	01:27:02
3	U 409.014†	-42.1	-41.8	-3.5508 µg/L	-3.5508 ppb	01:26:42
3	V 292.402†	-27.0	68.7	0.6809 µg/L	0.6809 ppb	01:26:42
3	Zn 213.857†	522.7	27.4	0.6431 µg/L	0.6431 ppb	01:27:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	2075344.1	98.843 %		0.0856			0.09%
Sc RADIAL	57015.7	96.6 %		0.23			0.23%
Y 371.029	1437715.1	98.779 %		0.0387			0.04%
Ag 328.068†	62.2	0.4667 µg/L		0.37681	0.4667 ppb	0.37681	80.74%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	8.8	6.5842 µg/L		5.25483	6.5842 ppb	5.25483	79.81%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	0.8	1.4125 µg/L		3.86565	1.4125 ppb	3.86565	273.68%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	36.0	1.4652 µg/L		0.21830	1.4652 ppb	0.21830	14.90%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	18.1	0.4447 µg/L		0.15242	0.4447 ppb	0.15242	34.27%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	232.0	0.1398 µg/L		0.01562	0.1398 ppb	0.01562	11.18%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	8.4	7.7489 µg/L		2.64750	7.7489 ppb	2.64750	34.17%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	-2.8	-0.0719 µg/L		0.24711	-0.0719 ppb	0.24711	343.83%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	4.2	0.1921 µg/L		0.06559	0.1921 ppb	0.06559	34.14%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-3.0 -0.0610 µg/L	0.36078 -0.0610 ppb	0.36078 591.77%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	9.5 0.0647 µg/L	0.17472 0.0647 ppb	0.17472 270.06%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.4 12.026 µg/L	8.8029 12.026 ppb	8.8029 73.20%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	-6.5 -4.4446 µg/L	20.11276 -4.4446 ppb	20.11276 452.52%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.6 -15.390 µg/L	3.1127 -15.390 ppb	3.1127 20.23%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	140.2 0.4485 µg/L	0.05370 0.4485 ppb	0.05370 11.97%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	5.2 0.5263 µg/L	0.31773 0.5263 ppb	0.31773 60.37%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	6.2 2.0162 µg/L	8.66669 2.0162 ppb	8.66669 429.84%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	11.8 0.5957 µg/L	0.12191 0.5957 ppb	0.12191 20.46%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-7.5 -15.008 µg/L	7.7439 -15.008 ppb	7.7439 51.60%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-9.1 -2.2256 µg/L	0.72927 -2.2256 ppb	0.72927 32.77%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-0.2 -1.0058 µg/L	10.47692 -1.0058 ppb	10.47692 >999.9%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-0.0 -0.0344 µg/L	5.61753 -0.0344 ppb	5.61753 >999.9%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	1.3 1.8267 µg/L	3.55200 1.8267 ppb	3.55200 194.45%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	86.7 17.354 µg/L	2.8546 17.354 ppb	2.8546 16.45%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	192.2 14.834 µg/L	0.7534 14.834 ppb	0.7534 5.08%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-0.9 -0.3780 µg/L	0.69187 -0.3780 ppb	0.69187 183.01%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-20.2 -0.1984 µg/L	0.15585 -0.1984 ppb	0.15585 78.56%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	390.3 0.8890 µg/L	0.06401 0.8890 ppb	0.06401 7.20%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	1.0 1.3120 µg/L	2.05385 1.3120 ppb	2.05385 156.55%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-6.1 -0.5230 µg/L	3.15324 -0.5230 ppb	3.15324 602.89%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	31.7 0.3188 µg/L	0.47826 0.3188 ppb	0.47826 150.02%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	27.9 0.6560 µg/L	0.01214 0.6560 ppb	0.01214 1.85%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 51
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 2/21/2010 02:00:15
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58016.3	58016.3	98.3 %			02:00:53
1	Al 396.153Radial†	6803.2	6932.4	5171.9 µg/L		5171.9 ppb	02:00:53
1	Ca 317.933Radial†	5589.6	5495.6	5040.9 µg/L		5040.9 ppb	02:01:13
1	Fe 238.204 Radial†	602.8	598.1	5144.9 µg/L		5144.9 ppb	02:01:13
1	K 766.490 Radial†	7436.0	7369.3	5067.3 µg/L		5067.3 ppb	02:00:53
1	Mg 279.077 IEC†	544.7	542.3	5281.5 µg/L		5281.5 ppb	02:01:13
1	Na 589.592 Radial†	31370.9	31452.7	10283 µg/L		10283 ppb	02:00:53
1	Sr 421.552†	49036.1	49863.0	490.41 µg/L		490.41 ppb	02:00:53
1	Sc 361.383	2078272.5	2078272.5	98.983 %			02:02:17
1	Y 371.029	1433440.7	1433440.7	98.485 %			02:02:17
1	Ag 328.068†	64786.8	65915.9	495.32 µg/L		495.32 ppb	02:02:23
1	As 188.979†	280.3	283.4	509.17 µg/L		509.17 ppb	02:02:43
1	B 249.677†	12026.2	11824.3	481.84 µg/L		481.84 ppb	02:02:23
1	Ba 233.527†	20064.6	20289.2	498.10 µg/L		498.10 ppb	02:02:23
1	Be 313.107†	813725.5	825847.9	498.57 µg/L		498.57 ppb	02:02:17
1	Cd 226.502†	19380.6	19716.4	496.05 µg/L		496.05 ppb	02:02:23
1	Co 228.616†	10781.0	10889.2	503.63 µg/L		503.63 ppb	02:02:23
1	Cr 267.716†	24292.9	24590.0	501.80 µg/L		501.80 ppb	02:02:23
1	Cu 324.752†	76665.5	74583.8	495.46 µg/L		495.46 ppb	02:02:23
1	Mn 257.610†	156372.6	158282.4	504.31 µg/L		504.31 ppb	02:02:17
1	Mo 202.031†	5113.1	5169.0	518.11 µg/L		518.11 ppb	02:02:43
1	Ni 231.604†	10116.6	9912.0	500.41 µg/L		500.41 ppb	02:02:23
1	P 214.914†	1294.4	1291.5	2520.6 µg/L		2520.6 ppb	02:02:43
1	Pb 220.353†	2152.3	2079.6	511.92 µg/L		511.92 ppb	02:02:43
1	S 181.975 Axial†	258.7	244.1	1011.7 µg/L		1011.7 ppb	02:02:43
1	Sb 206.836†	565.3	549.0	503.57 µg/L		503.57 ppb	02:02:43
1	Se 196.026†	369.3	358.1	498.48 µg/L		498.48 ppb	02:02:43
1	SiO2†	27924.0	26726.6	5352.0 µg/L		5352.0 ppb	02:02:23
1	Si 251.611†	32437.5	32477.3	2506.7 µg/L		2506.7 ppb	02:02:23
1	Sn 189.927†	1201.8	1209.4	517.23 µg/L		517.23 ppb	02:02:43
1	Ti 334.940†	219148.3	221259.1	502.89 µg/L		502.89 ppb	02:02:17
1	Tl 190.801†	350.0	375.8	508.35 µg/L		508.35 ppb	02:02:43
1	U 409.014†	5831.0	5891.7	498.96 µg/L		498.96 ppb	02:02:23
1	V 292.402†	49752.9	50360.3	504.44 µg/L		504.44 ppb	02:02:23
1	Zn 213.857†	21494.0	21213.0	497.09 µg/L		497.09 ppb	02:02:23
2	Sc RADIAL	57936.0	57936.0	98.1 %			02:01:19
2	Al 396.153Radial†	6835.4	6974.8	5203.8 µg/L		5203.8 ppb	02:01:19
2	Ca 317.933Radial†	5608.9	5523.1	5066.2 µg/L		5066.2 ppb	02:01:39
2	Fe 238.204 Radial†	606.6	602.8	5185.0 µg/L		5185.0 ppb	02:01:39
2	K 766.490 Radial†	7367.3	7309.7	5026.3 µg/L		5026.3 ppb	02:01:19
2	Mg 279.077 IEC†	548.9	547.3	5330.3 µg/L		5330.3 ppb	02:01:39
2	Na 589.592 Radial†	31392.3	31518.8	10304 µg/L		10304 ppb	02:01:19
2	Sr 421.552†	49150.2	50048.6	492.24 µg/L		492.24 ppb	02:01:19
2	Sc 361.383	2100300.4	2100300.4	100.03 %			02:02:50
2	Y 371.029	1448333.3	1448333.3	99.509 %			02:02:50
2	Ag 328.068†	65725.2	66167.5	497.21 µg/L		497.21 ppb	02:02:56
2	As 188.979†	280.5	280.7	504.24 µg/L		504.24 ppb	02:03:16
2	B 249.677†	12285.8	11956.4	487.23 µg/L		487.23 ppb	02:02:56
2	Ba 233.527†	20311.3	20323.2	498.93 µg/L		498.93 ppb	02:02:56
2	Be 313.107†	819773.3	823271.7	497.02 µg/L		497.02 ppb	02:02:50
2	Cd 226.502†	19666.7	19797.1	498.07 µg/L		498.07 ppb	02:02:56
2	Co 228.616†	10904.5	10898.5	504.06 µg/L		504.06 ppb	02:02:56
2	Cr 267.716†	24664.1	24703.7	504.12 µg/L		504.12 ppb	02:02:56
2	Cu 324.752†	77879.1	74984.7	498.13 µg/L		498.13 ppb	02:02:56
2	Mn 257.610†	157557.9	157810.4	502.81 µg/L		502.81 ppb	02:02:50
2	Mo 202.031†	5068.1	5069.8	508.18 µg/L		508.18 ppb	02:03:16
2	Ni 231.604†	10256.2	9944.3	502.05 µg/L		502.05 ppb	02:02:56
2	P 214.914†	1262.7	1246.1	2429.9 µg/L		2429.9 ppb	02:03:16
2	Pb 220.353†	2137.8	2042.3	502.71 µg/L		502.71 ppb	02:03:16

2	S 181.975 Axial†	254.1	236.7	981.19 µg/L	981.19 ppb	02:03:16
2	Sb 206.836†	565.3	543.1	497.96 µg/L	497.96 ppb	02:03:16
2	Se 196.026†	389.1	374.0	520.38 µg/L	520.38 ppb	02:03:16
2	SiO2†	28333.6	26840.2	5374.8 µg/L	5374.8 ppb	02:02:56
2	Si 251.611†	32968.1	32664.1	2521.1 µg/L	2521.1 ppb	02:02:56
2	Sn 189.927†	1191.0	1185.9	507.18 µg/L	507.18 ppb	02:03:16
2	Ti 334.940†	220546.4	220334.7	500.79 µg/L	500.79 ppb	02:02:50
2	Tl 190.801†	351.4	373.6	505.31 µg/L	505.31 ppb	02:03:16
2	U 409.014†	5875.4	5874.3	497.48 µg/L	497.48 ppb	02:02:56
2	V 292.402†	50411.1	50491.1	505.66 µg/L	505.66 ppb	02:02:56
2	Zn 213.857†	21824.0	21315.1	499.49 µg/L	499.49 ppb	02:02:56
3	Sc RADIAL	57472.6	57472.6	97.3 %		02:01:45
3	Al 396.153Radial†	6756.7	6950.1	5187.1 µg/L	5187.1 ppb	02:01:45
3	Ca 317.933Radial†	5572.1	5531.4	5073.8 µg/L	5073.8 ppb	02:02:05
3	Fe 238.204 Radial†	601.6	602.6	5182.7 µg/L	5182.7 ppb	02:02:05
3	K 766.490 Radial†	7219.7	7218.6	4963.7 µg/L	4963.7 ppb	02:01:45
3	Mg 279.077 IEC†	540.4	543.1	5287.9 µg/L	5287.9 ppb	02:02:05
3	Na 589.592 Radial†	31182.9	31561.5	10318 µg/L	10318 ppb	02:01:45
3	Sr 421.552†	48567.8	49854.1	490.33 µg/L	490.33 ppb	02:01:45
3	Sc 361.383	2097522.4	2097522.4	99.899 %		02:03:24
3	Y 371.029	1447759.9	1447759.9	99.469 %		02:03:24
3	Ag 328.068†	62305.7	62831.5	472.00 µg/L	472.00 ppb	02:03:29
3	As 188.979†	242.2	242.7	436.07 µg/L	436.07 ppb	02:03:50
3	B 249.677†	11525.4	11211.5	456.67 µg/L	456.67 ppb	02:03:29
3	Ba 233.527†	18622.1	18659.2	458.07 µg/L	458.07 ppb	02:03:29
3	Be 313.107†	768316.6	772848.6	466.58 µg/L	466.58 ppb	02:03:24
3	Cd 226.502†	17987.1	18141.8	456.37 µg/L	456.37 ppb	02:03:29
3	Co 228.616†	9836.6	9843.9	455.22 µg/L	455.22 ppb	02:03:29
3	Cr 267.716†	21805.7	21875.0	446.40 µg/L	446.40 ppb	02:03:29
3	Cu 324.752†	71131.3	68333.1	454.01 µg/L	454.01 ppb	02:03:29
3	Mn 257.610†	148169.2	148620.9	473.56 µg/L	473.56 ppb	02:03:24
3	Mo 202.031†	4240.4	4248.0	425.83 µg/L	425.83 ppb	02:03:50
3	Ni 231.604†	9332.7	9033.5	456.07 µg/L	456.07 ppb	02:03:29
3	P 214.914†	1086.1	1070.9	2084.9 µg/L	2084.9 ppb	02:03:50
3	Pb 220.353†	1870.1	1777.2	437.37 µg/L	437.37 ppb	02:03:50
3	S 181.975 Axial†	230.1	213.1	883.28 µg/L	883.28 ppb	02:03:50
3	Sb 206.836†	483.6	461.9	423.20 µg/L	423.20 ppb	02:03:50
3	Se 196.026†	336.4	321.7	448.75 µg/L	448.75 ppb	02:03:50
3	SiO2†	26495.3	25037.6	5013.8 µg/L	5013.8 ppb	02:03:29
3	Si 251.611†	30642.3	30379.6	2344.8 µg/L	2344.8 ppb	02:03:29
3	Sn 189.927†	982.2	978.4	418.46 µg/L	418.46 ppb	02:03:50
3	Ti 334.940†	205524.3	205589.5	467.25 µg/L	467.25 ppb	02:03:24
3	Tl 190.801†	316.3	338.8	458.58 µg/L	458.58 ppb	02:03:50
3	U 409.014†	5367.3	5373.5	454.98 µg/L	454.98 ppb	02:03:29
3	V 292.402†	45385.6	45527.3	455.75 µg/L	455.75 ppb	02:03:29
3	Zn 213.857†	19811.8	19329.8	452.91 µg/L	452.91 ppb	02:03:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2092031.7	99.638 %	0.5714			0.57%
Sc RADIAL	57808.3	97.9 %	0.50			0.51%
Y 371.029	1443177.9	99.154 %	0.5797			0.58%
Ag 328.068†	64971.6	488.18 µg/L	14.041	488.18 ppb	14.041	2.88%
QC value within limits for Ag 328.068 Recovery = 97.64%						
Al 396.153Radial†	6952.4	5187.6 µg/L	15.95	5187.6 ppb	15.95	0.31%
QC value within limits for Al 396.153Radial Recovery = 103.75%						
As 188.979†	268.9	483.16 µg/L	40.859	483.16 ppb	40.859	8.46%
QC value within limits for As 188.979 Recovery = 96.63%						
B 249.677†	11664.1	475.25 µg/L	16.314	475.25 ppb	16.314	3.43%
QC value within limits for B 249.677 Recovery = 95.05%						
Ba 233.527†	19757.2	485.03 µg/L	23.356	485.03 ppb	23.356	4.82%
QC value within limits for Ba 233.527 Recovery = 97.01%						
Be 313.107†	807322.8	487.39 µg/L	18.040	487.39 ppb	18.040	3.70%
QC value within limits for Be 313.107 Recovery = 97.48%						
Ca 317.933Radial†	5516.7	5060.3 µg/L	17.19	5060.3 ppb	17.19	0.34%
QC value within limits for Ca 317.933Radial Recovery = 101.21%						
Cd 226.502†	19218.4	483.50 µg/L	23.511	483.50 ppb	23.511	4.86%
QC value within limits for Cd 226.502 Recovery = 96.70%						
Co 228.616†	10543.9	487.64 µg/L	28.074	487.64 ppb	28.074	5.76%

Cr	267.716†	23722.9	484.11 µg/L	32.674	484.11 ppb	32.674	6.75%
Cu	324.752†	72633.9	482.53 µg/L	24.741	482.53 ppb	24.741	5.13%
Fe	238.204 Radial†	601.2	5170.9 µg/L	22.55	5170.9 ppb	22.55	0.44%
K	766.490 Radial†	7299.2	5019.1 µg/L	52.18	5019.1 ppb	52.18	1.04%
Mg	279.077 IEC†	544.3	5299.9 µg/L	26.51	5299.9 ppb	26.51	0.50%
Mn	257.610†	154904.6	493.56 µg/L	17.337	493.56 ppb	17.337	3.51%
Mo	202.031†	4828.9	484.04 µg/L	50.653	484.04 ppb	50.653	10.46%
Na	589.592 Radial†	31511.0	10302 µg/L	17.9	10302 ppb	17.9	0.17%
Ni	231.604†	9629.9	486.17 µg/L	26.086	486.17 ppb	26.086	5.37%
P	214.914†	1202.9	2345.2 µg/L	229.87	2345.2 ppb	229.87	9.80%
Pb	220.353†	1966.4	484.00 µg/L	40.648	484.00 ppb	40.648	8.40%
S	181.975 Axial†	231.3	958.73 µg/L	67.105	958.73 ppb	67.105	7.00%
Sb	206.836†	518.0	474.91 µg/L	44.871	474.91 ppb	44.871	9.45%
Se	196.026†	351.3	489.20 µg/L	36.704	489.20 ppb	36.704	7.50%
SiO2†		26201.4	5246.9 µg/L	202.16	5246.9 ppb	202.16	3.85%
Si	251.611†	31840.3	2457.5 µg/L	97.90	2457.5 ppb	97.90	3.98%
Sn	189.927†	1124.6	480.96 µg/L	54.359	480.96 ppb	54.359	11.30%
Sr	421.552†	49921.9	490.99 µg/L	1.080	490.99 ppb	1.080	0.22%
Ti	334.940†	215727.8	490.31 µg/L	19.996	490.31 ppb	19.996	4.08%
Tl	190.801†	362.7	490.75 µg/L	27.898	490.75 ppb	27.898	5.68%
U	409.014†	5713.2	483.81 µg/L	24.975	483.81 ppb	24.975	5.16%
V	292.402†	48792.9	488.62 µg/L	28.471	488.62 ppb	28.471	5.83%
Zn	213.857†	20619.3	483.16 µg/L	26.228	483.16 ppb	26.228	5.43%

QC value within limits for Co 228.616 Recovery = 97.53%
 QC value within limits for Cr 267.716 Recovery = 96.82%
 QC value within limits for Cu 324.752 Recovery = 96.51%
 QC value within limits for Fe 238.204 Radial Recovery = 103.42%
 QC value within limits for K 766.490 Radial Recovery = 100.38%
 QC value within limits for Mg 279.077 IEC Recovery = 106.00%
 QC value within limits for Mn 257.610 Recovery = 98.71%
 QC value within limits for Mo 202.031 Recovery = 96.81%
 QC value within limits for Na 589.592 Radial Recovery = 103.02%
 QC value within limits for Ni 231.604 Recovery = 97.23%
 QC value within limits for P 214.914 Recovery = 93.81%
 QC value within limits for Pb 220.353 Recovery = 96.80%
 QC value within limits for S 181.975 Axial Recovery = 95.87%
 QC value within limits for Sb 206.836 Recovery = 94.98%
 QC value within limits for Se 196.026 Recovery = 97.84%
 QC value within limits for SiO2 Recovery = 98.12%
 QC value within limits for Si 251.611 Recovery = 98.30%
 QC value within limits for Sn 189.927 Recovery = 96.19%
 QC value within limits for Sr 421.552 Recovery = 98.20%
 QC value within limits for Ti 334.940 Recovery = 98.06%
 QC value within limits for Tl 190.801 Recovery = 98.15%
 QC value within limits for U 409.014 Recovery = 96.76%
 QC value within limits for V 292.402 Recovery = 97.72%
 QC value within limits for Zn 213.857 Recovery = 96.63%

All analyte(s) passed QC.

Sequence No.: 52

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/21/2010 02:03:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57517.3	57517.3	97.4 %		02:04:32
1	Al 396.153Radial†	-10.6	-2.2	-1.6313 µg/L	-1.6313 ppb	02:04:32
1	Ca 317.933Radial†	181.1	-7.1	-6.4780 µg/L	-6.4780 ppb	02:04:53
1	Fe 238.204 Radial†	15.1	0.1	1.0423 µg/L	1.0423 ppb	02:04:53
1	K 766.490 Radial†	275.7	84.6	58.171 µg/L	58.171 ppb	02:04:32
1	Mg 279.077 IEC†	17.0	5.3	52.016 µg/L	52.016 ppb	02:04:53
1	Na 589.592 Radial†	432.6	-29.6	-9.6762 µg/L	-9.6762 ppb	02:04:32
1	Sr 421.552†	14.5	-26.5	-0.2608 µg/L	-0.2608 ppb	02:04:32
1	Sc 361.383	2097014.1	2097014.1	99.875 %		02:05:55
1	Y 371.029	1452757.0	1452757.0	99.812 %		02:05:55
1	Ag 328.068†	-422.9	39.7	0.2980 µg/L	0.2980 ppb	02:06:00
1	As 188.979†	4.4	4.7	8.5045 µg/L	8.5045 ppb	02:06:21
1	B 249.677†	356.9	31.9	1.3039 µg/L	1.3039 ppb	02:06:21
1	Ba 233.527†	-8.6	9.8	0.2399 µg/L	0.2399 ppb	02:06:21
1	Be 313.107†	-3581.4	173.0	0.1043 µg/L	0.1043 ppb	02:06:00
1	Cd 226.502†	-136.4	0.1	0.0015 µg/L	0.0015 ppb	02:06:21
1	Co 228.616†	2.8	0.2	0.0091 µg/L	0.0091 ppb	02:06:21
1	Cr 267.716†	-44.7	2.7	0.0543 µg/L	0.0543 ppb	02:06:00
1	Cu 324.752†	2817.5	-48.7	-0.3227 µg/L	-0.3227 ppb	02:06:00
1	Mn 257.610†	-246.1	56.2	0.1769 µg/L	0.1769 ppb	02:06:21
1	Mo 202.031†	4.9	8.2	0.8218 µg/L	0.8218 ppb	02:06:21
1	Ni 231.604†	301.7	-6.6	-0.3323 µg/L	-0.3323 ppb	02:06:21
1	P 214.914†	11.7	-4.5	-9.0031 µg/L	-9.0031 ppb	02:06:21
1	Pb 220.353†	88.8	-5.8	-1.4217 µg/L	-1.4217 ppb	02:06:21
1	S 181.975 Axial†	18.4	1.1	4.5996 µg/L	4.5996 ppb	02:06:21
1	Sb 206.836†	31.8	9.7	8.8827 µg/L	8.8827 ppb	02:06:21
1	Se 196.026†	19.0	4.0	5.4505 µg/L	5.4505 ppb	02:06:21
1	SiO2†	1533.5	51.0	10.220 µg/L	10.220 ppb	02:06:00
1	Si 251.611†	416.7	123.7	9.5476 µg/L	9.5476 ppb	02:06:21
1	Sn 189.927†	0.9	-3.8	-1.6263 µg/L	-1.6263 ppb	02:06:21
1	Ti 334.940†	344.8	203.6	0.4588 µg/L	0.4588 ppb	02:06:00
1	Tl 190.801†	-21.3	0.9	1.2407 µg/L	1.2407 ppb	02:06:21
1	U 409.014†	-110.5	-109.9	-9.3273 µg/L	-9.3273 ppb	02:06:00
1	V 292.402†	-70.9	25.0	0.2446 µg/L	0.2446 ppb	02:06:00
1	Zn 213.857†	516.1	14.8	0.3489 µg/L	0.3489 ppb	02:06:21
2	Sc RADIAL	58127.4	58127.4	98.4 %		02:04:58
2	Al 396.153Radial†	2.2	10.9	8.1529 µg/L	8.1529 ppb	02:04:58
2	Ca 317.933Radial†	186.9	-3.1	-2.8447 µg/L	-2.8447 ppb	02:05:19
2	Fe 238.204 Radial†	17.6	2.5	21.642 µg/L	21.642 ppb	02:05:19
2	K 766.490 Radial†	172.8	-22.9	-15.723 µg/L	-15.723 ppb	02:04:58
2	Mg 279.077 IEC†	7.3	-4.7	-45.425 µg/L	-45.425 ppb	02:05:19
2	Na 589.592 Radial†	455.4	-11.1	-3.6281 µg/L	-3.6281 ppb	02:04:58
2	Sr 421.552†	24.2	-16.8	-0.1647 µg/L	-0.1647 ppb	02:04:58
2	Sc 361.383	2094113.4	2094113.4	99.737 %		02:06:27
2	Y 371.029	1450930.3	1450930.3	99.687 %		02:06:27
2	Ag 328.068†	-415.6	46.4	0.3532 µg/L	0.3532 ppb	02:06:32
2	As 188.979†	-1.4	-1.1	-1.9523 µg/L	-1.9523 ppb	02:06:53
2	B 249.677†	343.9	19.4	0.7814 µg/L	0.7814 ppb	02:06:53
2	Ba 233.527†	-7.4	10.9	0.2685 µg/L	0.2685 ppb	02:06:53
2	Be 313.107†	-3506.3	243.4	0.1468 µg/L	0.1468 ppb	02:06:32
2	Cd 226.502†	-134.8	1.5	0.0349 µg/L	0.0349 ppb	02:06:53
2	Co 228.616†	12.8	10.2	0.4733 µg/L	0.4733 ppb	02:06:53
2	Cr 267.716†	-40.1	7.2	0.1469 µg/L	0.1469 ppb	02:06:32
2	Cu 324.752†	2839.1	-23.2	-0.1506 µg/L	-0.1506 ppb	02:06:32
2	Mn 257.610†	-242.3	59.6	0.1944 µg/L	0.1944 ppb	02:06:53
2	Mo 202.031†	5.5	8.8	0.8831 µg/L	0.8831 ppb	02:06:53
2	Ni 231.604†	311.1	3.3	0.1651 µg/L	0.1651 ppb	02:06:53
2	P 214.914†	6.1	-10.1	-20.066 µg/L	-20.066 ppb	02:06:53
2	Pb 220.353†	87.5	-7.1	-1.7360 µg/L	-1.7360 ppb	02:06:53

2	S 181.975 Axial†	13.8	-3.4	-14.185 µg/L	-14.185 ppb	02:06:53
2	Sb 206.836†	27.2	5.1	4.6888 µg/L	4.6888 ppb	02:06:53
2	Se 196.026†	17.0	2.1	2.9364 µg/L	2.9364 ppb	02:06:53
2	SiO2†	1558.7	78.4	15.702 µg/L	15.702 ppb	02:06:32
2	Si 251.611†	411.8	119.4	9.2140 µg/L	9.2140 ppb	02:06:53
2	Sn 189.927†	5.2	0.5	0.1899 µg/L	0.1899 ppb	02:06:53
2	Ti 334.940†	360.0	219.3	0.5023 µg/L	0.5023 ppb	02:06:32
2	Tl 190.801†	-22.2	-0.0	-0.0136 µg/L	-0.0136 ppb	02:06:53
2	U 409.014†	-74.9	-74.4	-6.3131 µg/L	-6.3131 ppb	02:06:32
2	V 292.402†	-8.2	87.8	0.8714 µg/L	0.8714 ppb	02:06:32
2	Zn 213.857†	504.7	4.1	0.0972 µg/L	0.0972 ppb	02:06:53
3	Sc RADIAL	57528.6	57528.6	97.4 %		02:05:24
3	Al 396.153Radial†	-12.0	-3.6	-2.7112 µg/L	-2.7112 ppb	02:05:24
3	Ca 317.933Radial†	190.4	2.4	2.2357 µg/L	2.2357 ppb	02:05:44
3	Fe 238.204 Radial†	16.0	1.1	9.2703 µg/L	9.2703 ppb	02:05:44
3	K 766.490 Radial†	235.2	43.0	29.565 µg/L	29.565 ppb	02:05:24
3	Mg 279.077 IEC†	10.5	-1.3	-12.298 µg/L	-12.298 ppb	02:05:44
3	Na 589.592 Radial†	465.3	3.8	1.2538 µg/L	1.2538 ppb	02:05:24
3	Sr 421.552†	22.5	-18.3	-0.1798 µg/L	-0.1798 ppb	02:05:24
3	Sc 361.383	2084159.3	2084159.3	99.263 %		02:06:59
3	Y 371.029	1442314.0	1442314.0	99.095 %		02:06:59
3	Ag 328.068†	-428.7	31.2	0.2375 µg/L	0.2375 ppb	02:07:04
3	As 188.979†	0.1	0.3	0.6305 µg/L	0.6305 ppb	02:07:25
3	B 249.677†	346.3	23.3	0.9497 µg/L	0.9497 ppb	02:07:25
3	Ba 233.527†	-10.8	7.4	0.1835 µg/L	0.1835 ppb	02:07:25
3	Be 313.107†	-3475.8	257.3	0.1552 µg/L	0.1552 ppb	02:07:04
3	Cd 226.502†	-147.3	-11.8	-0.2973 µg/L	-0.2973 ppb	02:07:25
3	Co 228.616†	4.5	2.0	0.0917 µg/L	0.0917 ppb	02:07:25
3	Cr 267.716†	-60.3	-13.3	-0.2713 µg/L	-0.2713 ppb	02:07:04
3	Cu 324.752†	2859.1	10.7	0.0720 µg/L	0.0720 ppb	02:07:04
3	Mn 257.610†	-235.8	65.0	0.2087 µg/L	0.2087 ppb	02:07:25
3	Mo 202.031†	-8.4	-5.2	-0.5199 µg/L	-0.5199 ppb	02:07:25
3	Ni 231.604†	310.5	4.2	0.2128 µg/L	0.2128 ppb	02:07:25
3	P 214.914†	15.8	-0.3	-0.5548 µg/L	-0.5548 ppb	02:07:25
3	Pb 220.353†	83.9	-10.3	-2.5204 µg/L	-2.5204 ppb	02:07:25
3	S 181.975 Axial†	14.0	-3.2	-13.304 µg/L	-13.304 ppb	02:07:25
3	Sb 206.836†	25.0	3.1	2.8200 µg/L	2.8200 ppb	02:07:25
3	Se 196.026†	16.0	1.1	1.5337 µg/L	1.5337 ppb	02:07:25
3	SiO2†	1532.7	59.6	11.941 µg/L	11.941 ppb	02:07:04
3	Si 251.611†	443.3	153.1	11.814 µg/L	11.814 ppb	02:07:25
3	Sn 189.927†	4.0	-0.7	-0.3131 µg/L	-0.3131 ppb	02:07:25
3	Ti 334.940†	327.5	188.3	0.4292 µg/L	0.4292 ppb	02:07:04
3	Tl 190.801†	-20.5	1.6	2.0986 µg/L	2.0986 ppb	02:07:25
3	U 409.014†	-45.9	-45.5	-3.8585 µg/L	-3.8585 ppb	02:07:04
3	V 292.402†	-37.5	58.2	0.5683 µg/L	0.5683 ppb	02:07:04
3	Zn 213.857†	515.9	17.7	0.4180 µg/L	0.4180 ppb	02:07:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2091762.3	99.625 %	0.3211			0.32%
Sc RADIAL	57724.5	97.8 %	0.59			0.60%
Y 371.029	1448667.1	99.531 %	0.3832			0.38%
Ag 328.068†	39.1	0.2962 µg/L	0.05791	0.2962 ppb	0.05791	19.55%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.7	1.2701 µg/L	5.98503	1.2701 ppb	5.98503	471.21%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	1.3	2.3942 µg/L	5.44692	2.3942 ppb	5.44692	227.50%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	24.9	1.0116 µg/L	0.26671	1.0116 ppb	0.26671	26.36%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.4	0.2306 µg/L	0.04322	0.2306 ppb	0.04322	18.74%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	224.5	0.1354 µg/L	0.02730	0.1354 ppb	0.02730	20.16%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-2.6	-2.3624 µg/L	4.37682	-2.3624 ppb	4.37682	185.27%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-3.4	-0.0870 µg/L	0.18292	-0.0870 ppb	0.18292	210.36%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.1	0.1914 µg/L	0.24766	0.1914 ppb	0.24766	129.41%

Cr	267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
		-1.2	-0.0234 µg/L	0.21961	-0.0234 ppb
				0.21961	939.10%
Cu	324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
		-20.4	-0.1338 µg/L	0.19788	-0.1338 ppb
				0.19788	147.93%
Fe	238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
		1.2	10.651 µg/L	10.3689	10.651 ppb
				10.3689	97.35%
K	766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
		34.9	24.004 µg/L	37.2596	24.004 ppb
				37.2596	155.22%
Mg	279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
		-0.2	-1.9023 µg/L	49.54493	-1.9023 ppb
				49.54493	>999.9%
Mn	257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
		60.3	0.1933 µg/L	0.01592	0.1933 ppb
				0.01592	8.23%
Mo	202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
		3.9	0.3950 µg/L	0.79290	0.3950 ppb
				0.79290	200.73%
Na	589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
		-12.3	-4.0169 µg/L	5.47535	-4.0169 ppb
				5.47535	136.31%
Ni	231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
		0.3	0.0152 µg/L	0.30189	0.0152 ppb
				0.30189	>999.9%
P	214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
		-5.0	-9.8746 µg/L	9.78475	-9.8746 ppb
				9.78475	99.09%
Pb	220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
		-7.7	-1.8927 µg/L	0.56585	-1.8927 ppb
				0.56585	29.90%
S	181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
		-1.8	-7.6299 µg/L	10.60018	-7.6299 ppb
				10.60018	138.93%
Sb	206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
		6.0	5.4638 µg/L	3.10480	5.4638 ppb
				3.10480	56.82%
Se	196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
		2.4	3.3069 µg/L	1.98452	3.3069 ppb
				1.98452	60.01%
SiO2†		QC value within limits for Se 196.026	Recovery = Not calculated		
		63.0	12.621 µg/L	2.8032	12.621 ppb
				2.8032	22.21%
Si	251.611†	QC value within limits for SiO2	Recovery = Not calculated		
		132.0	10.192 µg/L	1.4149	10.192 ppb
				1.4149	13.88%
Sn	189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
		-1.4	-0.5831 µg/L	0.93774	-0.5831 ppb
				0.93774	160.81%
Sr	421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
		-20.5	-0.2018 µg/L	0.05167	-0.2018 ppb
				0.05167	25.60%
Ti	334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
		203.7	0.4634 µg/L	0.03675	0.4634 ppb
				0.03675	7.93%
Tl	190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
		0.8	1.1086 µg/L	1.06227	1.1086 ppb
				1.06227	95.82%
U	409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
		-76.6	-6.4996 µg/L	2.73915	-6.4996 ppb
				2.73915	42.14%
V	292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
		57.0	0.5614 µg/L	0.31343	0.5614 ppb
				0.31343	55.83%
Zn	213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
		12.2	0.2880 µg/L	0.16888	0.2880 ppb
				0.16888	58.63%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 61
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 2/21/2010 02:37:01
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57377.2	57377.2	97.2 %		02:37:36
1	Al 396.153Radial†	6735.9	6940.3	5177.9 µg/L	5177.9 ppb	02:37:36
1	Ca 317.933Radial†	5600.4	5570.1	5109.3 µg/L	5109.3 ppb	02:37:57
1	Fe 238.204 Radial†	602.7	604.8	5202.7 µg/L	5202.7 ppb	02:37:57
1	K 766.490 Radial†	7251.0	7263.2	4994.3 µg/L	4994.3 ppb	02:37:36
1	Mg 279.077 IEC†	540.0	543.6	5293.9 µg/L	5293.9 ppb	02:37:57
1	Na 589.592 Radial†	30929.5	31354.0	10251 µg/L	10251 ppb	02:37:36
1	Sr 421.552†	48431.7	49796.9	489.76 µg/L	489.76 ppb	02:37:36
1	Sc 361.383	2098021.8	2098021.8	99.923 %		02:39:01
1	Y 371.029	1446111.2	1446111.2	99.356 %		02:39:01
1	Ag 328.068†	65119.9	65633.1	493.20 µg/L	493.20 ppb	02:39:06
1	As 188.979†	280.3	280.8	504.54 µg/L	504.54 ppb	02:39:27
1	B 249.677†	12177.8	11861.7	483.34 µg/L	483.34 ppb	02:39:06
1	Ba 233.527†	20088.3	20122.1	494.00 µg/L	494.00 ppb	02:39:06
1	Be 313.107†	822706.5	827097.2	499.33 µg/L	499.33 ppb	02:39:01
1	Cd 226.502†	19540.4	19692.0	495.42 µg/L	495.42 ppb	02:39:06
1	Co 228.616†	10811.6	10817.3	500.30 µg/L	500.30 ppb	02:39:06
1	Cr 267.716†	24471.0	24537.2	500.72 µg/L	500.72 ppb	02:39:06
1	Cu 324.752†	77142.2	74331.7	493.80 µg/L	493.80 ppb	02:39:06
1	Mn 257.610†	158119.4	158543.4	505.15 µg/L	505.15 ppb	02:39:01
1	Mo 202.031†	5130.4	5137.7	514.97 µg/L	514.97 ppb	02:39:27
1	Ni 231.604†	10155.1	9854.3	497.50 µg/L	497.50 ppb	02:39:06
1	P 214.914†	1301.6	1286.3	2510.5 µg/L	2510.5 ppb	02:39:27
1	Pb 220.353†	2168.3	2075.2	510.83 µg/L	510.83 ppb	02:39:27
1	S 181.975 Axial†	263.7	246.6	1022.1 µg/L	1022.1 ppb	02:39:27
1	Sb 206.836†	577.4	555.8	509.70 µg/L	509.70 ppb	02:39:27
1	Se 196.026†	385.4	370.7	515.90 µg/L	515.90 ppb	02:39:27
1	SiO2†	27993.2	26530.3	5312.7 µg/L	5312.7 ppb	02:39:06
1	Si 251.611†	32511.5	32243.0	2488.6 µg/L	2488.6 ppb	02:39:06
1	Sn 189.927†	1219.0	1215.3	519.73 µg/L	519.73 ppb	02:39:27
1	Ti 334.940†	220795.3	220823.2	501.90 µg/L	501.90 ppb	02:39:01
1	Tl 190.801†	359.2	381.7	516.24 µg/L	516.24 ppb	02:39:27
1	U 409.014†	5872.9	5878.1	497.80 µg/L	497.80 ppb	02:39:06
1	V 292.402†	49956.8	50091.2	501.76 µg/L	501.76 ppb	02:39:06
1	Zn 213.857†	21636.6	21151.2	495.65 µg/L	495.65 ppb	02:39:06
2	Sc RADIAL	57493.2	57493.2	97.4 %		02:38:02
2	Al 396.153Radial†	6730.2	6920.4	5163.2 µg/L	5163.2 ppb	02:38:02
2	Ca 317.933Radial†	5607.5	5565.8	5105.3 µg/L	5105.3 ppb	02:38:23
2	Fe 238.204 Radial†	599.5	600.3	5163.4 µg/L	5163.4 ppb	02:38:23
2	K 766.490 Radial†	7235.0	7231.7	4972.7 µg/L	4972.7 ppb	02:38:02
2	Mg 279.077 IEC†	549.4	552.1	5376.7 µg/L	5376.7 ppb	02:38:23
2	Na 589.592 Radial†	30985.2	31347.1	10248 µg/L	10248 ppb	02:38:02
2	Sr 421.552†	48559.0	49827.1	490.06 µg/L	490.06 ppb	02:38:02
2	Sc 361.383	2099879.4	2099879.4	100.01 %		02:39:34
2	Y 371.029	1448354.5	1448354.5	99.510 %		02:39:34
2	Ag 328.068†	65212.4	65667.9	493.46 µg/L	493.46 ppb	02:39:39
2	As 188.979†	283.1	283.4	509.10 µg/L	509.10 ppb	02:40:00
2	B 249.677†	12220.4	11893.5	484.66 µg/L	484.66 ppb	02:39:39
2	Ba 233.527†	20211.9	20227.9	496.59 µg/L	496.59 ppb	02:39:39
2	Be 313.107†	825290.6	828952.6	500.45 µg/L	500.45 ppb	02:39:34
2	Cd 226.502†	19555.6	19690.0	495.38 µg/L	495.38 ppb	02:39:39
2	Co 228.616†	10842.5	10838.6	501.28 µg/L	501.28 ppb	02:39:39
2	Cr 267.716†	24495.5	24540.0	500.78 µg/L	500.78 ppb	02:39:39
2	Cu 324.752†	77358.5	74479.7	494.78 µg/L	494.78 ppb	02:39:39
2	Mn 257.610†	158360.4	158644.4	505.46 µg/L	505.46 ppb	02:39:34
2	Mo 202.031†	5060.8	5063.5	507.54 µg/L	507.54 ppb	02:40:00
2	Ni 231.604†	10224.6	9914.7	500.55 µg/L	500.55 ppb	02:39:39
2	P 214.914†	1283.3	1266.9	2471.6 µg/L	2471.6 ppb	02:40:00
2	Pb 220.353†	2127.5	2032.5	500.29 µg/L	500.29 ppb	02:40:00

2	S 181.975 Axialt	261.6	244.2	1012.4 µg/L	1012.4 ppb	02:40:00
2	Sb 206.836†	555.1	532.9	488.75 µg/L	488.75 ppb	02:40:00
2	Se 196.026†	388.5	373.4	519.45 µg/L	519.45 ppb	02:40:00
2	SiO2†	28163.3	26675.6	5341.8 µg/L	5341.8 ppb	02:39:39
2	Si 251.611†	32643.3	32345.9	2496.6 µg/L	2496.6 ppb	02:39:39
2	Sn 189.927†	1187.0	1182.2	505.59 µg/L	505.59 ppb	02:40:00
2	Ti 334.940†	220997.1	220829.5	501.91 µg/L	501.91 ppb	02:39:34
2	Tl 190.801†	348.7	370.9	501.71 µg/L	501.71 ppb	02:40:00
2	U 409.014†	5890.1	5890.1	498.83 µg/L	498.83 ppb	02:39:39
2	V 292.402†	50027.5	50117.6	501.96 µg/L	501.96 ppb	02:39:39
2	Zn 213.857†	21721.2	21216.7	497.18 µg/L	497.18 ppb	02:39:39
3	Sc RADIAL	58022.1	58022.1	98.3 %		02:38:28
3	Al 396.153Radial†	6797.6	6926.0	5169.1 µg/L	5169.1 ppb	02:38:28
3	Ca 317.933Radial†	5614.0	5519.8	5063.1 µg/L	5063.1 ppb	02:38:49
3	Fe 238.204 Radial†	603.3	598.5	5147.3 µg/L	5147.3 ppb	02:38:49
3	K 766.490 Radial†	7323.7	7254.2	4988.1 µg/L	4988.1 ppb	02:38:28
3	Mg 279.077 IEC†	545.0	542.6	5282.5 µg/L	5282.5 ppb	02:38:49
3	Na 589.592 Radial†	31197.4	31272.9	10224 µg/L	10224 ppb	02:38:28
3	Sr 421.552†	48893.6	49713.1	488.94 µg/L	488.94 ppb	02:38:28
3	Sc 361.383	2094918.7	2094918.7	99.775 %		02:40:07
3	Y 371.029	1445516.4	1445516.4	99.315 %		02:40:07
3	Ag 328.068†	61673.9	62275.8	467.83 µg/L	467.83 ppb	02:40:13
3	As 188.979†	239.7	240.5	432.13 µg/L	432.13 ppb	02:40:33
3	B 249.677†	11436.9	11137.2	453.63 µg/L	453.63 ppb	02:40:13
3	Ba 233.527†	18556.3	18616.4	457.01 µg/L	457.01 ppb	02:40:13
3	Be 313.107†	769146.1	774635.8	467.66 µg/L	467.66 ppb	02:40:07
3	Cd 226.502†	17900.9	18077.8	454.76 µg/L	454.76 ppb	02:40:13
3	Co 228.616†	9816.3	9835.9	454.85 µg/L	454.85 ppb	02:40:13
3	Cr 267.716†	21534.7	21630.5	441.41 µg/L	441.41 ppb	02:40:13
3	Cu 324.752†	70376.9	67665.6	449.57 µg/L	449.57 ppb	02:40:13
3	Mn 257.610†	148134.2	148770.2	474.03 µg/L	474.03 ppb	02:40:07
3	Mo 202.031†	4229.6	4242.4	425.27 µg/L	425.27 ppb	02:40:33
3	Ni 231.604†	9247.0	8959.1	452.31 µg/L	452.31 ppb	02:40:13
3	P 214.914†	1097.8	1084.0	2111.4 µg/L	2111.4 ppb	02:40:33
3	Pb 220.353†	1856.3	1765.7	434.55 µg/L	434.55 ppb	02:40:33
3	S 181.975 Axialt	226.4	209.6	869.04 µg/L	869.04 ppb	02:40:33
3	Sb 206.836†	484.5	463.5	424.65 µg/L	424.65 ppb	02:40:33
3	Se 196.026†	336.6	322.4	449.55 µg/L	449.55 ppb	02:40:33
3	SiO2†	26233.0	24807.6	4967.7 µg/L	4967.7 ppb	02:40:13
3	Si 251.611†	30318.9	30093.6	2322.7 µg/L	2322.7 ppb	02:40:13
3	Sn 189.927†	981.0	978.5	418.50 µg/L	418.50 ppb	02:40:33
3	Ti 334.940†	205030.8	205350.6	466.71 µg/L	466.71 ppb	02:40:07
3	Tl 190.801†	314.8	337.8	457.15 µg/L	457.15 ppb	02:40:33
3	U 409.014†	5205.9	5218.4	441.83 µg/L	441.83 ppb	02:40:13
3	V 292.402†	45040.0	45237.3	452.85 µg/L	452.85 ppb	02:40:13
3	Zn 213.857†	19757.6	19300.1	452.23 µg/L	452.23 ppb	02:40:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2097606.7	99.903 %	0.1194			0.12%
Sc RADIAL	57630.8	97.6 %	0.58			0.60%
Y 371.029	1446660.7	99.394 %	0.1028			0.10%
Ag 328.068†	64525.6	484.83 µg/L	14.720	484.83 ppb	14.720	3.04%
QC value within limits for Ag 328.068 Recovery = 96.97%						
Al 396.153Radial†	6928.9	5170.1 µg/L	7.40	5170.1 ppb	7.40	0.14%
QC value within limits for Al 396.153Radial Recovery = 103.40%						
As 188.979†	268.2	481.92 µg/L	43.181	481.92 ppb	43.181	8.96%
QC value within limits for As 188.979 Recovery = 96.38%						
B 249.677†	11630.8	473.88 µg/L	17.545	473.88 ppb	17.545	3.70%
QC value within limits for B 249.677 Recovery = 94.78%						
Ba 233.527†	19655.5	482.53 µg/L	22.139	482.53 ppb	22.139	4.59%
QC value within limits for Ba 233.527 Recovery = 96.51%						
Be 313.107†	810228.6	489.14 µg/L	18.617	489.14 ppb	18.617	3.81%
QC value within limits for Be 313.107 Recovery = 97.83%						
Ca 317.933Radial†	5551.9	5092.6 µg/L	25.55	5092.6 ppb	25.55	0.50%
QC value within limits for Ca 317.933Radial Recovery = 101.85%						
Cd 226.502†	19153.3	481.85 µg/L	23.461	481.85 ppb	23.461	4.87%
QC value within limits for Cd 226.502 Recovery = 96.37%						
Co 228.616†	10497.3	485.48 µg/L	26.530	485.48 ppb	26.530	5.46%

Sequence No.: 62

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/21/2010 02:40:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57583.8	57583.8	97.5 %		02:41:18
1	Al 396.153Radial†	15.1	24.2	18.089 µg/L	18.089 ppb	02:41:18
1	Ca 317.933Radial†	186.5	-1.8	-1.6127 µg/L	-1.6127 ppb	02:41:38
1	Fe 238.204 Radial†	18.1	3.1	26.922 µg/L	26.922 ppb	02:41:38
1	K 766.490 Radial†	196.7	3.3	2.2687 µg/L	2.2687 ppb	02:41:18
1	Mg 279.077 IEC†	15.7	4.0	38.686 µg/L	38.686 ppb	02:41:38
1	Na 589.592 Radial†	471.3	9.6	3.1322 µg/L	3.1322 ppb	02:41:18
1	Sr 421.552†	71.4	31.9	0.3135 µg/L	0.3135 ppb	02:41:18
1	Sc 361.383	2107882.2	2107882.2	100.39 %		02:42:41
1	Y 371.029	1457472.0	1457472.0	100.14 %		02:42:41
1	Ag 328.068†	-355.8	108.7	0.8127 µg/L	0.8127 ppb	02:42:46
1	As 188.979†	-1.4	-1.1	-1.9225 µg/L	-1.9225 ppb	02:43:07
1	B 249.677†	341.3	14.5	0.5781 µg/L	0.5781 ppb	02:43:07
1	Ba 233.527†	-7.0	11.4	0.2789 µg/L	0.2789 ppb	02:43:07
1	Be 313.107†	-3675.1	98.1	0.0592 µg/L	0.0592 ppb	02:42:46
1	Cd 226.502†	-141.4	-4.2	-0.1088 µg/L	-0.1088 ppb	02:43:07
1	Co 228.616†	7.3	4.8	0.2195 µg/L	0.2195 ppb	02:43:07
1	Cr 267.716†	-51.9	-4.3	-0.0878 µg/L	-0.0878 ppb	02:42:46
1	Cu 324.752†	2891.5	10.5	0.0734 µg/L	0.0734 ppb	02:42:46
1	Mn 257.610†	-150.7	152.5	0.4873 µg/L	0.4873 ppb	02:43:07
1	Mo 202.031†	-2.8	0.5	0.0534 µg/L	0.0534 ppb	02:43:07
1	Ni 231.604†	310.9	1.0	0.0524 µg/L	0.0524 ppb	02:43:07
1	P 214.914†	13.8	-2.5	-4.9422 µg/L	-4.9422 ppb	02:43:07
1	Pb 220.353†	92.6	-2.5	-0.6217 µg/L	-0.6217 ppb	02:43:07
1	S 181.975 Axial†	16.0	-1.4	-5.8209 µg/L	-5.8209 ppb	02:43:07
1	Sb 206.836†	27.0	4.7	4.3295 µg/L	4.3295 ppb	02:43:07
1	Se 196.026†	15.2	0.1	0.2118 µg/L	0.2118 ppb	02:43:07
1	SiO2†	1525.3	34.9	6.9923 µg/L	6.9923 ppb	02:42:46
1	Si 251.611†	373.5	78.5	6.0589 µg/L	6.0589 ppb	02:43:07
1	Sn 189.927†	-0.7	-5.4	-2.3047 µg/L	-2.3047 ppb	02:43:07
1	Ti 334.940†	249.9	107.3	0.2409 µg/L	0.2409 ppb	02:42:46
1	Tl 190.801†	-25.0	-2.7	-3.5993 µg/L	-3.5993 ppb	02:43:07
1	U 409.014†	-40.8	-39.9	-3.3887 µg/L	-3.3887 ppb	02:42:46
1	V 292.402†	-95.0	1.3	0.0130 µg/L	0.0130 ppb	02:42:46
1	Zn 213.857†	509.7	5.7	0.1315 µg/L	0.1315 ppb	02:43:07
2	Sc RADIAL	57661.8	57661.8	97.7 %		02:41:44
2	Al 396.153Radial†	-5.1	3.5	2.5947 µg/L	2.5947 ppb	02:41:44
2	Ca 317.933Radial†	188.3	-0.1	-0.1298 µg/L	-0.1298 ppb	02:42:04
2	Fe 238.204 Radial†	16.1	1.1	9.0929 µg/L	9.0929 ppb	02:42:04
2	K 766.490 Radial†	221.1	28.0	19.262 µg/L	19.262 ppb	02:41:44
2	Mg 279.077 IEC†	9.8	-2.0	-19.680 µg/L	-19.680 ppb	02:42:04
2	Na 589.592 Radial†	438.6	-24.6	-8.0312 µg/L	-8.0312 ppb	02:41:44
2	Sr 421.552†	21.9	-18.9	-0.1861 µg/L	-0.1861 ppb	02:41:44
2	Sc 361.383	2088666.9	2088666.9	99.478 %		02:43:13
2	Y 371.029	1445652.0	1445652.0	99.324 %		02:43:13
2	Ag 328.068†	-442.1	18.7	0.1418 µg/L	0.1418 ppb	02:43:18
2	As 188.979†	-2.4	-2.2	-3.9040 µg/L	-3.9040 ppb	02:43:39
2	B 249.677†	352.6	29.0	1.1802 µg/L	1.1802 ppb	02:43:39
2	Ba 233.527†	-8.7	9.6	0.2348 µg/L	0.2348 ppb	02:43:39
2	Be 313.107†	-3617.3	122.5	0.0739 µg/L	0.0739 ppb	02:43:18
2	Cd 226.502†	-141.8	-6.0	-0.1516 µg/L	-0.1516 ppb	02:43:39
2	Co 228.616†	5.6	3.1	0.1443 µg/L	0.1443 ppb	02:43:39
2	Cr 267.716†	-45.8	1.3	0.0268 µg/L	0.0268 ppb	02:43:18
2	Cu 324.752†	2907.6	53.1	0.3536 µg/L	0.3536 ppb	02:43:18
2	Mn 257.610†	-145.0	156.8	0.5010 µg/L	0.5010 ppb	02:43:39
2	Mo 202.031†	5.2	8.5	0.8529 µg/L	0.8529 ppb	02:43:39
2	Ni 231.604†	309.8	2.8	0.1420 µg/L	0.1420 ppb	02:43:39
2	P 214.914†	12.5	-3.7	-7.4397 µg/L	-7.4397 ppb	02:43:39
2	Pb 220.353†	83.3	-11.0	-2.7169 µg/L	-2.7169 ppb	02:43:39

2	S 181.975 Axial†	14.7	-2.5	-10.513 µg/L	-10.513 ppb	02:43:39
2	Sb 206.836†	29.7	7.8	7.1143 µg/L	7.1143 ppb	02:43:39
2	Se 196.026†	12.0	-2.9	-3.9797 µg/L	-3.9797 ppb	02:43:39
2	SiO2†	1476.7	0.1	0.0198 µg/L	0.0198 ppb	02:43:18
2	Si 251.611†	368.7	77.1	5.9524 µg/L	5.9524 ppb	02:43:39
2	Sn 189.927†	3.2	-1.5	-0.6607 µg/L	-0.6607 ppb	02:43:39
2	Ti 334.940†	253.4	113.1	0.2588 µg/L	0.2588 ppb	02:43:18
2	Tl 190.801†	-22.9	-0.8	-1.0279 µg/L	-1.0279 ppb	02:43:39
2	U 409.014†	2.5	3.3	0.2780 µg/L	0.2780 ppb	02:43:18
2	V 292.402†	-69.9	25.8	0.2628 µg/L	0.2628 ppb	02:43:18
2	Zn 213.857†	522.2	23.0	0.5425 µg/L	0.5425 ppb	02:43:39
3	Sc RADIAL	57594.0	57594.0	97.5 %		02:42:10
3	Al 396.153Radial†	0.3	9.0	6.7301 µg/L	6.7301 ppb	02:42:10
3	Ca 317.933Radial†	197.0	9.0	8.2470 µg/L	8.2470 ppb	02:42:30
3	Fe 238.204 Radial†	12.9	-2.2	-18.514 µg/L	-18.514 ppb	02:42:30
3	K 766.490 Radial†	186.2	-7.5	-5.1374 µg/L	-5.1374 ppb	02:42:10
3	Mg 279.077 IEC†	11.0	-0.8	-7.3537 µg/L	-7.3537 ppb	02:42:30
3	Na 589.592 Radial†	465.0	3.0	0.9910 µg/L	0.9910 ppb	02:42:10
3	Sr 421.552†	49.2	9.0	0.0890 µg/L	0.0890 ppb	02:42:10
3	Sc 361.383	2091576.3	2091576.3	99.616 %		02:43:45
3	Y 371.029	1447072.2	1447072.2	99.422 %		02:43:45
3	Ag 328.068†	-443.6	17.8	0.1308 µg/L	0.1308 ppb	02:43:50
3	As 188.979†	1.1	1.4	2.5375 µg/L	2.5375 ppb	02:44:11
3	B 249.677†	359.1	35.0	1.4407 µg/L	1.4407 ppb	02:44:11
3	Ba 233.527†	-8.4	9.9	0.2431 µg/L	0.2431 ppb	02:44:11
3	Be 313.107†	-3647.7	97.1	0.0586 µg/L	0.0586 ppb	02:43:50
3	Cd 226.502†	-142.6	-6.5	-0.1625 µg/L	-0.1625 ppb	02:44:11
3	Co 228.616†	1.0	-1.5	-0.0717 µg/L	-0.0717 ppb	02:44:11
3	Cr 267.716†	-39.1	8.2	0.1667 µg/L	0.1667 ppb	02:43:50
3	Cu 324.752†	2871.8	13.1	0.0843 µg/L	0.0843 ppb	02:43:50
3	Mn 257.610†	-169.6	132.3	0.4189 µg/L	0.4189 ppb	02:44:11
3	Mo 202.031†	2.3	5.7	0.5669 µg/L	0.5669 ppb	02:44:11
3	Ni 231.604†	308.3	0.9	0.0450 µg/L	0.0450 ppb	02:44:11
3	P 214.914†	9.6	-6.6	-13.197 µg/L	-13.197 ppb	02:44:11
3	Pb 220.353†	95.4	1.0	0.2429 µg/L	0.2429 ppb	02:44:11
3	S 181.975 Axial†	14.7	-2.5	-10.332 µg/L	-10.332 ppb	02:44:11
3	Sb 206.836†	19.2	-2.8	-2.5403 µg/L	-2.5403 ppb	02:44:11
3	Se 196.026†	13.8	-1.2	-1.6582 µg/L	-1.6582 ppb	02:44:11
3	SiO2†	1518.9	40.3	8.0743 µg/L	8.0743 ppb	02:43:50
3	Si 251.611†	392.2	100.2	7.7354 µg/L	7.7354 ppb	02:44:11
3	Sn 189.927†	-0.8	-5.5	-2.3524 µg/L	-2.3524 ppb	02:44:11
3	Ti 334.940†	259.2	118.5	0.2702 µg/L	0.2702 ppb	02:43:50
3	Tl 190.801†	-25.5	-3.4	-4.4847 µg/L	-4.4847 ppb	02:44:11
3	U 409.014†	10.5	11.3	0.9632 µg/L	0.9632 ppb	02:43:50
3	V 292.402†	-112.5	-16.9	-0.1640 µg/L	-0.1640 ppb	02:43:50
3	Zn 213.857†	518.7	18.8	0.4446 µg/L	0.4446 ppb	02:44:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2096041.8	99.829 %		0.4933			0.49%
Sc RADIAL	57613.2	97.6 %		0.07			0.07%
Y 371.029	1450065.4	99.628 %		0.4434			0.45%
Ag 328.068†	48.4	0.3618 µg/L		0.39056	0.3618 ppb	0.39056	107.96%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	12.2	9.1381 µg/L		8.02305	9.1381 ppb	8.02305	87.80%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.6	-1.0964 µg/L		3.29926	-1.0964 ppb	3.29926	300.93%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	26.1	1.0663 µg/L		0.44245	1.0663 ppb	0.44245	41.49%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	10.3	0.2523 µg/L		0.02346	0.2523 ppb	0.02346	9.30%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	105.9	0.0639 µg/L		0.00870	0.0639 ppb	0.00870	13.61%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	2.4	2.1682 µg/L		5.31639	2.1682 ppb	5.31639	245.20%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	-5.6	-0.1410 µg/L		0.02838	-0.1410 ppb	0.02838	20.13%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	2.1	0.0974 µg/L		0.15115	0.0974 ppb	0.15115	155.23%

Cr	267.716†	1.7	0.0352 µg/L	0.12743	0.0352 ppb	0.12743	361.80%
	QC value within limits for Cr 267.716	Recovery = Not calculated					
Cu	324.752†	25.6	0.1704 µg/L	0.15874	0.1704 ppb	0.15874	93.14%
	QC value within limits for Cu 324.752	Recovery = Not calculated					
Fe	238.204 Radial†	0.7	5.8337 µg/L	22.89244	5.8337 ppb	22.89244	392.42%
	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated					
K	766.490 Radial†	7.9	5.4645 µg/L	12.50980	5.4645 ppb	12.50980	228.93%
	QC value within limits for K 766.490 Radial	Recovery = Not calculated					
Mg	279.077 IEC†	0.4	3.8840 µg/L	30.76296	3.8840 ppb	30.76296	792.04%
	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated					
Mn	257.610†	147.2	0.4691 µg/L	0.04398	0.4691 ppb	0.04398	9.38%
	QC value within limits for Mn 257.610	Recovery = Not calculated					
Mo	202.031†	4.9	0.4911 µg/L	0.40510	0.4911 ppb	0.40510	82.49%
	QC value within limits for Mo 202.031	Recovery = Not calculated					
Na	589.592 Radial†	-4.0	-1.3027 µg/L	5.92462	-1.3027 ppb	5.92462	454.80%
	QC value within limits for Na 589.592 Radial	Recovery = Not calculated					
Ni	231.604†	1.6	0.0798 µg/L	0.05397	0.0798 ppb	0.05397	67.64%
	QC value within limits for Ni 231.604	Recovery = Not calculated					
P	214.914†	-4.3	-8.5263 µg/L	4.23323	-8.5263 ppb	4.23323	49.65%
	QC value within limits for P 214.914	Recovery = Not calculated					
Pb	220.353†	-4.2	-1.0319 µg/L	1.52191	-1.0319 ppb	1.52191	147.48%
	QC value within limits for Pb 220.353	Recovery = Not calculated					
S	181.975 Axial†	-2.1	-8.8886 µg/L	2.65825	-8.8886 ppb	2.65825	29.91%
	QC value within limits for S 181.975 Axial	Recovery = Not calculated					
Sb	206.836†	3.2	2.9678 µg/L	4.96928	2.9678 ppb	4.96928	167.44%
	QC value within limits for Sb 206.836	Recovery = Not calculated					
Se	196.026†	-1.3	-1.8087 µg/L	2.09982	-1.8087 ppb	2.09982	116.10%
	QC value within limits for Se 196.026	Recovery = Not calculated					
SiO2†		25.1	5.0288 µg/L	4.37154	5.0288 ppb	4.37154	86.93%
	QC value within limits for SiO2	Recovery = Not calculated					
Si	251.611†	85.3	6.5823 µg/L	1.00011	6.5823 ppb	1.00011	15.19%
	QC value within limits for Si 251.611	Recovery = Not calculated					
Sn	189.927†	-4.1	-1.7726 µg/L	0.96321	-1.7726 ppb	0.96321	54.34%
	QC value within limits for Sn 189.927	Recovery = Not calculated					
Sr	421.552†	7.3	0.0721 µg/L	0.25021	0.0721 ppb	0.25021	346.93%
	QC value within limits for Sr 421.552	Recovery = Not calculated					
Ti	334.940†	113.0	0.2566 µg/L	0.01476	0.2566 ppb	0.01476	5.75%
	QC value within limits for Ti 334.940	Recovery = Not calculated					
Tl	190.801†	-2.3	-3.0373 µg/L	1.79562	-3.0373 ppb	1.79562	59.12%
	QC value within limits for Tl 190.801	Recovery = Not calculated					
U	409.014†	-8.4	-0.7158 µg/L	2.33997	-0.7158 ppb	2.33997	326.90%
	QC value within limits for U 409.014	Recovery = Not calculated					
V	292.402†	3.4	0.0373 µg/L	0.21443	0.0373 ppb	0.21443	575.04%
	QC value within limits for V 292.402	Recovery = Not calculated					
Zn	213.857†	15.8	0.3729 µg/L	0.21469	0.3729 ppb	0.21469	57.58%
	QC value within limits for Zn 213.857	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 72

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/21/2010 03:16:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58780.1	58780.1	99.6 %		03:17:14
1	Al 396.153Radial†	6771.9	6810.9	5081.3 µg/L	5081.3 ppb	03:17:14
1	Ca 317.933Radial†	5581.2	5413.2	4965.3 µg/L	4965.3 ppb	03:17:34
1	Fe 238.204 Radial†	597.4	584.7	5029.4 µg/L	5029.4 ppb	03:17:34
1	K 766.490 Radial†	7336.3	7170.8	4930.8 µg/L	4930.8 ppb	03:17:14
1	Mg 279.077 IEC†	544.5	534.8	5208.7 µg/L	5208.7 ppb	03:17:34
1	Na 589.592 Radial†	31243.8	30910.2	10105 µg/L	10105 ppb	03:17:14
1	Sr 421.552†	48814.8	48992.3	481.85 µg/L	481.85 ppb	03:17:14
1	Sc 361.383	2103212.2	2103212.2	100.17 %		03:18:37
1	Y 371.029	1451433.5	1451433.5	99.722 %		03:18:37
1	Ag 328.068†	64829.4	65182.2	489.80 µg/L	489.80 ppb	03:18:43
1	As 188.979†	279.0	278.8	500.92 µg/L	500.92 ppb	03:19:03
1	B 249.677†	12131.8	11785.7	480.31 µg/L	480.31 ppb	03:18:43
1	Ba 233.527†	20072.3	20056.5	492.38 µg/L	492.38 ppb	03:18:43
1	Be 313.107†	812693.7	815069.6	492.07 µg/L	492.07 ppb	03:18:37
1	Cd 226.502†	19401.3	19504.9	490.73 µg/L	490.73 ppb	03:18:43
1	Co 228.616†	10732.0	10711.2	495.40 µg/L	495.40 ppb	03:18:43
1	Cr 267.716†	24288.3	24294.3	495.77 µg/L	495.77 ppb	03:18:43
1	Cu 324.752†	76695.4	73695.2	489.55 µg/L	489.55 ppb	03:18:43
1	Mn 257.610†	156156.3	156193.1	497.65 µg/L	497.65 ppb	03:18:37
1	Mo 202.031†	5085.0	5079.7	509.16 µg/L	509.16 ppb	03:19:03
1	Ni 231.604†	10120.5	9794.7	494.49 µg/L	494.49 ppb	03:18:43
1	P 214.914†	1281.0	1262.6	2463.6 µg/L	2463.6 ppb	03:19:03
1	Pb 220.353†	2142.4	2044.0	503.15 µg/L	503.15 ppb	03:19:03
1	S 181.975 Axial†	255.0	237.2	983.40 µg/L	983.40 ppb	03:19:03
1	Sb 206.836†	558.7	535.6	491.31 µg/L	491.31 ppb	03:19:03
1	Se 196.026†	380.5	364.8	507.51 µg/L	507.51 ppb	03:19:03
1	SiO2†	27964.6	26432.6	5293.1 µg/L	5293.1 ppb	03:18:43
1	Si 251.611†	32472.9	32124.1	2479.5 µg/L	2479.5 ppb	03:18:43
1	Sn 189.927†	1197.2	1190.4	509.13 µg/L	509.13 ppb	03:19:03
1	Ti 334.940†	218058.4	217545.7	494.45 µg/L	494.45 ppb	03:18:37
1	Tl 190.801†	351.1	372.8	504.17 µg/L	504.17 ppb	03:19:03
1	U 409.014†	5775.7	5766.6	488.37 µg/L	488.37 ppb	03:18:43
1	V 292.402†	49656.7	49668.2	497.49 µg/L	497.49 ppb	03:18:43
1	Zn 213.857†	21553.3	21014.7	492.46 µg/L	492.46 ppb	03:18:43
2	Sc RADIAL	58126.7	58126.7	98.4 %		03:17:40
2	Al 396.153Radial†	6696.3	6810.7	5081.2 µg/L	5081.2 ppb	03:17:40
2	Ca 317.933Radial†	5617.4	5513.1	5057.0 µg/L	5057.0 ppb	03:18:00
2	Fe 238.204 Radial†	600.3	594.3	5112.5 µg/L	5112.5 ppb	03:18:00
2	K 766.490 Radial†	7298.6	7215.4	4961.4 µg/L	4961.4 ppb	03:17:40
2	Mg 279.077 IEC†	542.3	538.7	5246.6 µg/L	5246.6 ppb	03:18:00
2	Na 589.592 Radial†	31001.1	31016.4	10140 µg/L	10140 ppb	03:17:40
2	Sr 421.552†	48358.5	49080.1	482.71 µg/L	482.71 ppb	03:17:40
2	Sc 361.383	2106051.0	2106051.0	100.31 %		03:19:11
2	Y 371.029	1452532.7	1452532.7	99.797 %		03:19:11
2	Ag 328.068†	65181.5	65445.9	491.79 µg/L	491.79 ppb	03:19:16
2	As 188.979†	276.3	275.7	495.36 µg/L	495.36 ppb	03:19:37
2	B 249.677†	12206.6	11844.0	482.66 µg/L	482.66 ppb	03:19:16
2	Ba 233.527†	20200.9	20157.7	494.87 µg/L	494.87 ppb	03:19:16
2	Be 313.107†	814693.9	815970.2	492.61 µg/L	492.61 ppb	03:19:11
2	Cd 226.502†	19570.4	19647.4	494.31 µg/L	494.31 ppb	03:19:16
2	Co 228.616†	10803.4	10767.9	498.02 µg/L	498.02 ppb	03:19:16
2	Cr 267.716†	24448.9	24421.8	498.37 µg/L	498.37 ppb	03:19:16
2	Cu 324.752†	77156.8	74052.0	491.93 µg/L	491.93 ppb	03:19:16
2	Mn 257.610†	156187.4	156014.0	497.09 µg/L	497.09 ppb	03:19:11
2	Mo 202.031†	5052.6	5040.6	505.24 µg/L	505.24 ppb	03:19:37
2	Ni 231.604†	10198.6	9858.9	497.73 µg/L	497.73 ppb	03:19:16
2	P 214.914†	1282.9	1262.8	2463.7 µg/L	2463.7 ppb	03:19:37
2	Pb 220.353†	2119.9	2018.7	496.90 µg/L	496.90 ppb	03:19:37

2	S 181.975 Axial†	260.0	241.9	1002.7 µg/L	1002.7 ppb	03:19:37
2	Sb 206.836†	561.3	537.5	492.88 µg/L	492.88 ppb	03:19:37
2	Se 196.026†	370.5	354.4	493.33 µg/L	493.33 ppb	03:19:37
2	SiO2†	28226.7	26656.3	5337.9 µg/L	5337.9 ppb	03:19:16
2	Si 251.611†	32807.7	32414.2	2501.8 µg/L	2501.8 ppb	03:19:16
2	Sn 189.927†	1184.5	1176.2	503.03 µg/L	503.03 ppb	03:19:37
2	Ti 334.940†	218640.3	217832.4	495.10 µg/L	495.10 ppb	03:19:11
2	Tl 190.801†	351.2	372.4	503.63 µg/L	503.63 ppb	03:19:37
2	U 409.014†	5893.8	5876.6	497.69 µg/L	497.69 ppb	03:19:16
2	V 292.402†	50043.4	49986.9	500.63 µg/L	500.63 ppb	03:19:16
2	Zn 213.857†	21682.9	21114.8	494.80 µg/L	494.80 ppb	03:19:16
3	Sc RADIAL	58480.8	58480.8	99.0 %		03:18:05
3	Al 396.153Radial†	6751.8	6825.5	5094.0 µg/L	5094.0 ppb	03:18:05
3	Ca 317.933Radial†	5600.9	5461.8	5009.9 µg/L	5009.9 ppb	03:18:26
3	Fe 238.204 Radial†	599.0	589.3	5068.6 µg/L	5068.6 ppb	03:18:26
3	K 766.490 Radial†	7352.7	7225.1	4968.1 µg/L	4968.1 ppb	03:18:05
3	Mg 279.077 IEC†	539.0	532.1	5181.1 µg/L	5181.1 ppb	03:18:26
3	Na 589.592 Radial†	31112.1	30937.9	10114 µg/L	10114 ppb	03:18:05
3	Sr 421.552†	48679.1	49106.3	482.97 µg/L	482.97 ppb	03:18:05
3	Sc 361.383	2111088.1	2111088.1	100.55 %		03:19:44
3	Y 371.029	1457436.3	1457436.3	100.13 %		03:19:44
3	Ag 328.068†	61753.3	61881.4	464.87 µg/L	464.87 ppb	03:19:49
3	As 188.979†	237.7	236.7	425.23 µg/L	425.23 ppb	03:20:10
3	B 249.677†	11516.7	11128.7	453.33 µg/L	453.33 ppb	03:19:49
3	Ba 233.527†	18496.0	18414.0	452.05 µg/L	452.05 ppb	03:19:49
3	Be 313.107†	766109.7	765711.6	462.27 µg/L	462.27 ppb	03:19:44
3	Cd 226.502†	17927.4	17966.7	451.97 µg/L	451.97 ppb	03:19:49
3	Co 228.616†	9812.7	9756.9	451.20 µg/L	451.20 ppb	03:19:49
3	Cr 267.716†	21609.3	21539.4	439.55 µg/L	439.55 ppb	03:19:49
3	Cu 324.752†	70519.4	67267.0	446.92 µg/L	446.92 ppb	03:19:49
3	Mn 257.610†	147252.4	146756.0	467.61 µg/L	467.61 ppb	03:19:44
3	Mo 202.031†	4231.0	4211.3	422.15 µg/L	422.15 ppb	03:20:10
3	Ni 231.604†	9264.2	8905.3	449.59 µg/L	449.59 ppb	03:19:49
3	P 214.914†	1083.3	1061.2	2066.2 µg/L	2066.2 ppb	03:20:10
3	Pb 220.353†	1866.2	1761.3	433.46 µg/L	433.46 ppb	03:20:10
3	S 181.975 Axial†	236.4	217.9	903.06 µg/L	903.06 ppb	03:20:10
3	Sb 206.836†	481.7	457.0	418.72 µg/L	418.72 ppb	03:20:10
3	Se 196.026†	338.8	322.0	448.94 µg/L	448.94 ppb	03:20:10
3	SiO2†	26287.6	24660.6	4938.3 µg/L	4938.3 ppb	03:19:49
3	Si 251.611†	30522.1	30063.0	2320.4 µg/L	2320.4 ppb	03:19:49
3	Sn 189.927†	978.0	968.0	414.00 µg/L	414.00 ppb	03:20:10
3	Ti 334.940†	204439.1	203188.2	461.80 µg/L	461.80 ppb	03:19:44
3	Tl 190.801†	315.6	336.1	454.90 µg/L	454.90 ppb	03:20:10
3	U 409.014†	5237.1	5209.5	441.08 µg/L	441.08 ppb	03:19:49
3	V 292.402†	45091.9	44943.3	449.90 µg/L	449.90 ppb	03:19:49
3	Zn 213.857†	19803.6	19194.2	449.76 µg/L	449.76 ppb	03:19:49

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2106783.7	100.34 %	0.190			0.19%
Sc RADIAL	58462.5	99.0 %	0.55			0.56%
Y 371.029	1453800.8	99.884 %	0.2196			0.22%
Ag 328.068†	64169.8	482.15 µg/L	15.001	482.15 ppb	15.001	3.11%
QC value within limits for Ag 328.068 Recovery = 96.43%						
Al 396.153Radial†	6815.7	5085.5 µg/L	7.35	5085.5 ppb	7.35	0.14%
QC value within limits for Al 396.153Radial Recovery = 101.71%						
As 188.979†	263.7	473.84 µg/L	42.188	473.84 ppb	42.188	8.90%
QC value within limits for As 188.979 Recovery = 94.77%						
B 249.677†	11586.1	472.10 µg/L	16.299	472.10 ppb	16.299	3.45%
QC value within limits for B 249.677 Recovery = 94.42%						
Ba 233.527†	19542.7	479.77 µg/L	24.037	479.77 ppb	24.037	5.01%
QC value within limits for Ba 233.527 Recovery = 95.95%						
Be 313.107†	798917.1	482.32 µg/L	17.362	482.32 ppb	17.362	3.60%
QC value within limits for Be 313.107 Recovery = 96.46%						
Ca 317.933Radial†	5462.7	5010.7 µg/L	45.81	5010.7 ppb	45.81	0.91%
QC value within limits for Ca 317.933Radial Recovery = 100.21%						
Cd 226.502†	19039.7	479.00 µg/L	23.477	479.00 ppb	23.477	4.90%
QC value within limits for Cd 226.502 Recovery = 95.80%						
Co 228.616†	10412.0	481.54 µg/L	26.306	481.54 ppb	26.306	5.46%

Cr	267.716†	23418.5	477.90 µg/L	33.231	477.90 ppb	33.231	6.95%
QC value within limits for Cr 267.716 Recovery = 95.58%							
Cu	324.752†	71671.4	476.13 µg/L	25.330	476.13 ppb	25.330	5.32%
QC value within limits for Cu 324.752 Recovery = 95.23%							
Fe	238.204 Radial†	589.4	5070.2 µg/L	41.55	5070.2 ppb	41.55	0.82%
QC value within limits for Fe 238.204 Radial Recovery = 101.40%							
K	766.490 Radial†	7203.8	4953.4 µg/L	19.90	4953.4 ppb	19.90	0.40%
QC value within limits for K 766.490 Radial Recovery = 99.07%							
Mg	279.077 IEC†	535.2	5212.1 µg/L	32.92	5212.1 ppb	32.92	0.63%
QC value within limits for Mg 279.077 IEC Recovery = 104.24%							
Mn	257.610†	152987.7	487.45 µg/L	17.180	487.45 ppb	17.180	3.52%
QC value within limits for Mn 257.610 Recovery = 97.49%							
Mo	202.031†	4777.2	478.85 µg/L	49.141	478.85 ppb	49.141	10.26%
QC value within limits for Mo 202.031 Recovery = 95.77%							
Na	589.592 Radial†	30954.8	10120 µg/L	18.0	10120 ppb	18.0	0.18%
QC value within limits for Na 589.592 Radial Recovery = 101.20%							
Ni	231.604†	9519.6	480.61 µg/L	26.906	480.61 ppb	26.906	5.60%
QC value within limits for Ni 231.604 Recovery = 96.12%							
P	214.914†	1195.5	2331.2 µg/L	229.45	2331.2 ppb	229.45	9.84%
QC value within limits for P 214.914 Recovery = 93.25%							
Pb	220.353†	1941.3	477.84 µg/L	38.558	477.84 ppb	38.558	8.07%
QC value within limits for Pb 220.353 Recovery = 95.57%							
S	181.975 Axial†	232.3	963.07 µg/L	52.861	963.07 ppb	52.861	5.49%
QC value within limits for S 181.975 Axial Recovery = 96.31%							
Sb	206.836†	510.0	467.64 µg/L	42.373	467.64 ppb	42.373	9.06%
QC value within limits for Sb 206.836 Recovery = 93.53%							
Se	196.026†	347.1	483.26 µg/L	30.554	483.26 ppb	30.554	6.32%
QC value within limits for Se 196.026 Recovery = 96.65%							
SiO2†		25916.5	5189.8 µg/L	218.95	5189.8 ppb	218.95	4.22%
QC value within limits for SiO2 Recovery = 97.05%							
Si	251.611†	31533.8	2433.9 µg/L	98.95	2433.9 ppb	98.95	4.07%
QC value within limits for Si 251.611 Recovery = 97.36%							
Sn	189.927†	1111.5	475.39 µg/L	53.246	475.39 ppb	53.246	11.20%
QC value within limits for Sn 189.927 Recovery = 95.08%							
Sr	421.552†	49059.5	482.51 µg/L	0.587	482.51 ppb	0.587	0.12%
QC value within limits for Sr 421.552 Recovery = 96.50%							
Ti	334.940†	212855.4	483.79 µg/L	19.042	483.79 ppb	19.042	3.94%
QC value within limits for Ti 334.940 Recovery = 96.76%							
Tl	190.801†	360.4	487.57 µg/L	28.293	487.57 ppb	28.293	5.80%
QC value within limits for Tl 190.801 Recovery = 97.51%							
U	409.014†	5617.6	475.71 µg/L	30.354	475.71 ppb	30.354	6.38%
QC value within limits for U 409.014 Recovery = 95.14%							
V	292.402†	48199.5	482.67 µg/L	28.425	482.67 ppb	28.425	5.89%
QC value within limits for V 292.402 Recovery = 96.53%							
Zn	213.857†	20441.3	479.01 µg/L	25.354	479.01 ppb	25.354	5.29%
QC value within limits for Zn 213.857 Recovery = 95.80%							

All analyte(s) passed QC.

Sequence No.: 73

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/21/2010 03:20:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57796.8	57796.8	97.9 %		03:20:54
1	Al 396.153Radial†	-27.4	-19.3	-14.417 µg/L	-14.417 ppb	03:20:54
1	Ca 317.933Radial†	192.4	3.6	3.2827 µg/L	3.2827 ppb	03:21:14
1	Fe 238.204 Radial†	16.3	1.2	10.495 µg/L	10.495 ppb	03:21:14
1	K 766.490 Radial†	195.3	1.2	0.8088 µg/L	0.8088 ppb	03:20:54
1	Mg 279.077 IEC†	12.1	0.3	2.4570 µg/L	2.4570 ppb	03:21:14
1	Na 589.592 Radial†	418.9	-45.8	-14.971 µg/L	-14.971 ppb	03:20:54
1	Sr 421.552†	26.8	-13.9	-0.1370 µg/L	-0.1370 ppb	03:20:54
1	Sc 361.383	2099269.8	2099269.8	99.983 %		03:22:16
1	Y 371.029	1452643.4	1452643.4	99.805 %		03:22:16
1	Ag 328.068†	-420.9	42.1	0.3139 µg/L	0.3139 ppb	03:22:22
1	As 188.979†	-6.1	-5.8	-10.485 µg/L	-10.485 ppb	03:22:42
1	B 249.677†	354.1	28.7	1.1701 µg/L	1.1701 ppb	03:22:42
1	Ba 233.527†	-17.2	1.2	0.0280 µg/L	0.0280 ppb	03:22:42
1	Be 313.107†	-3602.5	155.7	0.0938 µg/L	0.0938 ppb	03:22:22
1	Cd 226.502†	-129.8	6.8	0.1691 µg/L	0.1691 ppb	03:22:42
1	Co 228.616†	4.5	2.0	0.0907 µg/L	0.0907 ppb	03:22:42
1	Cr 267.716†	-28.7	18.7	0.3814 µg/L	0.3814 ppb	03:22:22
1	Cu 324.752†	2910.5	41.3	0.2752 µg/L	0.2752 ppb	03:22:22
1	Mn 257.610†	-158.2	144.3	0.4607 µg/L	0.4607 ppb	03:22:42
1	Mo 202.031†	5.3	8.6	0.8621 µg/L	0.8621 ppb	03:22:42
1	Ni 231.604†	308.6	-0.0	-0.0006 µg/L	-0.0006 ppb	03:22:42
1	P 214.914†	18.5	2.3	4.5368 µg/L	4.5368 ppb	03:22:42
1	Pb 220.353†	93.1	-1.7	-0.4110 µg/L	-0.4110 ppb	03:22:42
1	S 181.975 Axial†	13.1	-4.2	-17.367 µg/L	-17.367 ppb	03:22:42
1	Sb 206.836†	22.7	0.6	0.5416 µg/L	0.5416 ppb	03:22:42
1	Se 196.026†	15.6	0.7	0.9289 µg/L	0.9289 ppb	03:22:42
1	SiO2†	1589.4	105.3	21.083 µg/L	21.083 ppb	03:22:22
1	Si 251.611†	433.0	139.5	10.769 µg/L	10.769 ppb	03:22:42
1	Sn 189.927†	2.8	-1.9	-0.8334 µg/L	-0.8334 ppb	03:22:42
1	Ti 334.940†	409.8	268.2	0.6099 µg/L	0.6099 ppb	03:22:22
1	Tl 190.801†	-26.4	-4.2	-5.6298 µg/L	-5.6298 ppb	03:22:42
1	U 409.014†	-104.8	-104.1	-8.8362 µg/L	-8.8362 ppb	03:22:22
1	V 292.402†	-114.5	-18.5	-0.1837 µg/L	-0.1837 ppb	03:22:22
1	Zn 213.857†	522.6	20.7	0.4877 µg/L	0.4877 ppb	03:22:42
2	Sc RADIAL	57635.8	57635.8	97.6 %		03:21:20
2	Al 396.153Radial†	-3.7	4.9	3.6309 µg/L	3.6309 ppb	03:21:20
2	Ca 317.933Radial†	186.9	-1.6	-1.4238 µg/L	-1.4238 ppb	03:21:40
2	Fe 238.204 Radial†	18.8	3.9	33.093 µg/L	33.093 ppb	03:21:40
2	K 766.490 Radial†	202.7	9.3	6.3913 µg/L	6.3913 ppb	03:21:20
2	Mg 279.077 IEC†	12.4	0.6	5.6794 µg/L	5.6794 ppb	03:21:40
2	Na 589.592 Radial†	456.6	-6.0	-1.9559 µg/L	-1.9559 ppb	03:21:20
2	Sr 421.552†	70.5	30.9	0.3035 µg/L	0.3035 ppb	03:21:20
2	Sc 361.383	2093057.7	2093057.7	99.687 %		03:22:48
2	Y 371.029	1448630.2	1448630.2	99.529 %		03:22:48
2	Ag 328.068†	-390.1	71.8	0.5419 µg/L	0.5419 ppb	03:22:54
2	As 188.979†	-4.3	-4.0	-7.2433 µg/L	-7.2433 ppb	03:23:14
2	B 249.677†	363.4	39.1	1.5820 µg/L	1.5820 ppb	03:23:14
2	Ba 233.527†	-13.9	4.4	0.1089 µg/L	0.1089 ppb	03:23:14
2	Be 313.107†	-3624.3	123.2	0.0743 µg/L	0.0743 ppb	03:22:54
2	Cd 226.502†	-147.3	-11.2	-0.2845 µg/L	-0.2845 ppb	03:23:14
2	Co 228.616†	8.1	5.5	0.2556 µg/L	0.2556 ppb	03:23:14
2	Cr 267.716†	-31.0	16.3	0.3336 µg/L	0.3336 ppb	03:22:54
2	Cu 324.752†	2908.0	47.4	0.3193 µg/L	0.3193 ppb	03:22:54
2	Mn 257.610†	-163.4	138.7	0.4456 µg/L	0.4456 ppb	03:23:14
2	Mo 202.031†	4.4	7.7	0.7763 µg/L	0.7763 ppb	03:23:14
2	Ni 231.604†	313.9	6.3	0.3172 µg/L	0.3172 ppb	03:23:14
2	P 214.914†	12.7	-3.5	-6.9064 µg/L	-6.9064 ppb	03:23:14
2	Pb 220.353†	86.2	-8.3	-2.0488 µg/L	-2.0488 ppb	03:23:14

2	S 181.975 Axial†	16.9	-0.3	-1.2490 µg/L	-1.2490 ppb	03:23:14
2	Sb 206.836†	24.2	2.1	1.9550 µg/L	1.9550 ppb	03:23:14
2	Se 196.026†	15.7	0.8	1.1757 µg/L	1.1757 ppb	03:23:14
2	SiO2†	1560.6	81.1	16.250 µg/L	16.250 ppb	03:22:54
2	Si 251.611†	434.9	142.8	11.019 µg/L	11.019 ppb	03:23:14
2	Sn 189.927†	7.4	2.8	1.1751 µg/L	1.1751 ppb	03:23:14
2	Ti 334.940†	270.8	130.0	0.2952 µg/L	0.2952 ppb	03:22:54
2	Tl 190.801†	-23.5	-1.3	-1.7449 µg/L	-1.7449 ppb	03:23:14
2	U 409.014†	12.0	12.8	1.0822 µg/L	1.0822 ppb	03:22:54
2	V 292.402†	-35.9	60.0	0.6055 µg/L	0.6055 ppb	03:22:54
2	Zn 213.857†	523.7	23.4	0.5483 µg/L	0.5483 ppb	03:23:14
3	Sc RADIAL	57534.0	57534.0	97.4 %		03:21:46
3	Al 396.153Radial†	-12.7	-4.3	-3.2564 µg/L	-3.2564 ppb	03:21:46
3	Ca 317.933Radial†	187.7	-0.4	-0.3487 µg/L	-0.3487 ppb	03:22:06
3	Fe 238.204 Radial†	17.4	2.4	20.771 µg/L	20.771 ppb	03:22:06
3	K 766.490 Radial†	128.8	-66.2	-45.514 µg/L	-45.514 ppb	03:21:46
3	Mg 279.077 IEC†	14.1	2.4	23.552 µg/L	23.552 ppb	03:22:06
3	Na 589.592 Radial†	452.3	-9.5	-3.1061 µg/L	-3.1061 ppb	03:21:46
3	Sr 421.552†	23.1	-17.7	-0.1739 µg/L	-0.1739 ppb	03:21:46
3	Sc 361.383	2108483.6	2108483.6	100.42 %		03:23:20
3	Y 371.029	1458182.9	1458182.9	100.19 %		03:23:20
3	Ag 328.068†	-394.1	70.7	0.5318 µg/L	0.5318 ppb	03:23:26
3	As 188.979†	4.1	4.4	7.8351 µg/L	7.8351 ppb	03:23:47
3	B 249.677†	349.6	22.7	0.9164 µg/L	0.9164 ppb	03:23:47
3	Ba 233.527†	-8.0	10.3	0.2542 µg/L	0.2542 ppb	03:23:47
3	Be 313.107†	-3555.2	218.6	0.1318 µg/L	0.1318 ppb	03:23:26
3	Cd 226.502†	-139.9	-2.7	-0.0698 µg/L	-0.0698 ppb	03:23:47
3	Co 228.616†	-3.6	-6.2	-0.2873 µg/L	-0.2873 ppb	03:23:47
3	Cr 267.716†	-72.0	-24.3	-0.4956 µg/L	-0.4956 ppb	03:23:26
3	Cu 324.752†	2886.2	4.3	0.0315 µg/L	0.0315 ppb	03:23:26
3	Mn 257.610†	-190.4	112.9	0.3613 µg/L	0.3613 ppb	03:23:47
3	Mo 202.031†	3.2	6.5	0.6517 µg/L	0.6517 ppb	03:23:47
3	Ni 231.604†	330.5	20.4	1.0338 µg/L	1.0338 ppb	03:23:47
3	P 214.914†	14.3	-2.0	-4.0587 µg/L	-4.0587 ppb	03:23:47
3	Pb 220.353†	94.7	-0.5	-0.1285 µg/L	-0.1285 ppb	03:23:47
3	S 181.975 Axial†	19.4	2.1	8.5354 µg/L	8.5354 ppb	03:23:47
3	Sb 206.836†	19.1	-3.1	-2.7977 µg/L	-2.7977 ppb	03:23:47
3	Se 196.026†	21.9	6.8	9.3560 µg/L	9.3560 ppb	03:23:47
3	SiO2†	1563.4	72.5	14.510 µg/L	14.510 ppb	03:23:26
3	Si 251.611†	446.2	150.8	11.639 µg/L	11.639 ppb	03:23:47
3	Sn 189.927†	0.5	-4.3	-1.8220 µg/L	-1.8220 ppb	03:23:47
3	Ti 334.940†	379.4	236.1	0.5351 µg/L	0.5351 ppb	03:23:26
3	Tl 190.801†	-24.3	-1.9	-2.5628 µg/L	-2.5628 ppb	03:23:47
3	U 409.014†	28.0	28.7	2.4304 µg/L	2.4304 ppb	03:23:26
3	V 292.402†	-48.9	47.3	0.4768 µg/L	0.4768 ppb	03:23:26
3	Zn 213.857†	514.5	10.4	0.2378 µg/L	0.2378 ppb	03:23:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2100270.4	100.03 %	0.370			0.37%
Sc RADIAL	57655.5	97.6 %	0.22			0.23%
Y 371.029	1453152.2	99.840 %	0.3296			0.33%
Ag 328.068†	61.6	0.4625 µg/L	0.12882	0.4625 ppb	0.12882	27.85%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.2	-4.6809 µg/L	9.10797	-4.6809 ppb	9.10797	194.58%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.8	-3.2978 µg/L	9.77670	-3.2978 ppb	9.77670	296.46%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	30.2	1.2229 µg/L	0.33593	1.2229 ppb	0.33593	27.47%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.3	0.1304 µg/L	0.11460	0.1304 ppb	0.11460	87.89%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	165.8	0.1000 µg/L	0.02926	0.1000 ppb	0.02926	29.27%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.5	0.5034 µg/L	2.46620	0.5034 ppb	2.46620	489.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-2.4	-0.0617 µg/L	0.22690	-0.0617 ppb	0.22690	367.47%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.4	0.0197 µg/L	0.27831	0.0197 ppb	0.27831	>999.9%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	3.6	0.0731 µg/L	0.49313	0.0731 ppb	0.49313 674.40%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	31.0	0.2087 µg/L	0.15498	0.2087 ppb	0.15498 74.27%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	2.5	21.453 µg/L	11.3142	21.453 ppb	11.3142 52.74%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	-18.6	-12.771 µg/L	28.4931	-12.771 ppb	28.4931 223.10%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	1.1	10.563 µg/L	11.3640	10.563 ppb	11.3640 107.58%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	132.0	0.4226 µg/L	0.05355	0.4226 ppb	0.05355 12.67%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	7.6	0.7634 µg/L	0.10576	0.7634 ppb	0.10576 13.85%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	-20.4	-6.6776 µg/L	7.20511	-6.6776 ppb	7.20511 107.90%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	8.9	0.4501 µg/L	0.52984	0.4501 ppb	0.52984 117.71%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-1.1	-2.1428 µg/L	5.95731	-2.1428 ppb	5.95731 278.02%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-3.5	-0.8627 µg/L	1.03678	-0.8627 ppb	1.03678 120.17%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-0.8	-3.3601 µg/L	13.07954	-3.3601 ppb	13.07954 389.26%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	-0.1	-0.1004 µg/L	2.44056	-0.1004 ppb	2.44056 >999.9%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	2.8	3.8202 µg/L	4.79574	3.8202 ppb	4.79574 125.54%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	86.3	17.281 µg/L	3.4054	17.281 ppb	3.4054 19.71%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	144.4	11.142 µg/L	0.4479	11.142 ppb	0.4479 4.02%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	-1.2	-0.4935 µg/L	1.52721	-0.4935 ppb	1.52721 309.49%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	-0.3	-0.0025 µg/L	0.26564	-0.0025 ppb	0.26564 >999.9%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	211.4	0.4801 µg/L	0.16443	0.4801 ppb	0.16443 34.25%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	-2.5	-3.3125 µg/L	2.04811	-3.3125 ppb	2.04811 61.83%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	-20.9	-1.7745 µg/L	6.15265	-1.7745 ppb	6.15265 346.72%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	29.6	0.2995 µg/L	0.42344	0.2995 ppb	0.42344 141.37%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	18.2	0.4246 µg/L	0.16456	0.4246 ppb	0.16456 38.76%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 83

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/21/2010 03:57:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58531.6	58531.6	99.1 %		03:57:43
1	Al 396.153Radial†	6849.9	6918.5	5161.6 µg/L	5161.6 ppb	03:57:43
1	Ca 317.933Radial†	5659.2	5515.8	5059.4 µg/L	5059.4 ppb	03:58:04
1	Fe 238.204 Radial†	605.6	595.5	5122.2 µg/L	5122.2 ppb	03:58:04
1	K 766.490 Radial†	7356.2	7222.2	4966.1 µg/L	4966.1 ppb	03:57:43
1	Mg 279.077 IEC†	551.3	544.0	5298.2 µg/L	5298.2 ppb	03:58:04
1	Na 589.592 Radial†	31454.5	31256.0	10218 µg/L	10218 ppb	03:57:43
1	Sr 421.552†	49251.0	49640.5	488.22 µg/L	488.22 ppb	03:57:43
1	Sc 361.383	2078184.7	2078184.7	98.978 %		03:59:08
1	Y 371.029	1433368.9	1433368.9	98.480 %		03:59:08
1	Ag 328.068†	64859.1	65991.6	495.88 µg/L	495.88 ppb	03:59:13
1	As 188.979†	279.1	282.3	507.09 µg/L	507.09 ppb	03:59:34
1	B 249.677†	12180.7	11980.9	488.26 µg/L	488.26 ppb	03:59:13
1	Ba 233.527†	20061.6	20287.0	498.04 µg/L	498.04 ppb	03:59:13
1	Be 313.107†	816218.6	828401.4	500.11 µg/L	500.11 ppb	03:59:08
1	Cd 226.502†	19471.2	19808.8	498.37 µg/L	498.37 ppb	03:59:13
1	Co 228.616†	10753.9	10862.3	502.39 µg/L	502.39 ppb	03:59:13
1	Cr 267.716†	24286.7	24584.8	501.70 µg/L	501.70 ppb	03:59:13
1	Cu 324.752†	76889.7	74813.5	496.99 µg/L	496.99 ppb	03:59:13
1	Mn 257.610†	156764.4	158684.9	505.59 µg/L	505.59 ppb	03:59:08
1	Mo 202.031†	5084.8	5140.6	515.26 µg/L	515.26 ppb	03:59:34
1	Ni 231.604†	10149.9	9946.1	502.13 µg/L	502.13 ppb	03:59:13
1	P 214.914†	1283.4	1280.4	2498.4 µg/L	2498.4 ppb	03:59:34
1	Pb 220.353†	2143.9	2071.3	509.85 µg/L	509.85 ppb	03:59:34
1	S 181.975 Axial†	262.6	248.0	1028.0 µg/L	1028.0 ppb	03:59:34
1	Sb 206.836†	565.7	549.4	503.91 µg/L	503.91 ppb	03:59:34
1	Se 196.026†	374.8	363.7	506.11 µg/L	506.11 ppb	03:59:34
1	SiO2†	28064.9	26870.1	5380.8 µg/L	5380.8 ppb	03:59:13
1	Si 251.611†	32532.1	32574.4	2514.2 µg/L	2514.2 ppb	03:59:13
1	Sn 189.927†	1199.2	1206.8	516.14 µg/L	516.14 ppb	03:59:34
1	Ti 334.940†	219415.9	221538.8	503.53 µg/L	503.53 ppb	03:59:08
1	Tl 190.801†	356.3	382.2	516.94 µg/L	516.94 ppb	03:59:34
1	U 409.014†	5914.5	5976.3	506.15 µg/L	506.15 ppb	03:59:13
1	V 292.402†	49736.8	50346.1	504.28 µg/L	504.28 ppb	03:59:13
1	Zn 213.857†	21565.6	21286.3	498.81 µg/L	498.81 ppb	03:59:13
2	Sc RADIAL	58001.6	58001.6	98.2 %		03:58:09
2	Al 396.153Radial†	6804.9	6935.9	5174.8 µg/L	5174.8 ppb	03:58:09
2	Ca 317.933Radial†	5627.9	5536.1	5078.0 µg/L	5078.0 ppb	03:58:30
2	Fe 238.204 Radial†	605.8	601.3	5172.7 µg/L	5172.7 ppb	03:58:30
2	K 766.490 Radial†	7363.4	7297.3	5017.8 µg/L	5017.8 ppb	03:58:09
2	Mg 279.077 IEC†	538.4	536.0	5219.6 µg/L	5219.6 ppb	03:58:30
2	Na 589.592 Radial†	31265.6	31353.6	10250 µg/L	10250 ppb	03:58:09
2	Sr 421.552†	48850.9	49687.3	488.68 µg/L	488.68 ppb	03:58:09
2	Sc 361.383	2093473.1	2093473.1	99.707 %		03:59:41
2	Y 371.029	1443918.1	1443918.1	99.205 %		03:59:41
2	Ag 328.068†	64902.3	65556.4	492.61 µg/L	492.61 ppb	03:59:47
2	As 188.979†	272.6	273.6	491.61 µg/L	491.61 ppb	04:00:07
2	B 249.677†	12163.5	11873.8	483.85 µg/L	483.85 ppb	03:59:47
2	Ba 233.527†	20122.1	20199.7	495.90 µg/L	495.90 ppb	03:59:47
2	Be 313.107†	819369.0	825538.9	498.39 µg/L	498.39 ppb	03:59:41
2	Cd 226.502†	19513.4	19707.4	495.81 µg/L	495.81 ppb	03:59:47
2	Co 228.616†	10777.9	10807.0	499.82 µg/L	499.82 ppb	03:59:47
2	Cr 267.716†	24288.9	24407.8	498.08 µg/L	498.08 ppb	03:59:47
2	Cu 324.752†	76932.2	74288.9	493.51 µg/L	493.51 ppb	03:59:47
2	Mn 257.610†	157419.2	158185.0	504.00 µg/L	504.00 ppb	03:59:41
2	Mo 202.031†	5028.5	5046.6	505.84 µg/L	505.84 ppb	04:00:07
2	Ni 231.604†	10146.8	9868.0	498.19 µg/L	498.19 ppb	03:59:47
2	P 214.914†	1277.2	1264.7	2467.4 µg/L	2467.4 ppb	04:00:07
2	Pb 220.353†	2126.9	2038.3	501.73 µg/L	501.73 ppb	04:00:07

2	S 181.975 Axial†	259.8	243.3	1008.3 µg/L	1008.3 ppb	04:00:07
2	Sb 206.836†	563.4	543.0	497.93 µg/L	497.93 ppb	04:00:07
2	Se 196.026†	368.6	354.7	494.02 µg/L	494.02 ppb	04:00:07
2	SiO2†	28163.2	26761.7	5359.0 µg/L	5359.0 ppb	03:59:47
2	Si 251.611†	32625.6	32428.1	2502.9 µg/L	2502.9 ppb	03:59:47
2	Sn 189.927†	1185.8	1184.6	506.61 µg/L	506.61 ppb	04:00:07
2	Ti 334.940†	219851.1	220356.4	500.85 µg/L	500.85 ppb	03:59:41
2	Tl 190.801†	352.4	375.7	508.14 µg/L	508.14 ppb	04:00:07
2	U 409.014†	5890.2	5908.3	500.37 µg/L	500.37 ppb	03:59:47
2	V 292.402†	49698.7	49940.9	500.19 µg/L	500.19 ppb	03:59:47
2	Zn 213.857†	21597.0	21158.6	495.83 µg/L	495.83 ppb	03:59:47
3	Sc RADIAL	58382.6	58382.6	98.9 %		03:58:35
3	Al 396.153Radial†	6839.6	6925.7	5168.8 µg/L	5168.8 ppb	03:58:35
3	Ca 317.933Radial†	5616.8	5487.4	5033.4 µg/L	5033.4 ppb	03:58:56
3	Fe 238.204 Radial†	606.1	597.5	5139.2 µg/L	5139.2 ppb	03:58:56
3	K 766.490 Radial†	7430.3	7316.1	5030.7 µg/L	5030.7 ppb	03:58:35
3	Mg 279.077 IEC†	537.6	531.6	5176.0 µg/L	5176.0 ppb	03:58:56
3	Na 589.592 Radial†	31457.3	31339.8	10246 µg/L	10246 ppb	03:58:35
3	Sr 421.552†	49308.1	49825.1	490.04 µg/L	490.04 ppb	03:58:35
3	Sc 361.383	2082026.1	2082026.1	99.161 %		04:00:14
3	Y 371.029	1432610.6	1432610.6	98.428 %		04:00:14
3	Ag 328.068†	61695.5	62680.3	470.86 µg/L	470.86 ppb	04:00:20
3	As 188.979†	243.5	245.8	441.69 µg/L	441.69 ppb	04:00:40
3	B 249.677†	11511.1	11283.0	459.61 µg/L	459.61 ppb	04:00:20
3	Ba 233.527†	18525.0	18700.0	459.06 µg/L	459.06 ppb	04:00:20
3	Be 313.107†	764443.3	774666.8	467.68 µg/L	467.68 ppb	04:00:14
3	Cd 226.502†	17844.5	18132.0	456.13 µg/L	456.13 ppb	04:00:20
3	Co 228.616†	9779.8	9860.0	455.97 µg/L	455.97 ppb	04:00:20
3	Cr 267.716†	21572.1	21801.9	444.91 µg/L	444.91 ppb	04:00:20
3	Cu 324.752†	70371.5	68096.9	452.43 µg/L	452.43 ppb	04:00:20
3	Mn 257.610†	147534.0	149084.2	475.03 µg/L	475.03 ppb	04:00:14
3	Mo 202.031†	4225.9	4265.0	427.53 µg/L	427.53 ppb	04:00:40
3	Ni 231.604†	9252.4	9022.0	455.49 µg/L	455.49 ppb	04:00:20
3	P 214.914†	1092.6	1085.6	2114.3 µg/L	2114.3 ppb	04:00:40
3	Pb 220.353†	1874.9	1796.0	442.00 µg/L	442.00 ppb	04:00:40
3	S 181.975 Axial†	233.3	218.0	903.54 µg/L	903.54 ppb	04:00:40
3	Sb 206.836†	488.8	470.9	431.40 µg/L	431.40 ppb	04:00:40
3	Se 196.026†	335.7	323.5	451.24 µg/L	451.24 ppb	04:00:40
3	SiO2†	26279.0	25016.8	5009.6 µg/L	5009.6 ppb	04:00:20
3	Si 251.611†	30568.4	30533.4	2356.7 µg/L	2356.7 ppb	04:00:20
3	Sn 189.927†	987.4	991.1	423.85 µg/L	423.85 ppb	04:00:40
3	Ti 334.940†	204246.0	205831.6	467.81 µg/L	467.81 ppb	04:00:14
3	Tl 190.801†	319.6	344.5	466.20 µg/L	466.20 ppb	04:00:40
3	U 409.014†	5223.0	5267.9	446.03 µg/L	446.03 ppb	04:00:20
3	V 292.402†	44899.0	45374.7	454.24 µg/L	454.24 ppb	04:00:20
3	Zn 213.857†	19708.6	19373.3	453.95 µg/L	453.95 ppb	04:00:20

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2084561.3	99.282 %	0.3788			0.38%
Sc RADIAL	58305.3	98.7 %	0.46			0.47%
Y 371.029	1436632.6	98.705 %	0.4343			0.44%
Ag 328.068†	64742.8	486.45 µg/L	13.603	486.45 ppb	13.603	2.80%
QC value within limits for Ag 328.068 Recovery = 97.29%						
Al 396.153Radial†	6926.7	5168.4 µg/L	6.59	5168.4 ppb	6.59	0.13%
QC value within limits for Al 396.153Radial Recovery = 103.37%						
As 188.979†	267.2	480.13 µg/L	34.176	480.13 ppb	34.176	7.12%
QC value within limits for As 188.979 Recovery = 96.03%						
B 249.677†	11712.6	477.24 µg/L	15.426	477.24 ppb	15.426	3.23%
QC value within limits for B 249.677 Recovery = 95.45%						
Ba 233.527†	19728.9	484.33 µg/L	21.911	484.33 ppb	21.911	4.52%
QC value within limits for Ba 233.527 Recovery = 96.87%						
Be 313.107†	809535.7	488.73 µg/L	18.250	488.73 ppb	18.250	3.73%
QC value within limits for Be 313.107 Recovery = 97.75%						
Ca 317.933Radial†	5513.1	5057.0 µg/L	22.43	5057.0 ppb	22.43	0.44%
QC value within limits for Ca 317.933Radial Recovery = 101.14%						
Cd 226.502†	19216.0	483.44 µg/L	23.684	483.44 ppb	23.684	4.90%
QC value within limits for Cd 226.502 Recovery = 96.69%						
Co 228.616†	10509.8	486.06 µg/L	26.092	486.06 ppb	26.092	5.37%

Cr	267.716†	23598.2	481.56 µg/L	31.793	481.56 ppb	31.793	6.60%
QC value within limits for Cr 267.716 Recovery = 96.31%							
Cu	324.752†	72399.8	480.98 µg/L	24.780	480.98 ppb	24.780	5.15%
QC value within limits for Cu 324.752 Recovery = 96.20%							
Fe	238.204 Radial†	598.1	5144.7 µg/L	25.68	5144.7 ppb	25.68	0.50%
QC value within limits for Fe 238.204 Radial Recovery = 102.89%							
K	766.490 Radial†	7278.5	5004.8 µg/L	34.17	5004.8 ppb	34.17	0.68%
QC value within limits for K 766.490 Radial Recovery = 100.10%							
Mg	279.077 IEC†	537.2	5231.3 µg/L	61.92	5231.3 ppb	61.92	1.18%
QC value within limits for Mg 279.077 IEC Recovery = 104.63%							
Mn	257.610†	155318.0	494.87 µg/L	17.202	494.87 ppb	17.202	3.48%
QC value within limits for Mn 257.610 Recovery = 98.97%							
Mo	202.031†	4817.4	482.88 µg/L	48.163	482.88 ppb	48.163	9.97%
QC value within limits for Mo 202.031 Recovery = 96.58%							
Na	589.592 Radial†	31316.5	10238 µg/L	17.3	10238 ppb	17.3	0.17%
QC value within limits for Na 589.592 Radial Recovery = 102.38%							
Ni	231.604†	9612.0	485.27 µg/L	25.870	485.27 ppb	25.870	5.33%
QC value within limits for Ni 231.604 Recovery = 97.05%							
P	214.914†	1210.2	2360.0 µg/L	213.38	2360.0 ppb	213.38	9.04%
QC value within limits for P 214.914 Recovery = 94.40%							
Pb	220.353†	1968.5	484.53 µg/L	37.054	484.53 ppb	37.054	7.65%
QC value within limits for Pb 220.353 Recovery = 96.91%							
S	181.975 Axial†	236.4	979.95 µg/L	66.905	979.95 ppb	66.905	6.83%
QC value within limits for S 181.975 Axial Recovery = 98.00%							
Sb	206.836†	521.1	477.75 µg/L	40.248	477.75 ppb	40.248	8.42%
QC value within limits for Sb 206.836 Recovery = 95.55%							
Se	196.026†	347.3	483.79 µg/L	28.829	483.79 ppb	28.829	5.96%
QC value within limits for Se 196.026 Recovery = 96.76%							
SiO2†		26216.2	5249.8 µg/L	208.28	5249.8 ppb	208.28	3.97%
QC value within limits for SiO2 Recovery = 98.17%							
Si	251.611†	31845.3	2457.9 µg/L	87.87	2457.9 ppb	87.87	3.58%
QC value within limits for Si 251.611 Recovery = 98.32%							
Sn	189.927†	1127.5	482.20 µg/L	50.753	482.20 ppb	50.753	10.53%
QC value within limits for Sn 189.927 Recovery = 96.44%							
Sr	421.552†	49717.6	488.98 µg/L	0.944	488.98 ppb	0.944	0.19%
QC value within limits for Sr 421.552 Recovery = 97.80%							
Ti	334.940†	215908.9	490.73 µg/L	19.891	490.73 ppb	19.891	4.05%
QC value within limits for Ti 334.940 Recovery = 98.15%							
Tl	190.801†	367.5	497.09 µg/L	27.116	497.09 ppb	27.116	5.45%
QC value within limits for Tl 190.801 Recovery = 99.42%							
U	409.014†	5717.5	484.18 µg/L	33.165	484.18 ppb	33.165	6.85%
QC value within limits for U 409.014 Recovery = 96.84%							
V	292.402†	48553.9	486.24 µg/L	27.788	486.24 ppb	27.788	5.71%
QC value within limits for V 292.402 Recovery = 97.25%							
Zn	213.857†	20606.1	482.86 µg/L	25.084	482.86 ppb	25.084	5.19%
QC value within limits for Zn 213.857 Recovery = 96.57%							

All analyte(s) passed QC.

Sequence No.: 84

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/21/2010 04:00:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57441.3	57441.3	97.3 %		04:01:25
1	Al 396.153Radial†	-7.6	0.9	0.6454 µg/L	0.6454 ppb	04:01:25
1	Ca 317.933Radial†	192.3	4.7	4.2670 µg/L	4.2670 ppb	04:01:46
1	Fe 238.204 Radial†	15.5	0.5	4.3286 µg/L	4.3286 ppb	04:01:46
1	K 766.490 Radial†	224.6	32.5	22.339 µg/L	22.339 ppb	04:01:25
1	Mg 279.077 IEC†	14.6	2.9	28.439 µg/L	28.439 ppb	04:01:46
1	Na 589.592 Radial†	441.6	-19.8	-6.4739 µg/L	-6.4739 ppb	04:01:25
1	Sr 421.552†	34.9	-5.4	-0.0536 µg/L	-0.0536 ppb	04:01:25
1	Sc 361.383	2089247.2	2089247.2	99.505 %		04:02:48
1	Y 371.029	1444417.0	1444417.0	99.239 %		04:02:48
1	Ag 328.068†	-419.0	42.0	0.3153 µg/L	0.3153 ppb	04:02:54
1	As 188.979†	-1.8	-1.5	-2.7849 µg/L	-2.7849 ppb	04:03:14
1	B 249.677†	359.8	36.1	1.4756 µg/L	1.4756 ppb	04:03:14
1	Ba 233.527†	-4.3	14.0	0.3445 µg/L	0.3445 ppb	04:03:14
1	Be 313.107†	-3624.0	116.9	0.0704 µg/L	0.0704 ppb	04:02:54
1	Cd 226.502†	-139.2	-3.3	-0.0840 µg/L	-0.0840 ppb	04:03:14
1	Co 228.616†	3.2	0.7	0.0312 µg/L	0.0312 ppb	04:03:14
1	Cr 267.716†	-32.4	14.8	0.3017 µg/L	0.3017 ppb	04:02:54
1	Cu 324.752†	2922.7	67.5	0.4485 µg/L	0.4485 ppb	04:02:54
1	Mn 257.610†	-217.3	84.1	0.2673 µg/L	0.2673 ppb	04:03:14
1	Mo 202.031†	5.1	8.4	0.8441 µg/L	0.8441 ppb	04:03:14
1	Ni 231.604†	305.3	-1.8	-0.0898 µg/L	-0.0898 ppb	04:03:14
1	P 214.914†	20.8	4.6	9.1410 µg/L	9.1410 ppb	04:03:14
1	Pb 220.353†	87.9	-6.5	-1.5905 µg/L	-1.5905 ppb	04:03:14
1	S 181.975 Axial†	16.2	-1.0	-4.0930 µg/L	-4.0930 ppb	04:03:14
1	Sb 206.836†	24.9	2.9	2.6935 µg/L	2.6935 ppb	04:03:14
1	Se 196.026†	17.4	2.5	3.4033 µg/L	3.4033 ppb	04:03:14
1	SiO2†	1568.8	92.2	18.455 µg/L	18.455 ppb	04:02:54
1	Si 251.611†	409.7	118.2	9.1234 µg/L	9.1234 ppb	04:03:14
1	Sn 189.927†	3.5	-1.2	-0.5196 µg/L	-0.5196 ppb	04:03:14
1	Ti 334.940†	379.6	239.8	0.5432 µg/L	0.5432 ppb	04:02:54
1	Tl 190.801†	-25.6	-3.5	-4.7094 µg/L	-4.7094 ppb	04:03:14
1	U 409.014†	20.4	21.3	1.8073 µg/L	1.8073 ppb	04:02:54
1	V 292.402†	-72.1	23.5	0.2422 µg/L	0.2422 ppb	04:02:54
1	Zn 213.857†	523.4	24.1	0.5663 µg/L	0.5663 ppb	04:03:14
2	Sc RADIAL	57470.5	57470.5	97.3 %		04:01:51
2	Al 396.153Radial†	14.8	23.9	17.835 µg/L	17.835 ppb	04:01:51
2	Ca 317.933Radial†	197.9	10.3	9.4490 µg/L	9.4490 ppb	04:02:12
2	Fe 238.204 Radial†	17.2	2.3	19.681 µg/L	19.681 ppb	04:02:12
2	K 766.490 Radial†	177.8	-15.7	-10.824 µg/L	-10.824 ppb	04:01:51
2	Mg 279.077 IEC†	11.9	0.2	1.6851 µg/L	1.6851 ppb	04:02:12
2	Na 589.592 Radial†	453.0	-8.3	-2.7180 µg/L	-2.7180 ppb	04:01:51
2	Sr 421.552†	12.1	-28.9	-0.2843 µg/L	-0.2843 ppb	04:01:51
2	Sc 361.383	2076688.9	2076688.9	98.907 %		04:03:20
2	Y 371.029	1437032.1	1437032.1	98.732 %		04:03:20
2	Ag 328.068†	-445.3	13.0	0.0963 µg/L	0.0963 ppb	04:03:26
2	As 188.979†	-0.9	-0.6	-1.1369 µg/L	-1.1369 ppb	04:03:46
2	B 249.677†	358.1	36.6	1.4874 µg/L	1.4874 ppb	04:03:46
2	Ba 233.527†	-6.9	11.4	0.2787 µg/L	0.2787 ppb	04:03:46
2	Be 313.107†	-3636.5	82.2	0.0495 µg/L	0.0495 ppb	04:03:26
2	Cd 226.502†	-143.8	-8.8	-0.2251 µg/L	-0.2251 ppb	04:03:46
2	Co 228.616†	5.0	2.5	0.1131 µg/L	0.1131 ppb	04:03:46
2	Cr 267.716†	-45.0	1.9	0.0389 µg/L	0.0389 ppb	04:03:26
2	Cu 324.752†	2804.5	-34.2	-0.2241 µg/L	-0.2241 ppb	04:03:26
2	Mn 257.610†	-207.6	92.7	0.2975 µg/L	0.2975 ppb	04:03:46
2	Mo 202.031†	1.2	4.6	0.4571 µg/L	0.4571 ppb	04:03:46
2	Ni 231.604†	292.7	-12.7	-0.6422 µg/L	-0.6422 ppb	04:03:46
2	P 214.914†	19.0	3.0	5.9336 µg/L	5.9336 ppb	04:03:46
2	Pb 220.353†	85.0	-8.8	-2.1663 µg/L	-2.1663 ppb	04:03:46

2	S 181.975 Axial†	18.3	1.2	4.8871 µg/L	4.8871 ppb	04:03:46
2	Sb 206.836†	24.8	2.9	2.6738 µg/L	2.6738 ppb	04:03:46
2	Se 196.026†	14.2	-0.6	-0.8387 µg/L	-0.8387 ppb	04:03:46
2	SiO2†	1527.9	60.4	12.095 µg/L	12.095 ppb	04:03:26
2	Si 251.611†	422.9	134.1	10.349 µg/L	10.349 ppb	04:03:46
2	Sn 189.927†	-1.5	-6.2	-2.6583 µg/L	-2.6583 ppb	04:03:46
2	Ti 334.940†	355.5	217.8	0.4954 µg/L	0.4954 ppb	04:03:26
2	Tl 190.801†	-23.4	-1.4	-1.9341 µg/L	-1.9341 ppb	04:03:46
2	U 409.014†	-47.5	-47.3	-4.0174 µg/L	-4.0174 ppb	04:03:26
2	V 292.402†	-118.3	-23.6	-0.2312 µg/L	-0.2312 ppb	04:03:26
2	Zn 213.857†	519.4	23.2	0.5506 µg/L	0.5506 ppb	04:03:46
3	Sc RADIAL	56797.0	56797.0	96.2 %		04:02:17
3	Al 396.153Radial†	5.5	14.4	10.722 µg/L	10.722 ppb	04:02:17
3	Ca 317.933Radial†	187.7	2.2	1.9881 µg/L	1.9881 ppb	04:02:38
3	Fe 238.204 Radial†	16.3	1.5	13.221 µg/L	13.221 ppb	04:02:38
3	K 766.490 Radial†	214.2	24.2	16.672 µg/L	16.672 ppb	04:02:17
3	Mg 279.077 IEC†	10.4	-1.3	-12.504 µg/L	-12.504 ppb	04:02:38
3	Na 589.592 Radial†	462.5	7.1	2.3266 µg/L	2.3266 ppb	04:02:17
3	Sr 421.552†	35.6	-4.3	-0.0427 µg/L	-0.0427 ppb	04:02:17
3	Sc 361.383	2074832.4	2074832.4	98.819 %		04:03:52
3	Y 371.029	1434371.9	1434371.9	98.549 %		04:03:52
3	Ag 328.068†	-365.5	93.3	0.6979 µg/L	0.6979 ppb	04:03:58
3	As 188.979†	-5.3	-5.1	-9.2346 µg/L	-9.2346 ppb	04:04:19
3	B 249.677†	349.0	27.6	1.1238 µg/L	1.1238 ppb	04:04:19
3	Ba 233.527†	-9.8	8.4	0.2068 µg/L	0.2068 ppb	04:04:19
3	Be 313.107†	-3548.7	167.8	0.1011 µg/L	0.1011 ppb	04:03:58
3	Cd 226.502†	-144.8	-9.9	-0.2507 µg/L	-0.2507 ppb	04:04:19
3	Co 228.616†	2.0	-0.6	-0.0279 µg/L	-0.0279 ppb	04:04:19
3	Cr 267.716†	-50.7	-4.0	-0.0805 µg/L	-0.0805 ppb	04:03:58
3	Cu 324.752†	2862.7	27.2	0.1824 µg/L	0.1824 ppb	04:03:58
3	Mn 257.610†	-204.3	95.8	0.3072 µg/L	0.3072 ppb	04:04:19
3	Mo 202.031†	5.1	8.4	0.8454 µg/L	0.8454 ppb	04:04:19
3	Ni 231.604†	308.6	3.6	0.1825 µg/L	0.1825 ppb	04:04:19
3	P 214.914†	16.7	0.7	1.3578 µg/L	1.3578 ppb	04:04:19
3	Pb 220.353†	94.9	1.2	0.3068 µg/L	0.3068 ppb	04:04:19
3	S 181.975 Axial†	12.0	-5.2	-21.512 µg/L	-21.512 ppb	04:04:19
3	Sb 206.836†	19.3	-2.6	-2.3556 µg/L	-2.3556 ppb	04:04:19
3	Se 196.026†	19.2	4.4	6.0846 µg/L	6.0846 ppb	04:04:19
3	SiO2†	1583.3	117.9	23.601 µg/L	23.601 ppb	04:03:58
3	Si 251.611†	425.5	137.1	10.579 µg/L	10.579 ppb	04:04:19
3	Sn 189.927†	0.3	-4.4	-1.8947 µg/L	-1.8947 ppb	04:04:19
3	Ti 334.940†	379.1	242.0	0.5514 µg/L	0.5514 ppb	04:03:58
3	Tl 190.801†	-22.9	-0.9	-1.2027 µg/L	-1.2027 ppb	04:04:19
3	U 409.014†	-108.6	-109.1	-9.2614 µg/L	-9.2614 ppb	04:03:58
3	V 292.402†	-76.6	18.5	0.1812 µg/L	0.1812 ppb	04:03:58
3	Zn 213.857†	521.4	25.7	0.6063 µg/L	0.6063 ppb	04:04:19

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2080256.2	99.077 %	0.3735			0.38%
Sc RADIAL	57236.3	96.9 %	0.64			0.67%
Y 371.029	1438607.0	98.840 %	0.3576			0.36%
Ag 328.068†	49.4	0.3698 µg/L	0.30447	0.3698 ppb	0.30447	82.32%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	13.0	9.7341 µg/L	8.63711	9.7341 ppb	8.63711	88.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.4	-4.3855 µg/L	4.27954	-4.3855 ppb	4.27954	97.58%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	33.5	1.3623 µg/L	0.20661	1.3623 ppb	0.20661	15.17%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	11.3	0.2767 µg/L	0.06884	0.2767 ppb	0.06884	24.88%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	122.3	0.0736 µg/L	0.02597	0.0736 ppb	0.02597	35.27%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	5.7	5.2347 µg/L	3.82345	5.2347 ppb	3.82345	73.04%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-7.4	-0.1866 µg/L	0.08976	-0.1866 ppb	0.08976	48.10%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.8	0.0388 µg/L	0.07080	0.0388 ppb	0.07080	182.35%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	4.2	0.0867 µg/L	0.19555	0.0867 ppb	0.19555 225.60%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	20.2	0.1356 µg/L	0.33876	0.1356 ppb	0.33876 249.79%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	1.4	12.410 µg/L	7.7081	12.410 ppb	7.7081 62.11%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	13.7	9.3956 µg/L	17.73884	9.3956 ppb	17.73884 188.80%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	0.6	5.8733 µg/L	20.79015	5.8733 ppb	20.79015 353.98%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	90.9	0.2907 µg/L	0.02084	0.2907 ppb	0.02084 7.17%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	7.1	0.7155 µg/L	0.22382	0.7155 ppb	0.22382 31.28%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	-7.0	-2.2884 µg/L	4.41591	-2.2884 ppb	4.41591 192.97%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-3.6	-0.1832 µg/L	0.42017	-0.1832 ppb	0.42017 229.40%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	2.8	5.4775 µg/L	3.91159	5.4775 ppb	3.91159 71.41%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-4.7	-1.1500 µg/L	1.29405	-1.1500 ppb	1.29405 112.52%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	-1.7	-6.9061 µg/L	13.42273	-6.9061 ppb	13.42273 194.36%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	1.1	1.0039 µg/L	2.90946	1.0039 ppb	2.90946 289.82%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	2.1	2.8831 µg/L	3.49084	2.8831 ppb	3.49084 121.08%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	90.1	18.050 µg/L	5.7635	18.050 ppb	5.7635 31.93%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	129.8	10.017 µg/L	0.7824	10.017 ppb	0.7824 7.81%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	-4.0	-1.6909 µg/L	1.08381	-1.6909 ppb	1.08381 64.10%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	-12.9	-0.1269 µg/L	0.13648	-0.1269 ppb	0.13648 107.57%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	233.2	0.5300 µg/L	0.03026	0.5300 ppb	0.03026 5.71%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	-2.0	-2.6154 µg/L	1.84993	-2.6154 ppb	1.84993 70.73%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	-45.0	-3.8238 µg/L	5.53688	-3.8238 ppb	5.53688 144.80%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	6.2	0.0641 µg/L	0.25756	0.0641 ppb	0.25756 402.04%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	24.4	0.5744 µg/L	0.02872	0.5744 ppb	0.02872 5.00%
	QC value within limits for Zn 213.857	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 94

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/21/2010 04:37:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57964.9	57964.9	98.2 %		04:37:58
1	Al 396.153Radial†	6913.1	7050.5	5260.1 µg/L	5260.1 ppb	04:37:58
1	Ca 317.933Radial†	5687.1	5600.0	5136.7 µg/L	5136.7 ppb	04:38:18
1	Fe 238.204 Radial†	614.5	610.5	5251.5 µg/L	5251.5 ppb	04:38:18
1	K 766.490 Radial†	7414.7	7354.3	5057.0 µg/L	5057.0 ppb	04:37:58
1	Mg 279.077 IEC†	548.6	546.7	5324.7 µg/L	5324.7 ppb	04:38:18
1	Na 589.592 Radial†	31704.4	31820.8	10403 µg/L	10403 ppb	04:37:58
1	Sr 421.552†	49681.0	50564.2	497.31 µg/L	497.31 ppb	04:37:58
1	Sc 361.383	2069155.9	2069155.9	98.548 %		04:39:22
1	Y 371.029	1425908.0	1425908.0	97.968 %		04:39:22
1	Ag 328.068†	65357.2	66783.0	501.84 µg/L	501.84 ppb	04:39:27
1	As 188.979†	280.3	284.7	511.46 µg/L	511.46 ppb	04:39:48
1	B 249.677†	12206.9	12061.2	491.49 µg/L	491.49 ppb	04:39:27
1	Ba 233.527†	20189.2	20504.9	503.39 µg/L	503.39 ppb	04:39:27
1	Be 313.107†	826325.3	842255.4	508.48 µg/L	508.48 ppb	04:39:22
1	Cd 226.502†	19572.7	19997.6	503.12 µg/L	503.12 ppb	04:39:27
1	Co 228.616†	10789.7	10946.0	506.25 µg/L	506.25 ppb	04:39:27
1	Cr 267.716†	24426.4	24833.6	506.77 µg/L	506.77 ppb	04:39:27
1	Cu 324.752†	77626.2	75899.9	504.21 µg/L	504.21 ppb	04:39:27
1	Mn 257.610†	158635.8	161275.0	513.85 µg/L	513.85 ppb	04:39:22
1	Mo 202.031†	5131.9	5210.8	522.30 µg/L	522.30 ppb	04:39:48
1	Ni 231.604†	10210.5	10052.3	507.50 µg/L	507.50 ppb	04:39:27
1	P 214.914†	1283.1	1285.8	2508.3 µg/L	2508.3 ppb	04:39:48
1	Pb 220.353†	2149.5	2086.4	513.57 µg/L	513.57 ppb	04:39:48
1	S 181.975 Axial†	261.1	247.7	1026.7 µg/L	1026.7 ppb	04:39:48
1	Sb 206.836†	574.2	560.5	514.08 µg/L	514.08 ppb	04:39:48
1	Se 196.026†	379.6	370.2	515.30 µg/L	515.30 ppb	04:39:48
1	SiO2†	28169.6	27100.1	5426.8 µg/L	5426.8 ppb	04:39:27
1	Si 251.611†	32706.2	32894.4	2538.9 µg/L	2538.9 ppb	04:39:27
1	Sn 189.927†	1208.2	1221.3	522.30 µg/L	522.30 ppb	04:39:48
1	Ti 334.940†	222251.4	225383.4	512.27 µg/L	512.27 ppb	04:39:22
1	Tl 190.801†	350.6	377.9	511.34 µg/L	511.34 ppb	04:39:48
1	U 409.014†	5939.7	6028.0	510.51 µg/L	510.51 ppb	04:39:27
1	V 292.402†	50117.0	50951.2	510.35 µg/L	510.35 ppb	04:39:27
1	Zn 213.857†	21719.0	21536.9	504.69 µg/L	504.69 ppb	04:39:27
2	Sc RADIAL	57814.6	57814.6	97.9 %		04:38:23
2	Al 396.153Radial†	6911.7	7067.3	5272.7 µg/L	5272.7 ppb	04:38:23
2	Ca 317.933Radial†	5643.7	5570.7	5109.8 µg/L	5109.8 ppb	04:38:44
2	Fe 238.204 Radial†	607.3	604.9	5203.2 µg/L	5203.2 ppb	04:38:44
2	K 766.490 Radial†	7463.7	7424.0	5104.9 µg/L	5104.9 ppb	04:38:23
2	Mg 279.077 IEC†	547.3	546.8	5325.6 µg/L	5325.6 ppb	04:38:44
2	Na 589.592 Radial†	31789.2	31991.3	10459 µg/L	10459 ppb	04:38:23
2	Sr 421.552†	49729.4	50745.1	499.09 µg/L	499.09 ppb	04:38:23
2	Sc 361.383	2054866.1	2054866.1	97.868 %		04:39:55
2	Y 371.029	1416211.9	1416211.9	97.302 %		04:39:55
2	Ag 328.068†	65765.1	67661.0	508.44 µg/L	508.44 ppb	04:40:00
2	As 188.979†	284.8	291.3	523.29 µg/L	523.29 ppb	04:40:21
2	B 249.677†	12331.8	12275.0	500.28 µg/L	500.28 ppb	04:40:00
2	Ba 233.527†	20384.3	20846.7	511.79 µg/L	511.79 ppb	04:40:00
2	Be 313.107†	820134.1	841760.3	508.18 µg/L	508.18 ppb	04:39:55
2	Cd 226.502†	19703.9	20269.7	509.98 µg/L	509.98 ppb	04:40:00
2	Co 228.616†	10913.3	11148.5	515.62 µg/L	515.62 ppb	04:40:00
2	Cr 267.716†	24753.9	25340.6	517.12 µg/L	517.12 ppb	04:40:00
2	Cu 324.752†	78171.4	77004.7	511.53 µg/L	511.53 ppb	04:40:00
2	Mn 257.610†	157417.9	161150.0	513.44 µg/L	513.44 ppb	04:39:55
2	Mo 202.031†	5099.5	5213.9	522.61 µg/L	522.61 ppb	04:40:21
2	Ni 231.604†	10303.9	10219.8	515.95 µg/L	515.95 ppb	04:40:00
2	P 214.914†	1287.9	1299.7	2535.3 µg/L	2535.3 ppb	04:40:21
2	Pb 220.353†	2146.9	2098.9	516.64 µg/L	516.64 ppb	04:40:21

2	S 181.975 Axial†	263.5	251.9	1044.3 µg/L	1044.3 ppb	04:40:21
2	Sb 206.836†	562.9	553.1	507.20 µg/L	507.20 ppb	04:40:21
2	Se 196.026†	377.4	370.7	515.82 µg/L	515.82 ppb	04:40:21
2	SiO2†	28431.4	27566.4	5520.2 µg/L	5520.2 ppb	04:40:00
2	Si 251.611†	33078.6	33505.8	2586.1 µg/L	2586.1 ppb	04:40:00
2	Sn 189.927†	1202.5	1224.0	523.45 µg/L	523.45 ppb	04:40:21
2	Ti 334.940†	220660.0	225325.6	512.14 µg/L	512.14 ppb	04:39:55
2	Tl 190.801†	355.5	385.5	521.43 µg/L	521.43 ppb	04:40:21
2	U 409.014†	5987.7	6118.9	518.23 µg/L	518.23 ppb	04:40:00
2	V 292.402†	50621.8	51820.7	518.98 µg/L	518.98 ppb	04:40:00
2	Zn 213.857†	21911.5	21886.9	512.90 µg/L	512.90 ppb	04:40:00
3	Sc RADIAL	57362.1	57362.1	97.2 %		04:38:49
3	Al 396.153Radial†	6856.4	7066.1	5273.6 µg/L	5273.6 ppb	04:38:49
3	Ca 317.933Radial†	5638.3	5610.6	5146.4 µg/L	5146.4 ppb	04:39:10
3	Fe 238.204 Radial†	606.5	608.9	5236.9 µg/L	5236.9 ppb	04:39:10
3	K 766.490 Radial†	7344.3	7361.2	5061.7 µg/L	5061.7 ppb	04:38:49
3	Mg 279.077 IEC†	542.4	546.2	5318.2 µg/L	5318.2 ppb	04:39:10
3	Na 589.592 Radial†	31621.8	32075.1	10486 µg/L	10486 ppb	04:38:49
3	Sr 421.552†	49451.5	50859.8	500.22 µg/L	500.22 ppb	04:38:49
3	Sc 361.383	2057021.9	2057021.9	97.971 %		04:40:28
3	Y 371.029	1418757.6	1418757.6	97.477 %		04:40:28
3	Ag 328.068†	62793.8	64557.7	484.98 µg/L	484.98 ppb	04:40:34
3	As 188.979†	241.5	246.8	443.44 µg/L	443.44 ppb	04:40:54
3	B 249.677†	11721.9	11639.2	474.16 µg/L	474.16 ppb	04:40:34
3	Ba 233.527†	18891.4	19301.1	473.82 µg/L	473.82 ppb	04:40:34
3	Be 313.107†	776167.5	796004.7	480.56 µg/L	480.56 ppb	04:40:28
3	Cd 226.502†	18199.0	18712.6	470.75 µg/L	470.75 ppb	04:40:34
3	Co 228.616†	10016.1	10221.0	472.67 µg/L	472.67 ppb	04:40:34
3	Cr 267.716†	22039.0	22543.0	460.03 µg/L	460.03 ppb	04:40:34
3	Cu 324.752†	71851.0	70469.7	468.19 µg/L	468.19 ppb	04:40:34
3	Mn 257.610†	149112.3	152503.8	485.93 µg/L	485.93 ppb	04:40:28
3	Mo 202.031†	4266.6	4358.3	436.89 µg/L	436.89 ppb	04:40:54
3	Ni 231.604†	9453.2	9340.4	471.56 µg/L	471.56 ppb	04:40:34
3	P 214.914†	1097.5	1104.0	2149.3 µg/L	2149.3 ppb	04:40:54
3	Pb 220.353†	1877.4	1821.5	448.26 µg/L	448.26 ppb	04:40:54
3	S 181.975 Axial†	229.7	217.2	900.37 µg/L	900.37 ppb	04:40:54
3	Sb 206.836†	490.3	478.3	438.20 µg/L	438.20 ppb	04:40:54
3	Se 196.026†	329.7	321.6	448.64 µg/L	448.64 ppb	04:40:54
3	SiO2†	26745.6	25815.3	5169.5 µg/L	5169.5 ppb	04:40:34
3	Si 251.611†	31019.8	31368.9	2421.2 µg/L	2421.2 ppb	04:40:34
3	Sn 189.927†	998.1	1014.0	433.68 µg/L	433.68 ppb	04:40:54
3	Ti 334.940†	207732.3	211893.8	481.59 µg/L	481.59 ppb	04:40:28
3	Tl 190.801†	316.4	345.2	467.20 µg/L	467.20 ppb	04:40:54
3	U 409.014†	5319.5	5430.5	459.81 µg/L	459.81 ppb	04:40:34
3	V 292.402†	46017.1	47066.3	471.10 µg/L	471.10 ppb	04:40:34
3	Zn 213.857†	20132.5	20047.6	469.75 µg/L	469.75 ppb	04:40:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2060348.0	98.129 %	0.3669			0.37%
Sc RADIAL	57713.9	97.7 %	0.53			0.54%
Y 371.029	1420292.5	97.582 %	0.3454			0.35%
Ag 328.068†	66333.9	498.42 µg/L	12.096	498.42 ppb	12.096	2.43%
QC value within limits for Ag 328.068 Recovery = 99.68%						
Al 396.153Radial†	7061.3	5268.8 µg/L	7.53	5268.8 ppb	7.53	0.14%
QC value within limits for Al 396.153Radial Recovery = 105.38%						
As 188.979†	274.3	492.73 µg/L	43.091	492.73 ppb	43.091	8.75%
QC value within limits for As 188.979 Recovery = 98.55%						
B 249.677†	11991.8	488.64 µg/L	13.290	488.64 ppb	13.290	2.72%
QC value within limits for B 249.677 Recovery = 97.73%						
Ba 233.527†	20217.6	496.33 µg/L	19.941	496.33 ppb	19.941	4.02%
QC value within limits for Ba 233.527 Recovery = 99.27%						
Be 313.107†	826673.4	499.07 µg/L	16.035	499.07 ppb	16.035	3.21%
QC value within limits for Be 313.107 Recovery = 99.81%						
Ca 317.933Radial†	5593.8	5130.9 µg/L	18.99	5130.9 ppb	18.99	0.37%
QC value within limits for Ca 317.933Radial Recovery = 102.62%						
Cd 226.502†	19660.0	494.61 µg/L	20.951	494.61 ppb	20.951	4.24%
QC value within limits for Cd 226.502 Recovery = 98.92%						
Co 228.616†	10771.8	498.18 µg/L	22.588	498.18 ppb	22.588	4.53%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = 99.64%				
	24239.1	494.64 µg/L	30.414	494.64 ppb	30.414	6.15%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = 98.93%				
	74458.1	494.64 µg/L	23.202	494.64 ppb	23.202	4.69%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = 98.93%				
	608.1	5230.5 µg/L	24.79	5230.5 ppb	24.79	0.47%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = 104.61%				
	7379.9	5074.5 µg/L	26.39	5074.5 ppb	26.39	0.52%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = 101.49%				
	546.6	5322.8 µg/L	4.03	5322.8 ppb	4.03	0.08%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = 106.46%				
	158309.6	504.41 µg/L	16.005	504.41 ppb	16.005	3.17%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = 100.88%				
	4927.7	493.93 µg/L	49.404	493.93 ppb	49.404	10.00%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = 98.79%				
	31962.4	10449 µg/L	42.4	10449 ppb	42.4	0.41%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = 104.49%				
	9870.8	498.34 µg/L	23.572	498.34 ppb	23.572	4.73%
P 214.914†	QC value within limits for Ni 231.604	Recovery = 99.67%				
	1229.8	2397.6 µg/L	215.46	2397.6 ppb	215.46	8.99%
Pb 220.353†	QC value within limits for P 214.914	Recovery = 95.91%				
	2002.3	492.82 µg/L	38.621	492.82 ppb	38.621	7.84%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = 98.56%				
	238.9	990.46 µg/L	78.518	990.46 ppb	78.518	7.93%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = 99.05%				
	530.6	486.49 µg/L	41.964	486.49 ppb	41.964	8.63%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = 97.30%				
	354.1	493.25 µg/L	38.637	493.25 ppb	38.637	7.83%
SiO2†	QC value within limits for Se 196.026	Recovery = 98.65%				
	26827.3	5372.2 µg/L	181.61	5372.2 ppb	181.61	3.38%
Si 251.611†	QC value within limits for SiO2	Recovery = 100.46%				
	32589.7	2515.4 µg/L	84.95	2515.4 ppb	84.95	3.38%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = 100.62%				
	1153.1	493.15 µg/L	51.500	493.15 ppb	51.500	10.44%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = 98.63%				
	50723.1	498.87 µg/L	1.466	498.87 ppb	1.466	0.29%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = 99.77%				
	220867.6	502.00 µg/L	17.675	502.00 ppb	17.675	3.52%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = 100.40%				
	369.5	499.99 µg/L	28.843	499.99 ppb	28.843	5.77%
U 409.014†	QC value within limits for Tl 190.801	Recovery = 100.00%				
	5859.1	496.18 µg/L	31.738	496.18 ppb	31.738	6.40%
V 292.402†	QC value within limits for U 409.014	Recovery = 99.24%				
	49946.1	500.15 µg/L	25.519	500.15 ppb	25.519	5.10%
Zn 213.857†	QC value within limits for V 292.402	Recovery = 100.03%				
	21157.2	495.78 µg/L	22.910	495.78 ppb	22.910	4.62%
	QC value within limits for Zn 213.857	Recovery = 99.16%				

All analyte(s) passed QC.

Sequence No.: 95

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/21/2010 04:41:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56543.1	56543.1	95.8 %		04:41:39
1	Al 396.153Radial†	16.4	25.9	19.323 µg/L	19.323 ppb	04:41:39
1	Ca 317.933Radial†	191.1	6.5	5.9961 µg/L	5.9961 ppb	04:42:00
1	Fe 238.204 Radial†	15.9	1.2	10.459 µg/L	10.459 ppb	04:42:00
1	K 766.490 Radial†	206.5	17.2	11.838 µg/L	11.838 ppb	04:41:39
1	Mg 279.077 IEC†	9.9	-1.7	-17.011 µg/L	-17.011 ppb	04:42:00
1	Na 589.592 Radial†	429.1	-25.6	-8.3809 µg/L	-8.3809 ppb	04:41:39
1	Sr 421.552†	49.3	10.1	0.0994 µg/L	0.0994 ppb	04:41:39
1	Sc 361.383	2062096.5	2062096.5	98.212 %		04:43:02
1	Y 371.029	1426184.8	1426184.8	97.987 %		04:43:02
1	Ag 328.068†	-446.8	8.2	0.0637 µg/L	0.0637 ppb	04:43:08
1	As 188.979†	-3.5	-3.3	-5.9658 µg/L	-5.9658 ppb	04:43:28
1	B 249.677†	365.3	46.5	1.8963 µg/L	1.8963 ppb	04:43:28
1	Ba 233.527†	-8.8	9.4	0.2299 µg/L	0.2299 ppb	04:43:28
1	Be 313.107†	-3676.7	15.3	0.0092 µg/L	0.0092 ppb	04:43:08
1	Cd 226.502†	-137.4	-3.3	-0.0843 µg/L	-0.0843 ppb	04:43:28
1	Co 228.616†	12.3	10.0	0.4608 µg/L	0.4608 ppb	04:43:28
1	Cr 267.716†	-36.4	10.3	0.2112 µg/L	0.2112 ppb	04:43:08
1	Cu 324.752†	2873.8	56.3	0.3752 µg/L	0.3752 ppb	04:43:08
1	Mn 257.610†	-253.7	44.3	0.1431 µg/L	0.1431 ppb	04:43:28
1	Mo 202.031†	0.4	3.8	0.3785 µg/L	0.3785 ppb	04:43:28
1	Ni 231.604†	313.7	10.8	0.5454 µg/L	0.5454 ppb	04:43:28
1	P 214.914†	15.3	-0.7	-1.3834 µg/L	-1.3834 ppb	04:43:28
1	Pb 220.353†	88.9	-4.3	-1.0521 µg/L	-1.0521 ppb	04:43:28
1	S 181.975 Axial†	17.6	0.6	2.3928 µg/L	2.3928 ppb	04:43:28
1	Sb 206.836†	21.9	0.2	0.2120 µg/L	0.2120 ppb	04:43:28
1	Se 196.026†	12.2	-2.6	-3.4707 µg/L	-3.4707 ppb	04:43:28
1	SiO2†	1520.6	63.9	12.797 µg/L	12.797 ppb	04:43:08
1	Si 251.611†	411.2	125.1	9.6575 µg/L	9.6575 ppb	04:43:28
1	Sn 189.927†	4.7	0.1	0.0465 µg/L	0.0465 ppb	04:43:28
1	Ti 334.940†	201.2	63.2	0.1451 µg/L	0.1451 ppb	04:43:08
1	Tl 190.801†	-20.2	1.7	2.2429 µg/L	2.2429 ppb	04:43:28
1	U 409.014†	-0.4	0.4	0.0310 µg/L	0.0310 ppb	04:43:08
1	V 292.402†	-69.7	25.0	0.2519 µg/L	0.2519 ppb	04:43:08
1	Zn 213.857†	525.3	32.9	0.7748 µg/L	0.7748 ppb	04:43:28
2	Sc RADIAL	56472.5	56472.5	95.6 %		04:42:05
2	Al 396.153Radial†	-17.1	-9.2	-6.8488 µg/L	-6.8488 ppb	04:42:05
2	Ca 317.933Radial†	181.4	-3.3	-2.9956 µg/L	-2.9956 ppb	04:42:26
2	Fe 238.204 Radial†	16.5	1.9	16.256 µg/L	16.256 ppb	04:42:26
2	K 766.490 Radial†	152.6	-38.8	-26.684 µg/L	-26.684 ppb	04:42:05
2	Mg 279.077 IEC†	13.1	1.6	15.303 µg/L	15.303 ppb	04:42:26
2	Na 589.592 Radial†	410.4	-44.6	-14.578 µg/L	-14.578 ppb	04:42:05
2	Sr 421.552†	48.0	8.8	0.0868 µg/L	0.0868 ppb	04:42:05
2	Sc 361.383	2042281.2	2042281.2	97.268 %		04:43:34
2	Y 371.029	1412201.8	1412201.8	97.026 %		04:43:34
2	Ag 328.068†	-387.2	65.1	0.4881 µg/L	0.4881 ppb	04:43:40
2	As 188.979†	-0.0	0.3	0.5058 µg/L	0.5058 ppb	04:44:00
2	B 249.677†	367.4	52.2	2.1271 µg/L	2.1271 ppb	04:44:00
2	Ba 233.527†	-11.9	6.1	0.1492 µg/L	0.1492 ppb	04:44:00
2	Be 313.107†	-3710.0	-55.3	-0.0335 µg/L	-0.0335 ppb	04:43:40
2	Cd 226.502†	-147.1	-14.7	-0.3700 µg/L	-0.3700 ppb	04:44:00
2	Co 228.616†	0.9	-1.7	-0.0768 µg/L	-0.0768 ppb	04:44:00
2	Cr 267.716†	-57.8	-12.1	-0.2461 µg/L	-0.2461 ppb	04:43:40
2	Cu 324.752†	2864.0	74.7	0.4976 µg/L	0.4976 ppb	04:43:40
2	Mn 257.610†	-248.4	47.2	0.1517 µg/L	0.1517 ppb	04:44:00
2	Mo 202.031†	-0.6	2.7	0.2695 µg/L	0.2695 ppb	04:44:00
2	Ni 231.604†	310.3	10.3	0.5233 µg/L	0.5233 ppb	04:44:00
2	P 214.914†	14.8	-1.0	-2.1192 µg/L	-2.1192 ppb	04:44:00
2	Pb 220.353†	80.0	-12.5	-3.0809 µg/L	-3.0809 ppb	04:44:00

2	S 181.975 Axial†	15.8	-1.1	-4.4797 µg/L	-4.4797 ppb	04:44:00
2	Sb 206.836†	33.5	12.3	11.234 µg/L	11.234 ppb	04:44:00
2	Se 196.026†	18.1	3.6	4.9333 µg/L	4.9333 ppb	04:44:00
2	SiO2†	1533.7	92.3	18.488 µg/L	18.488 ppb	04:43:40
2	Si 251.611†	440.4	159.2	12.290 µg/L	12.290 ppb	04:44:00
2	Sn 189.927†	-0.2	-4.9	-2.0967 µg/L	-2.0967 ppb	04:44:00
2	Ti 334.940†	207.3	71.4	0.1612 µg/L	0.1612 ppb	04:43:40
2	Tl 190.801†	-26.3	-4.8	-6.3839 µg/L	-6.3839 ppb	04:44:00
2	U 409.014†	-83.7	-85.3	-7.2418 µg/L	-7.2418 ppb	04:43:40
2	V 292.402†	-68.9	25.2	0.2451 µg/L	0.2451 ppb	04:43:40
2	Zn 213.857†	519.9	32.5	0.7629 µg/L	0.7629 ppb	04:44:00
3	Sc RADIAL	56862.9	56862.9	96.3 %		04:42:31
3	Al 396.153Radial†	-8.1	0.3	0.2104 µg/L	0.2104 ppb	04:42:31
3	Ca 317.933Radial†	190.4	4.7	4.3022 µg/L	4.3022 ppb	04:42:52
3	Fe 238.204 Radial†	14.9	0.0	0.3978 µg/L	0.3978 ppb	04:42:52
3	K 766.490 Radial†	214.1	23.9	16.449 µg/L	16.449 ppb	04:42:31
3	Mg 279.077 IEC†	13.2	1.6	15.396 µg/L	15.396 ppb	04:42:52
3	Na 589.592 Radial†	391.0	-67.7	-22.148 µg/L	-22.148 ppb	04:42:31
3	Sr 421.552†	44.8	5.1	0.0503 µg/L	0.0503 ppb	04:42:31
3	Sc 361.383	2056881.8	2056881.8	97.964 %		04:44:06
3	Y 371.029	1422943.5	1422943.5	97.764 %		04:44:06
3	Ag 328.068†	-440.1	13.9	0.1045 µg/L	0.1045 ppb	04:44:12
3	As 188.979†	-0.3	-0.0	-0.0738 µg/L	-0.0738 ppb	04:44:32
3	B 249.677†	361.1	43.1	1.7614 µg/L	1.7614 ppb	04:44:32
3	Ba 233.527†	-11.3	6.8	0.1674 µg/L	0.1674 ppb	04:44:32
3	Be 313.107†	-3729.3	-47.9	-0.0291 µg/L	-0.0291 ppb	04:44:12
3	Cd 226.502†	-140.3	-6.6	-0.1664 µg/L	-0.1664 ppb	04:44:32
3	Co 228.616†	1.4	-1.1	-0.0530 µg/L	-0.0530 ppb	04:44:32
3	Cr 267.716†	-64.2	-18.2	-0.3701 µg/L	-0.3701 ppb	04:44:12
3	Cu 324.752†	2921.0	112.0	0.7432 µg/L	0.7432 ppb	04:44:12
3	Mn 257.610†	-242.6	54.9	0.1742 µg/L	0.1742 ppb	04:44:32
3	Mo 202.031†	-2.0	1.3	0.1319 µg/L	0.1319 ppb	04:44:32
3	Ni 231.604†	306.1	3.9	0.1949 µg/L	0.1949 ppb	04:44:32
3	P 214.914†	14.7	-1.2	-2.5049 µg/L	-2.5049 ppb	04:44:32
3	Pb 220.353†	92.8	-0.1	-0.0199 µg/L	-0.0199 ppb	04:44:32
3	S 181.975 Axial†	18.9	2.0	8.1060 µg/L	8.1060 ppb	04:44:32
3	Sb 206.836†	22.2	0.5	0.4763 µg/L	0.4763 ppb	04:44:32
3	Se 196.026†	9.2	-5.6	-7.6504 µg/L	-7.6504 ppb	04:44:32
3	SiO2†	1589.1	137.7	27.576 µg/L	27.576 ppb	04:44:12
3	Si 251.611†	444.8	160.5	12.391 µg/L	12.391 ppb	04:44:32
3	Sn 189.927†	-1.6	-6.3	-2.7023 µg/L	-2.7023 ppb	04:44:32
3	Ti 334.940†	267.4	131.3	0.2974 µg/L	0.2974 ppb	04:44:12
3	Tl 190.801†	-27.4	-5.7	-7.6763 µg/L	-7.6763 ppb	04:44:32
3	U 409.014†	-4.5	-3.8	-0.3223 µg/L	-0.3223 ppb	04:44:12
3	V 292.402†	-79.4	15.0	0.1483 µg/L	0.1483 ppb	04:44:12
3	Zn 213.857†	521.2	30.1	0.7084 µg/L	0.7084 ppb	04:44:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2053753.1	97.815 %	0.4892			0.50%
Sc RADIAL	56626.2	95.9 %	0.35			0.37%
Y 371.029	1420443.4	97.592 %	0.5029			0.52%
Ag 328.068†	29.1	0.2188 µg/L	0.23416	0.2188 ppb	0.23416	107.04%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.7	4.2282 µg/L	13.54068	4.2282 ppb	13.54068	320.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.0	-1.8446 µg/L	3.58081	-1.8446 ppb	3.58081	194.13%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	47.3	1.9283 µg/L	0.18494	1.9283 ppb	0.18494	9.59%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.4	0.1822 µg/L	0.04230	0.1822 ppb	0.04230	23.22%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-29.3	-0.0178 µg/L	0.02345	-0.0178 ppb	0.02345	131.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.7	2.4342 µg/L	4.77804	2.4342 ppb	4.77804	196.29%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-8.2	-0.2069 µg/L	0.14710	-0.2069 ppb	0.14710	71.10%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.4	0.1103 µg/L	0.30374	0.1103 ppb	0.30374	275.31%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated		
	-6.6	-0.1350 µg/L	0.30617	-0.1350 ppb 0.30617 226.76%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated		
	81.0	0.5387 µg/L	0.18741	0.5387 ppb 0.18741 34.79%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated		
	1.1	9.0375 µg/L	8.02395	9.0375 ppb 8.02395 88.78%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
	0.8	0.5343 µg/L	23.68411	0.5343 ppb 23.68411 >999.9%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated		
	0.5	4.5626 µg/L	18.68331	4.5626 ppb 18.68331 409.49%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
	48.8	0.1563 µg/L	0.01607	0.1563 ppb 0.01607 10.28%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated		
	2.6	0.2599 µg/L	0.12360	0.2599 ppb 0.12360 47.55%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated		
	-46.0	-15.036 µg/L	6.8948	-15.036 ppb 6.8948 45.86%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
	8.3	0.4212 µg/L	0.19631	0.4212 ppb 0.19631 46.61%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated		
	-1.0	-2.0025 µg/L	0.56978	-2.0025 ppb 0.56978 28.45%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated		
	-5.6	-1.3843 µg/L	1.55731	-1.3843 ppb 1.55731 112.50%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated		
	0.5	2.0064 µg/L	6.30177	2.0064 ppb 6.30177 314.09%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated		
	4.3	3.9741 µg/L	6.28860	3.9741 ppb 6.28860 158.24%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated		
	-1.5	-2.0626 µg/L	6.40889	-2.0626 ppb 6.40889 310.72%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated		
	98.0	19.620 µg/L	7.4543	19.620 ppb 7.4543 37.99%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated		
	148.3	11.446 µg/L	1.5496	11.446 ppb 1.5496 13.54%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated		
	-3.7	-1.5841 µg/L	1.44430	-1.5841 ppb 1.44430 91.17%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated		
	8.0	0.0788 µg/L	0.02553	0.0788 ppb 0.02553 32.39%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated		
	88.6	0.2012 µg/L	0.08369	0.2012 ppb 0.08369 41.58%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated		
	-2.9	-3.9391 µg/L	5.39263	-3.9391 ppb 5.39263 136.90%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated		
	-29.6	-2.5110 µg/L	4.10075	-2.5110 ppb 4.10075 163.31%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated		
	21.7	0.2151 µg/L	0.05796	0.2151 ppb 0.05796 26.94%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated		
	31.9	0.7487 µg/L	0.03540	0.7487 ppb 0.03540 4.73%
	QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 104

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/21/2010 05:13:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57715.1	57715.1	97.7 %		05:14:33
1	Al 396.153Radial†	6823.7	6989.5	5214.5 µg/L	5214.5 ppb	05:14:33
1	Ca 317.933Radial†	5675.7	5613.4	5149.0 µg/L	5149.0 ppb	05:14:54
1	Fe 238.204 Radial†	615.4	614.2	5283.5 µg/L	5283.5 ppb	05:14:54
1	K 766.490 Radial†	7342.0	7312.6	5028.3 µg/L	5028.3 ppb	05:14:33
1	Mg 279.077 IEC†	550.2	550.8	5364.3 µg/L	5364.3 ppb	05:14:54
1	Na 589.592 Radial†	31323.7	31571.0	10321 µg/L	10321 ppb	05:14:33
1	Sr 421.552†	48997.6	50084.1	492.59 µg/L	492.59 ppb	05:14:33
1	Sc 361.383	2076836.9	2076836.9	98.914 %		05:15:57
1	Y 371.029	1433327.7	1433327.7	98.478 %		05:15:57
1	Ag 328.068†	65704.5	66888.9	502.63 µg/L	502.63 ppb	05:16:03
1	As 188.979†	285.2	288.6	518.58 µg/L	518.58 ppb	05:16:23
1	B 249.677†	12264.9	12074.0	492.00 µg/L	492.00 ppb	05:16:03
1	Ba 233.527†	20332.2	20573.7	505.08 µg/L	505.08 ppb	05:16:03
1	Be 313.107†	827186.2	840024.6	507.13 µg/L	507.13 ppb	05:15:57
1	Cd 226.502†	19698.9	20051.7	504.47 µg/L	504.47 ppb	05:16:03
1	Co 228.616†	10865.7	10982.4	507.94 µg/L	507.94 ppb	05:16:03
1	Cr 267.716†	24672.4	24990.6	509.98 µg/L	509.98 ppb	05:16:03
1	Cu 324.752†	77904.6	75890.0	504.15 µg/L	504.15 ppb	05:16:03
1	Mn 257.610†	158845.8	160891.9	512.63 µg/L	512.63 ppb	05:15:57
1	Mo 202.031†	5164.6	5224.6	523.68 µg/L	523.68 ppb	05:16:23
1	Ni 231.604†	10256.2	10060.1	507.89 µg/L	507.89 ppb	05:16:03
1	P 214.914†	1303.5	1301.6	2539.7 µg/L	2539.7 ppb	05:16:23
1	Pb 220.353†	2162.5	2091.4	514.82 µg/L	514.82 ppb	05:16:23
1	S 181.975 Axial†	270.3	255.9	1060.9 µg/L	1060.9 ppb	05:16:23
1	Sb 206.836†	571.6	555.8	509.75 µg/L	509.75 ppb	05:16:23
1	Se 196.026†	385.1	374.3	521.01 µg/L	521.01 ppb	05:16:23
1	SiO2†	28196.8	27021.9	5411.2 µg/L	5411.2 ppb	05:16:03
1	Si 251.611†	32774.2	32840.4	2534.7 µg/L	2534.7 ppb	05:16:03
1	Sn 189.927†	1220.4	1229.0	525.62 µg/L	525.62 ppb	05:16:23
1	Ti 334.940†	221535.0	223825.0	508.72 µg/L	508.72 ppb	05:15:57
1	Tl 190.801†	360.0	386.2	522.28 µg/L	522.28 ppb	05:16:23
1	U 409.014†	5944.5	6010.5	509.03 µg/L	509.03 ppb	05:16:03
1	V 292.402†	50425.3	51074.8	511.59 µg/L	511.59 ppb	05:16:03
1	Zn 213.857†	21846.8	21584.7	505.81 µg/L	505.81 ppb	05:16:03
2	Sc RADIAL	57887.0	57887.0	98.0 %		05:14:59
2	Al 396.153Radial†	6870.6	7016.6	5235.0 µg/L	5235.0 ppb	05:14:59
2	Ca 317.933Radial†	5706.7	5627.7	5162.1 µg/L	5162.1 ppb	05:15:20
2	Fe 238.204 Radial†	612.9	609.8	5245.3 µg/L	5245.3 ppb	05:15:20
2	K 766.490 Radial†	7424.5	7374.5	5070.8 µg/L	5070.8 ppb	05:14:59
2	Mg 279.077 IEC†	548.2	547.1	5328.0 µg/L	5328.0 ppb	05:15:20
2	Na 589.592 Radial†	31777.8	31939.1	10442 µg/L	10442 ppb	05:14:59
2	Sr 421.552†	49774.8	50728.1	498.92 µg/L	498.92 ppb	05:14:59
2	Sc 361.383	2088394.2	2088394.2	99.465 %		05:16:30
2	Y 371.029	1440290.3	1440290.3	98.956 %		05:16:30
2	Ag 328.068†	66184.1	67003.4	503.50 µg/L	503.50 ppb	05:16:36
2	As 188.979†	281.3	283.1	508.69 µg/L	508.69 ppb	05:16:57
2	B 249.677†	12377.6	12118.7	493.85 µg/L	493.85 ppb	05:16:36
2	Ba 233.527†	20532.5	20661.3	507.23 µg/L	507.23 ppb	05:16:36
2	Be 313.107†	831332.2	839565.0	506.85 µg/L	506.85 ppb	05:16:30
2	Cd 226.502†	19908.3	20152.0	507.00 µg/L	507.00 ppb	05:16:36
2	Co 228.616†	10980.5	11037.1	510.47 µg/L	510.47 ppb	05:16:36
2	Cr 267.716†	24859.8	25041.0	511.00 µg/L	511.00 ppb	05:16:36
2	Cu 324.752†	78479.0	76031.6	505.08 µg/L	505.08 ppb	05:16:36
2	Mn 257.610†	159744.3	160906.5	512.67 µg/L	512.67 ppb	05:16:30
2	Mo 202.031†	5106.6	5137.4	514.95 µg/L	514.95 ppb	05:16:57
2	Ni 231.604†	10327.7	10074.7	508.63 µg/L	508.63 ppb	05:16:36
2	P 214.914†	1292.3	1283.1	2502.7 µg/L	2502.7 ppb	05:16:57
2	Pb 220.353†	2158.6	2075.5	510.87 µg/L	510.87 ppb	05:16:57

2	S 181.975 Axial†	261.0	245.1	1016.2 µg/L	1016.2 ppb	05:16:57
2	Sb 206.836†	569.3	550.2	504.55 µg/L	504.55 ppb	05:16:57
2	Se 196.026†	376.6	363.6	506.26 µg/L	506.26 ppb	05:16:57
2	SiO2†	28510.0	27179.0	5442.6 µg/L	5442.6 ppb	05:16:36
2	Si 251.611†	33140.3	33025.1	2549.0 µg/L	2549.0 ppb	05:16:36
2	Sn 189.927†	1200.6	1202.4	514.22 µg/L	514.22 ppb	05:16:57
2	Ti 334.940†	222690.1	223746.9	508.55 µg/L	508.55 ppb	05:16:30
2	Tl 190.801†	349.7	373.9	505.80 µg/L	505.80 ppb	05:16:57
2	U 409.014†	5927.3	5959.9	504.74 µg/L	504.74 ppb	05:16:36
2	V 292.402†	50860.6	51230.3	513.06 µg/L	513.06 ppb	05:16:36
2	Zn 213.857†	22041.2	21657.9	507.53 µg/L	507.53 ppb	05:16:36
3	Sc RADIAL	57725.8	57725.8	97.8 %		05:15:25
3	Al 396.153Radial†	6858.8	7024.1	5242.3 µg/L	5242.3 ppb	05:15:25
3	Ca 317.933Radial†	5683.1	5619.8	5154.9 µg/L	5154.9 ppb	05:15:45
3	Fe 238.204 Radial†	612.2	610.8	5252.8 µg/L	5252.8 ppb	05:15:45
3	K 766.490 Radial†	7424.5	7395.6	5085.4 µg/L	5085.4 ppb	05:15:25
3	Mg 279.077 IEC†	549.0	549.4	5349.4 µg/L	5349.4 ppb	05:15:45
3	Na 589.592 Radial†	31771.3	32022.9	10469 µg/L	10469 ppb	05:15:25
3	Sr 421.552†	49771.8	50866.8	500.29 µg/L	500.29 ppb	05:15:25
3	Sc 361.383	2093359.2	2093359.2	99.701 %		05:17:04
3	Y 371.029	1444139.0	1444139.0	99.220 %		05:17:04
3	Ag 328.068†	62461.5	63111.8	474.12 µg/L	474.12 ppb	05:17:09
3	As 188.979†	244.7	245.8	441.56 µg/L	441.56 ppb	05:17:30
3	B 249.677†	11651.7	11361.1	462.75 µg/L	462.75 ppb	05:17:09
3	Ba 233.527†	18747.0	18821.5	462.05 µg/L	462.05 ppb	05:17:09
3	Be 313.107†	782254.4	788357.7	475.94 µg/L	475.94 ppb	05:17:04
3	Cd 226.502†	18147.6	18338.6	461.32 µg/L	461.32 ppb	05:17:09
3	Co 228.616†	9942.4	9969.6	461.03 µg/L	461.03 ppb	05:17:09
3	Cr 267.716†	21932.0	22045.1	449.87 µg/L	449.87 ppb	05:17:09
3	Cu 324.752†	71414.0	68758.3	456.84 µg/L	456.84 ppb	05:17:09
3	Mn 257.610†	150548.7	151302.5	482.10 µg/L	482.10 ppb	05:17:04
3	Mo 202.031†	4270.2	4286.3	429.67 µg/L	429.67 ppb	05:17:30
3	Ni 231.604†	9425.7	9145.3	461.72 µg/L	461.72 ppb	05:17:09
3	P 214.914†	1097.9	1084.9	2112.5 µg/L	2112.5 ppb	05:17:30
3	Pb 220.353†	1876.3	1787.1	439.80 µg/L	439.80 ppb	05:17:30
3	S 181.975 Axial†	234.8	218.2	904.52 µg/L	904.52 ppb	05:17:30
3	Sb 206.836†	482.3	461.6	422.95 µg/L	422.95 ppb	05:17:30
3	Se 196.026†	341.4	327.4	456.70 µg/L	456.70 ppb	05:17:30
3	SiO2†	26546.5	25141.7	5034.6 µg/L	5034.6 ppb	05:17:09
3	Si 251.611†	30745.5	30544.1	2357.5 µg/L	2357.5 ppb	05:17:09
3	Sn 189.927†	995.3	993.5	424.91 µg/L	424.91 ppb	05:17:30
3	Ti 334.940†	208641.3	209125.0	475.29 µg/L	475.29 ppb	05:17:04
3	Tl 190.801†	313.7	336.8	456.04 µg/L	456.04 ppb	05:17:30
3	U 409.014†	5413.2	5430.1	459.77 µg/L	459.77 ppb	05:17:09
3	V 292.402†	45717.1	45950.1	459.98 µg/L	459.98 ppb	05:17:09
3	Zn 213.857†	20113.1	19671.5	460.94 µg/L	460.94 ppb	05:17:09

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2086196.8	99.360 %	0.4038			0.41%
Sc RADIAL	57776.0	97.9 %	0.16			0.17%
Y 371.029	1439252.3	98.885 %	0.3765			0.38%
Ag 328.068†	65668.0	493.42 µg/L	16.716	493.42 ppb	16.716	3.39%
QC value within limits for Ag 328.068 Recovery = 98.68%						
Al 396.153Radial†	7010.1	5230.6 µg/L	14.38	5230.6 ppb	14.38	0.27%
QC value within limits for Al 396.153Radial Recovery = 104.61%						
As 188.979†	272.5	489.61 µg/L	41.906	489.61 ppb	41.906	8.56%
QC value within limits for As 188.979 Recovery = 97.92%						
B 249.677†	11851.3	482.87 µg/L	17.444	482.87 ppb	17.444	3.61%
QC value within limits for B 249.677 Recovery = 96.57%						
Ba 233.527†	20018.9	491.46 µg/L	25.486	491.46 ppb	25.486	5.19%
QC value within limits for Ba 233.527 Recovery = 98.29%						
Be 313.107†	822649.1	496.64 µg/L	17.929	496.64 ppb	17.929	3.61%
QC value within limits for Be 313.107 Recovery = 99.33%						
Ca 317.933Radial†	5620.3	5155.3 µg/L	6.59	5155.3 ppb	6.59	0.13%
QC value within limits for Ca 317.933Radial Recovery = 103.11%						
Cd 226.502†	19514.1	490.93 µg/L	25.675	490.93 ppb	25.675	5.23%
QC value within limits for Cd 226.502 Recovery = 98.19%						
Co 228.616†	10663.0	493.15 µg/L	27.841	493.15 ppb	27.841	5.65%

QC value within limits for Co 228.616 Recovery = 98.63%						
Cr 267.716†	24025.5	490.28 µg/L	35.001	490.28 ppb	35.001	7.14%
QC value within limits for Cr 267.716 Recovery = 98.06%						
Cu 324.752†	73560.0	488.69 µg/L	27.589	488.69 ppb	27.589	5.65%
QC value within limits for Cu 324.752 Recovery = 97.74%						
Fe 238.204 Radial†	611.6	5260.5 µg/L	20.24	5260.5 ppb	20.24	0.38%
QC value within limits for Fe 238.204 Radial Recovery = 105.21%						
K 766.490 Radial†	7360.9	5061.5 µg/L	29.67	5061.5 ppb	29.67	0.59%
QC value within limits for K 766.490 Radial Recovery = 101.23%						
Mg 279.077 IEC†	549.1	5347.2 µg/L	18.28	5347.2 ppb	18.28	0.34%
QC value within limits for Mg 279.077 IEC Recovery = 106.94%						
Mn 257.610†	157700.3	502.47 µg/L	17.638	502.47 ppb	17.638	3.51%
QC value within limits for Mn 257.610 Recovery = 100.49%						
Mo 202.031†	4882.8	489.43 µg/L	51.941	489.43 ppb	51.941	10.61%
QC value within limits for Mo 202.031 Recovery = 97.89%						
Na 589.592 Radial†	31844.3	10411 µg/L	78.6	10411 ppb	78.6	0.75%
QC value within limits for Na 589.592 Radial Recovery = 104.11%						
Ni 231.604†	9760.0	492.75 µg/L	26.874	492.75 ppb	26.874	5.45%
QC value within limits for Ni 231.604 Recovery = 98.55%						
P 214.914†	1223.2	2385.0 µg/L	236.67	2385.0 ppb	236.67	9.92%
QC value within limits for P 214.914 Recovery = 95.40%						
Pb 220.353†	1984.7	488.50 µg/L	42.217	488.50 ppb	42.217	8.64%
QC value within limits for Pb 220.353 Recovery = 97.70%						
S 181.975 Axial†	239.8	993.85 µg/L	80.534	993.85 ppb	80.534	8.10%
QC value within limits for S 181.975 Axial Recovery = 99.39%						
Sb 206.836†	522.6	479.08 µg/L	48.679	479.08 ppb	48.679	10.16%
QC value within limits for Sb 206.836 Recovery = 95.82%						
Se 196.026†	355.1	494.66 µg/L	33.689	494.66 ppb	33.689	6.81%
QC value within limits for Se 196.026 Recovery = 98.93%						
SiO2†	26447.5	5296.1 µg/L	227.01	5296.1 ppb	227.01	4.29%
QC value within limits for SiO2 Recovery = 99.04%						
Si 251.611†	32136.6	2480.4 µg/L	106.68	2480.4 ppb	106.68	4.30%
QC value within limits for Si 251.611 Recovery = 99.22%						
Sn 189.927†	1141.7	488.25 µg/L	55.148	488.25 ppb	55.148	11.29%
QC value within limits for Sn 189.927 Recovery = 97.65%						
Sr 421.552†	50559.7	497.27 µg/L	4.107	497.27 ppb	4.107	0.83%
QC value within limits for Sr 421.552 Recovery = 99.45%						
Ti 334.940†	218899.0	497.52 µg/L	19.252	497.52 ppb	19.252	3.87%
QC value within limits for Ti 334.940 Recovery = 99.50%						
Tl 190.801†	365.6	494.71 µg/L	34.488	494.71 ppb	34.488	6.97%
QC value within limits for Tl 190.801 Recovery = 98.94%						
U 409.014†	5800.2	491.18 µg/L	27.281	491.18 ppb	27.281	5.55%
QC value within limits for U 409.014 Recovery = 98.24%						
V 292.402†	49418.4	494.88 µg/L	30.230	494.88 ppb	30.230	6.11%
QC value within limits for V 292.402 Recovery = 98.98%						
Zn 213.857†	20971.4	491.43 µg/L	26.419	491.43 ppb	26.419	5.38%
QC value within limits for Zn 213.857 Recovery = 98.29%						

All analyte(s) passed QC.

Sequence No.: 105

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/21/2010 05:17:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57729.0	57729.0	97.8 %		05:18:14
1	Al 396.153Radial†	4.8	13.6	10.127 µg/L	10.127 ppb	05:18:14
1	Ca 317.933Radial†	198.2	9.8	8.9659 µg/L	8.9659 ppb	05:18:35
1	Fe 238.204 Radial†	16.3	1.2	10.720 µg/L	10.720 ppb	05:18:35
1	K 766.490 Radial†	193.9	-0.0	-0.0248 µg/L	-0.0248 ppb	05:18:14
1	Mg 279.077 IEC†	13.7	1.9	18.342 µg/L	18.342 ppb	05:18:35
1	Na 589.592 Radial†	433.4	-30.4	-9.9415 µg/L	-9.9415 ppb	05:18:14
1	Sr 421.552†	32.4	-8.2	-0.0807 µg/L	-0.0807 ppb	05:18:14
1	Sc 361.383	2098624.4	2098624.4	99.952 %		05:19:36
1	Y 371.029	1452781.0	1452781.0	99.814 %		05:19:36
1	Ag 328.068†	-398.7	64.2	0.4817 µg/L	0.4817 ppb	05:19:42
1	As 188.979†	1.5	1.8	3.1645 µg/L	3.1645 ppb	05:20:02
1	B 249.677†	344.3	19.0	0.7704 µg/L	0.7704 ppb	05:20:02
1	Ba 233.527†	-9.3	9.1	0.2228 µg/L	0.2228 ppb	05:20:02
1	Be 313.107†	-3553.7	203.5	0.1228 µg/L	0.1228 ppb	05:19:42
1	Cd 226.502†	-128.3	8.2	0.2051 µg/L	0.2051 ppb	05:20:02
1	Co 228.616†	3.0	0.4	0.0196 µg/L	0.0196 ppb	05:20:02
1	Cr 267.716†	-38.1	9.3	0.1897 µg/L	0.1897 ppb	05:19:42
1	Cu 324.752†	2877.5	9.2	0.0625 µg/L	0.0625 ppb	05:19:42
1	Mn 257.610†	-199.0	103.4	0.3300 µg/L	0.3300 ppb	05:20:02
1	Mo 202.031†	8.2	11.6	1.1580 µg/L	1.1580 ppb	05:20:02
1	Ni 231.604†	307.5	-1.0	-0.0496 µg/L	-0.0496 ppb	05:20:02
1	P 214.914†	16.3	0.0	0.0498 µg/L	0.0498 ppb	05:20:02
1	Pb 220.353†	92.4	-2.4	-0.5803 µg/L	-0.5803 ppb	05:20:02
1	S 181.975 Axial†	18.8	1.6	6.4668 µg/L	6.4668 ppb	05:20:02
1	Sb 206.836†	27.4	5.3	4.8486 µg/L	4.8486 ppb	05:20:02
1	Se 196.026†	16.5	1.5	2.0251 µg/L	2.0251 ppb	05:20:02
1	SiO2†	1514.9	31.3	6.2619 µg/L	6.2619 ppb	05:19:42
1	Si 251.611†	382.7	89.3	6.8942 µg/L	6.8942 ppb	05:20:02
1	Sn 189.927†	2.1	-2.6	-1.1035 µg/L	-1.1035 ppb	05:20:02
1	Ti 334.940†	291.6	150.1	0.3401 µg/L	0.3401 ppb	05:19:42
1	Tl 190.801†	-23.8	-1.6	-2.1665 µg/L	-2.1665 ppb	05:20:02
1	U 409.014†	-10.2	-9.4	-0.8008 µg/L	-0.8008 ppb	05:19:42
1	V 292.402†	-67.8	28.1	0.2881 µg/L	0.2881 ppb	05:19:42
1	Zn 213.857†	523.3	21.6	0.5089 µg/L	0.5089 ppb	05:20:02
2	Sc RADIAL	57613.8	57613.8	97.6 %		05:18:40
2	Al 396.153Radial†	-13.4	-5.0	-3.7848 µg/L	-3.7848 ppb	05:18:40
2	Ca 317.933Radial†	200.5	12.5	11.509 µg/L	11.509 ppb	05:19:00
2	Fe 238.204 Radial†	16.9	2.0	16.904 µg/L	16.904 ppb	05:19:00
2	K 766.490 Radial†	189.5	-4.2	-2.8923 µg/L	-2.8923 ppb	05:18:40
2	Mg 279.077 IEC†	13.6	1.9	18.162 µg/L	18.162 ppb	05:19:00
2	Na 589.592 Radial†	408.3	-55.3	-18.074 µg/L	-18.074 ppb	05:18:40
2	Sr 421.552†	43.2	2.9	0.0288 µg/L	0.0288 ppb	05:18:40
2	Sc 361.383	2103203.5	2103203.5	100.17 %		05:20:08
2	Y 371.029	1456446.8	1456446.8	100.07 %		05:20:08
2	Ag 328.068†	-420.3	43.5	0.3281 µg/L	0.3281 ppb	05:20:14
2	As 188.979†	-1.9	-1.7	-2.9917 µg/L	-2.9917 ppb	05:20:35
2	B 249.677†	351.1	25.0	1.0133 µg/L	1.0133 ppb	05:20:35
2	Ba 233.527†	-17.0	1.4	0.0358 µg/L	0.0358 ppb	05:20:35
2	Be 313.107†	-3666.0	99.1	0.0597 µg/L	0.0597 ppb	05:20:14
2	Cd 226.502†	-147.2	-10.3	-0.2621 µg/L	-0.2621 ppb	05:20:35
2	Co 228.616†	9.6	7.0	0.3263 µg/L	0.3263 ppb	05:20:35
2	Cr 267.716†	-57.9	-10.4	-0.2123 µg/L	-0.2123 ppb	05:20:14
2	Cu 324.752†	2849.8	-24.7	-0.1616 µg/L	-0.1616 ppb	05:20:14
2	Mn 257.610†	-214.5	88.4	0.2830 µg/L	0.2830 ppb	05:20:35
2	Mo 202.031†	3.2	6.5	0.6538 µg/L	0.6538 ppb	05:20:35
2	Ni 231.604†	312.8	3.6	0.1814 µg/L	0.1814 ppb	05:20:35
2	P 214.914†	11.3	-4.9	-9.8466 µg/L	-9.8466 ppb	05:20:35
2	Pb 220.353†	93.2	-1.7	-0.4174 µg/L	-0.4174 ppb	05:20:35

2	S 181.975 Axial†	13.2	-4.1	-17.020 µg/L	-17.020 ppb	05:20:35
2	Sb 206.836†	31.5	9.3	8.5171 µg/L	8.5171 ppb	05:20:35
2	Se 196.026†	19.3	4.3	5.8638 µg/L	5.8638 ppb	05:20:35
2	SiO2†	1539.7	52.7	10.557 µg/L	10.557 ppb	05:20:14
2	Si 251.611†	389.2	95.0	7.3361 µg/L	7.3361 ppb	05:20:35
2	Sn 189.927†	3.1	-1.6	-0.6955 µg/L	-0.6955 ppb	05:20:35
2	Ti 334.940†	249.8	107.7	0.2438 µg/L	0.2438 ppb	05:20:14
2	Tl 190.801†	-21.9	0.4	0.5007 µg/L	0.5007 ppb	05:20:35
2	U 409.014†	-8.3	-7.5	-0.6403 µg/L	-0.6403 ppb	05:20:14
2	V 292.402†	-56.0	40.1	0.4025 µg/L	0.4025 ppb	05:20:14
2	Zn 213.857†	517.7	14.9	0.3482 µg/L	0.3482 ppb	05:20:35
3	Sc RADIAL	57496.3	57496.3	97.4 %		05:19:06
3	Al 396.153Radial†	-1.1	7.5	5.6113 µg/L	5.6113 ppb	05:19:06
3	Ca 317.933Radial†	199.5	11.9	10.874 µg/L	10.874 ppb	05:19:26
3	Fe 238.204 Radial†	14.8	-0.2	-1.6305 µg/L	-1.6305 ppb	05:19:26
3	K 766.490 Radial†	207.0	14.2	9.7708 µg/L	9.7708 ppb	05:19:06
3	Mg 279.077 IEC†	11.7	-0.1	-0.8004 µg/L	-0.8004 ppb	05:19:26
3	Na 589.592 Radial†	449.3	-12.3	-4.0192 µg/L	-4.0192 ppb	05:19:06
3	Sr 421.552†	64.6	25.0	0.2460 µg/L	0.2460 ppb	05:19:06
3	Sc 361.383	2090561.1	2090561.1	99.568 %		05:20:41
3	Y 371.029	1448573.1	1448573.1	99.525 %		05:20:41
3	Ag 328.068†	-390.4	71.1	0.5319 µg/L	0.5319 ppb	05:20:46
3	As 188.979†	-2.1	-1.8	-3.2999 µg/L	-3.2999 ppb	05:21:07
3	B 249.677†	348.8	24.9	1.0178 µg/L	1.0178 ppb	05:21:07
3	Ba 233.527†	-15.6	2.7	0.0669 µg/L	0.0669 ppb	05:21:07
3	Be 313.107†	-3609.8	133.4	0.0804 µg/L	0.0804 ppb	05:20:46
3	Cd 226.502†	-138.1	-2.1	-0.0526 µg/L	-0.0526 ppb	05:21:07
3	Co 228.616†	-3.3	-5.9	-0.2726 µg/L	-0.2726 ppb	05:21:07
3	Cr 267.716†	-45.8	1.4	0.0290 µg/L	0.0290 ppb	05:20:46
3	Cu 324.752†	2819.1	-38.4	-0.2547 µg/L	-0.2547 ppb	05:20:46
3	Mn 257.610†	-226.9	74.7	0.2375 µg/L	0.2375 ppb	05:21:07
3	Mo 202.031†	4.2	7.5	0.7506 µg/L	0.7506 ppb	05:21:07
3	Ni 231.604†	301.0	-6.3	-0.3190 µg/L	-0.3190 ppb	05:21:07
3	P 214.914†	3.6	-12.7	-25.156 µg/L	-25.156 ppb	05:21:07
3	Pb 220.353†	80.5	-13.9	-3.4169 µg/L	-3.4169 ppb	05:21:07
3	S 181.975 Axial†	16.0	-1.2	-5.0402 µg/L	-5.0402 ppb	05:21:07
3	Sb 206.836†	21.7	-0.3	-0.2963 µg/L	-0.2963 ppb	05:21:07
3	Se 196.026†	21.9	7.0	9.5315 µg/L	9.5315 ppb	05:21:07
3	SiO2†	1537.2	59.4	11.904 µg/L	11.904 ppb	05:20:46
3	Si 251.611†	396.7	104.9	8.0935 µg/L	8.0935 ppb	05:21:07
3	Sn 189.927†	1.8	-2.9	-1.2526 µg/L	-1.2526 ppb	05:21:07
3	Ti 334.940†	324.1	183.8	0.4183 µg/L	0.4183 ppb	05:20:46
3	Tl 190.801†	-24.9	-2.8	-3.7735 µg/L	-3.7735 ppb	05:21:07
3	U 409.014†	-32.7	-32.1	-2.7206 µg/L	-2.7206 ppb	05:20:46
3	V 292.402†	-67.5	28.2	0.2814 µg/L	0.2814 ppb	05:20:46
3	Zn 213.857†	513.7	14.0	0.3318 µg/L	0.3318 ppb	05:21:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2097463.0	99.897 %	0.3048			0.31%
Sc RADIAL	57613.0	97.6 %	0.20			0.20%
Y 371.029	1452600.3	99.802 %	0.2707			0.27%
Ag 328.068†	59.6	0.4472 µg/L	0.10622	0.4472 ppb	0.10622	23.75%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.4	3.9846 µg/L	7.09730	3.9846 ppb	7.09730	178.12%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.6	-1.0424 µg/L	3.64649	-1.0424 ppb	3.64649	349.82%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	22.9	0.9338 µg/L	0.14157	0.9338 ppb	0.14157	15.16%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	4.4	0.1085 µg/L	0.10024	0.1085 ppb	0.10024	92.39%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	145.3	0.0876 µg/L	0.03213	0.0876 ppb	0.03213	36.66%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	11.4	10.450 µg/L	1.3237	10.450 ppb	1.3237	12.67%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-1.4	-0.0365 µg/L	0.23400	-0.0365 ppb	0.23400	640.85%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.5	0.0244 µg/L	0.29947	0.0244 ppb	0.29947	>999.9%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	0.1 0.0021 µg/L	0.20235 0.0021 ppb	0.20235 >999.9%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-18.0 -0.1179 µg/L	0.16308 -0.1179 ppb	0.16308 138.27%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.0 8.6644 µg/L	9.43654 8.6644 ppb	9.43654 108.91%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	3.3 2.2845 µg/L	6.63990 2.2845 ppb	6.63990 290.64%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	1.2 11.901 µg/L	11.0002 11.901 ppb	11.0002 92.43%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	88.8 0.2835 µg/L	0.04626 0.2835 ppb	0.04626 16.32%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	8.5 0.8541 µg/L	0.26755 0.8541 ppb	0.26755 31.32%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-32.7 -10.678 µg/L	7.0565 -10.678 ppb	7.0565 66.08%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-1.2 -0.0624 µg/L	0.25041 -0.0624 ppb	0.25041 401.14%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-5.9 -11.651 µg/L	12.6995 -11.651 ppb	12.6995 109.00%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-6.0 -1.4715 µg/L	1.68673 -1.4715 ppb	1.68673 114.62%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-1.3 -5.1978 µg/L	11.74417 -5.1978 ppb	11.74417 225.95%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	4.8 4.3565 µg/L	4.42725 4.3565 ppb	4.42725 101.63%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	4.2 5.8068 µg/L	3.75354 5.8068 ppb	3.75354 64.64%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	47.8 9.5744 µg/L	2.94659 9.5744 ppb	2.94659 30.78%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	96.4 7.4413 µg/L	0.60650 7.4413 ppb	0.60650 8.15%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-2.4 -1.0172 µg/L	0.28840 -1.0172 ppb	0.28840 28.35%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	6.6 0.0647 µg/L	0.16628 0.0647 ppb	0.16628 257.12%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	147.2 0.3340 µg/L	0.08740 0.3340 ppb	0.08740 26.17%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-1.4 -1.8131 µg/L	2.15888 -1.8131 ppb	2.15888 119.07%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-16.3 -1.3872 µg/L	1.15748 -1.3872 ppb	1.15748 83.44%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	32.1 0.3240 µg/L	0.06804 0.3240 ppb	0.06804 21.00%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	16.8 0.3963 µg/L	0.09787 0.3963 ppb	0.09787 24.70%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 106

Sample ID: 245979004|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 426

Date Collected: 2/21/2010 05:21:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979004|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58448.7	58448.7	99.0	%		05:21:54
1	Al 396.153Radial†	57491.0	58085.0	43424	µg/L	43424 ppb	05:21:54
1	Ca 317.933Radial†	10905.8	10823.9	9928.4	µg/L	9928.4 ppb	05:22:14
1	Fe 238.204 Radial†	11252.7	11351.8	97447	µg/L	97447 ppb	05:22:14
1	K 766.490 Radial†	14064.0	14008.8	9632.7	µg/L	9632.7 ppb	05:21:54
1	Mg 279.077 IEC†	980.3	978.2	9416.2	µg/L	9416.2 ppb	05:22:14
1	Na 589.592 Radial†	1839.8	1384.8	452.73	µg/L	452.73 ppb	05:21:54
1	Sr 421.552†	11929.6	12009.6	118.12	µg/L	118.12 ppb	05:21:54
1	Sc 361.383	2079675.0	2079675.0	99.049	%		05:23:18
1	Y 371.029	1455708.6	1455708.6	100.02	%		05:23:18
1	Ag 328.068†	-1442.4	-993.1	-0.0754	µg/L	-0.0754 ppb	05:23:24
1	As 188.979†	11.9	12.3	27.269	µg/L	27.269 ppb	05:23:44
1	B 249.677†	953.1	636.8	-24.549	µg/L	-24.549 ppb	05:23:24
1	Ba 233.527†	24668.0	24923.0	611.08	µg/L	611.08 ppb	05:23:24
1	Be 313.107†	11963.4	15837.1	8.2306	µg/L	8.2306 ppb	05:23:24
1	Cd 226.502†	258.2	397.3	-0.9354	µg/L	-0.9354 ppb	05:23:44
1	Co 228.616†	1034.9	1042.2	40.953	µg/L	40.953 ppb	05:23:44
1	Cr 267.716†	7510.6	7630.1	155.72	µg/L	155.72 ppb	05:23:24
1	Cu 324.752†	26552.5	23937.6	172.33	µg/L	172.33 ppb	05:23:24
1	Mn 257.610†	699591.3	706607.7	2261.8	µg/L	2261.8 ppb	05:23:18
1	Mo 202.031†	-0.5	2.9	3.9894	µg/L	3.9894 ppb	05:23:44
1	Ni 231.604†	1874.0	1583.4	81.232	µg/L	81.232 ppb	05:23:44
1	P 214.914†	374.1	361.4	635.07	µg/L	635.07 ppb	05:23:44
1	Pb 220.353†	2314.8	2242.2	550.10	µg/L	550.10 ppb	05:23:44
1	S 181.975 Axial†	129.5	113.4	470.10	µg/L	470.10 ppb	05:23:44
1	Sb 206.836†	31.1	9.3	5.8468	µg/L	5.8468 ppb	05:23:44
1	Se 196.026†	-40.6	-56.0	178.46	µg/L	178.46 ppb	05:23:44
1	SiO2†	281043.0	282255.7	56522	µg/L	56522 ppb	05:23:18
1	Si 251.611†	336289.7	339223.5	26182	µg/L	26182 ppb	05:23:18
1	Sn 189.927†	-16.0	-20.9	-18.240	µg/L	-18.240 ppb	05:23:44
1	Ti 334.940†	1524997.7	1539491.1	3500.8	µg/L	3500.8 ppb	05:23:18
1	Tl 190.801†	-58.5	-36.9	6.6890	µg/L	6.6890 ppb	05:23:44
1	U 409.014†	353.8	358.0	16.230	µg/L	16.230 ppb	05:23:24
1	V 292.402†	18017.5	18286.4	192.75	µg/L	192.75 ppb	05:23:24
1	Zn 213.857†	10735.3	10336.4	238.17	µg/L	238.17 ppb	05:23:24
2	Sc RADIAL	58501.7	58501.7	99.1	%		05:22:20
2	Al 396.153Radial†	57519.8	58061.4	43406	µg/L	43406 ppb	05:22:20
2	Ca 317.933Radial†	10913.8	10821.9	9926.5	µg/L	9926.5 ppb	05:22:40
2	Fe 238.204 Radial†	11265.7	11354.7	97472	µg/L	97472 ppb	05:22:40
2	K 766.490 Radial†	14053.2	13985.0	9616.3	µg/L	9616.3 ppb	05:22:20
2	Mg 279.077 IEC†	985.7	982.7	9460.6	µg/L	9460.6 ppb	05:22:40
2	Na 589.592 Radial†	1818.9	1362.0	445.29	µg/L	445.29 ppb	05:22:20
2	Sr 421.552†	11925.4	11994.5	117.97	µg/L	117.97 ppb	05:22:20
2	Sc 361.383	2098288.6	2098288.6	99.936	%		05:23:52
2	Y 371.029	1470133.4	1470133.4	101.01	%		05:23:52
2	Ag 328.068†	-1545.5	-1083.3	-0.7522	µg/L	-0.7522 ppb	05:23:57
2	As 188.979†	6.6	6.9	17.601	µg/L	17.601 ppb	05:24:18
2	B 249.677†	969.2	644.4	-24.251	µg/L	-24.251 ppb	05:23:57
2	Ba 233.527†	24880.0	24914.3	610.86	µg/L	610.86 ppb	05:23:57
2	Be 313.107†	11996.6	15763.1	8.1859	µg/L	8.1859 ppb	05:23:57
2	Cd 226.502†	254.2	391.0	-1.0965	µg/L	-1.0965 ppb	05:24:18
2	Co 228.616†	1030.4	1028.5	40.318	µg/L	40.318 ppb	05:24:18
2	Cr 267.716†	7573.3	7625.6	155.63	µg/L	155.63 ppb	05:23:57
2	Cu 324.752†	26739.0	23886.4	172.00	µg/L	172.00 ppb	05:23:57
2	Mn 257.610†	707033.8	707789.5	2265.6	µg/L	2265.6 ppb	05:23:52
2	Mo 202.031†	2.5	5.9	4.2903	µg/L	4.2903 ppb	05:24:18
2	Ni 231.604†	1869.0	1561.6	80.131	µg/L	80.131 ppb	05:24:18
2	P 214.914†	380.2	364.2	640.66	µg/L	640.66 ppb	05:24:18
2	Pb 220.353†	2308.6	2215.3	543.46	µg/L	543.46 ppb	05:24:18

2	S 181.975 Axial†	124.2	107.0	443.64 µg/L	443.64 ppb	05:24:18
2	Sb 206.836†	30.8	8.7	5.3440 µg/L	5.3440 ppb	05:24:18
2	Se 196.026†	-36.0	-51.1	185.22 µg/L	185.22 ppb	05:24:18
2	SiO2†	283524.6	282221.9	56515 µg/L	56515 ppb	05:23:52
2	Si 251.611†	339370.0	339293.9	26188 µg/L	26188 ppb	05:23:52
2	Sn 189.927†	-19.5	-24.3	-19.702 µg/L	-19.702 ppb	05:24:18
2	Ti 334.940†	1538741.0	1539585.4	3501.0 µg/L	3501.0 ppb	05:23:52
2	Tl 190.801†	-55.7	-33.5	11.249 µg/L	11.249 ppb	05:24:18
2	U 409.014†	378.7	379.7	18.070 µg/L	18.070 ppb	05:23:57
2	V 292.402†	18102.0	18209.6	192.00 µg/L	192.00 ppb	05:23:57
2	Zn 213.857†	10841.3	10346.3	238.41 µg/L	238.41 ppb	05:23:57
3	Sc RADIAL	58674.0	58674.0	99.4 %		05:22:46
3	Al 396.153Radial†	57675.6	58047.7	43396 µg/L	43396 ppb	05:22:46
3	Ca 317.933Radial†	10858.4	10733.8	9845.7 µg/L	9845.7 ppb	05:23:06
3	Fe 238.204 Radial†	11243.3	11298.8	96992 µg/L	96992 ppb	05:23:06
3	K 766.490 Radial†	14193.4	14084.4	9684.7 µg/L	9684.7 ppb	05:22:46
3	Mg 279.077 IEC†	980.3	974.4	9380.0 µg/L	9380.0 ppb	05:23:06
3	Na 589.592 Radial†	1789.9	1327.5	433.99 µg/L	433.99 ppb	05:22:46
3	Sr 421.552†	11997.9	12032.2	118.34 µg/L	118.34 ppb	05:22:46
3	Sc 361.383	2092040.7	2092040.7	99.638 %		05:24:25
3	Y 371.029	1465594.0	1465594.0	100.69 %		05:24:25
3	Ag 328.068†	-1459.7	-1001.9	-0.2193 µg/L	-0.2193 ppb	05:24:30
3	As 188.979†	3.6	3.8	12.037 µg/L	12.037 ppb	05:24:51
3	B 249.677†	943.9	621.9	-24.932 µg/L	-24.932 ppb	05:24:30
3	Ba 233.527†	24015.2	24120.7	591.40 µg/L	591.40 ppb	05:24:30
3	Be 313.107†	11580.8	15381.7	7.9856 µg/L	7.9856 ppb	05:24:30
3	Cd 226.502†	217.1	354.5	-1.9654 µg/L	-1.9654 ppb	05:24:51
3	Co 228.616†	967.0	967.9	37.678 µg/L	37.678 ppb	05:24:51
3	Cr 267.716†	7246.7	7320.4	149.40 µg/L	149.40 ppb	05:24:30
3	Cu 324.752†	25988.5	23213.1	167.47 µg/L	167.47 ppb	05:24:30
3	Mn 257.610†	691184.4	693995.4	2221.6 µg/L	2221.6 ppb	05:24:25
3	Mo 202.031†	5.1	8.5	4.5325 µg/L	4.5325 ppb	05:24:51
3	Ni 231.604†	1767.3	1465.1	75.250 µg/L	75.250 ppb	05:24:51
3	P 214.914†	352.8	337.8	588.98 µg/L	588.98 ppb	05:24:51
3	Pb 220.353†	2220.6	2133.9	523.46 µg/L	523.46 ppb	05:24:51
3	S 181.975 Axial†	119.8	103.0	426.76 µg/L	426.76 ppb	05:24:51
3	Sb 206.836†	32.5	10.5	7.0756 µg/L	7.0756 ppb	05:24:51
3	Se 196.026†	-26.0	-41.1	197.62 µg/L	197.62 ppb	05:24:51
3	SiO2†	278366.1	277892.0	55648 µg/L	55648 ppb	05:24:25
3	Si 251.611†	332964.3	333879.2	25770 µg/L	25770 ppb	05:24:25
3	Sn 189.927†	-19.1	-23.9	-19.489 µg/L	-19.489 ppb	05:24:51
3	Ti 334.940†	1499521.0	1504821.5	3422.0 µg/L	3422.0 ppb	05:24:25
3	Tl 190.801†	-58.0	-35.9	7.0137 µg/L	7.0137 ppb	05:24:51
3	U 409.014†	327.2	329.1	13.847 µg/L	13.847 ppb	05:24:30
3	V 292.402†	17372.7	17531.7	185.22 µg/L	185.22 ppb	05:24:30
3	Zn 213.857†	10472.4	10008.5	230.49 µg/L	230.49 ppb	05:24:30

Mean Data: 245979004|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2090001.4	99.541 %	0.4512			0.45%
Sc RADIAL	58541.5	99.1 %	0.20			0.20%
Y 371.029	1463812.0	100.57 %	0.507			0.50%
Ag 328.068†	-1026.1	-0.3490 µg/L	0.35653	-0.3490 ppb	0.35653	102.16%
Al 396.153Radial†	58064.7	43409 µg/L	14.1	43409 ppb	14.1	0.03%
As 188.979†	7.7	18.969 µg/L	7.7077	18.969 ppb	7.7077	40.63%
B 249.677†	634.3	-24.577 µg/L	0.3415	-24.577 ppb	0.3415	1.39%
Ba 233.527†	24652.7	604.45 µg/L	11.298	604.45 ppb	11.298	1.87%
Be 313.107†	15660.6	8.1341 µg/L	0.13046	8.1341 ppb	0.13046	1.60%
Ca 317.933Radial†	10793.2	9900.2 µg/L	47.18	9900.2 ppb	47.18	0.48%
Cd 226.502†	380.9	-1.3324 µg/L	0.55405	-1.3324 ppb	0.55405	41.58%
Co 228.616†	1012.9	39.649 µg/L	1.7368	39.649 ppb	1.7368	4.38%
Cr 267.716†	7525.3	153.58 µg/L	3.623	153.58 ppb	3.623	2.36%
Cu 324.752†	23679.0	170.60 µg/L	2.720	170.60 ppb	2.720	1.59%
Fe 238.204 Radial†	11335.1	97304 µg/L	270.3	97304 ppb	270.3	0.28%
K 766.490 Radial†	14026.1	9644.6 µg/L	35.71	9644.6 ppb	35.71	0.37%
Mg 279.077 IEC†	978.4	9418.9 µg/L	40.37	9418.9 ppb	40.37	0.43%
Mn 257.610†	702797.5	2249.7 µg/L	24.37	2249.7 ppb	24.37	1.08%
Mo 202.031†	5.7	4.2708 µg/L	0.27209	4.2708 ppb	0.27209	6.37%
Na 589.592 Radial†	1358.1	444.00 µg/L	9.436	444.00 ppb	9.436	2.13%

Ni 231.604†	1536.7	78.871 µg/L	3.1836	78.871 ppb	3.1836	4.04%
P 214.914†	354.5	621.57 µg/L	28.364	621.57 ppb	28.364	4.56%
Pb 220.353†	2197.1	539.01 µg/L	13.866	539.01 ppb	13.866	2.57%
S 181.975 Axial†	107.8	446.83 µg/L	21.846	446.83 ppb	21.846	4.89%
Sb 206.836†	9.5	6.0888 µg/L	0.89083	6.0888 ppb	0.89083	14.63%
Se 196.026†	-49.4	187.10 µg/L	9.720	187.10 ppb	9.720	5.19%
SiO2†	280789.9	56228 µg/L	502.6	56228 ppb	502.6	0.89%
Si 251.611†	337465.5	26047 µg/L	239.7	26047 ppb	239.7	0.92%
Sn 189.927†	-23.0	-19.144 µg/L	0.7899	-19.144 ppb	0.7899	4.13%
Sr 421.552†	12012.1	118.14 µg/L	0.187	118.14 ppb	0.187	0.16%
Ti 334.940†	1527966.0	3474.6 µg/L	45.59	3474.6 ppb	45.59	1.31%
Tl 190.801†	-35.4	8.3171 µg/L	2.54403	8.3171 ppb	2.54403	30.59%
U 409.014†	355.6	16.049 µg/L	2.1171	16.049 ppb	2.1171	13.19%
V 292.402†	18009.2	189.99 µg/L	4.148	189.99 ppb	4.148	2.18%
Zn 213.857†	10230.4	235.69 µg/L	4.504	235.69 ppb	4.504	1.91%

Sequence No.: 107

Sample ID: 245979005|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 427

Date Collected: 2/21/2010 05:25:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979005|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58521.1	58521.1	99.1 %		05:25:33
1	Al 396.153Radial†	59026.7	59562.6	44528 µg/L	44528 ppb	05:25:33
1	Ca 317.933Radial†	10293.6	10192.6	9349.3 µg/L	9349.3 ppb	05:25:54
1	Fe 238.204 Radial†	11598.3	11686.5	100320 µg/L	100320 ppb	05:25:54
1	K 766.490 Radial†	7800.2	7671.4	5275.0 µg/L	5275.0 ppb	05:25:33
1	Mg 279.077 IEC†	726.5	720.9	6908.9 µg/L	6908.9 ppb	05:25:54
1	Na 589.592 Radial†	5272.6	4846.0	1584.3 µg/L	1584.3 ppb	05:25:33
1	Sr 421.552†	8497.3	8531.8	83.912 µg/L	83.912 ppb	05:25:33
1	Sc 361.383	2117520.5	2117520.5	100.85 %		05:26:59
1	Y 371.029	1529663.0	1529663.0	105.10 %		05:26:59
1	Ag 328.068†	-1558.9	-1082.6	-1.4129 µg/L	-1.4129 ppb	05:27:04
1	As 188.979†	15.6	15.7	33.601 µg/L	33.601 ppb	05:27:25
1	B 249.677†	805.6	473.3	-32.846 µg/L	-32.846 ppb	05:27:04
1	Ba 233.527†	20325.8	20172.4	494.43 µg/L	494.43 ppb	05:27:04
1	Be 313.107†	7507.8	11203.2	6.2122 µg/L	6.2122 ppb	05:27:04
1	Cd 226.502†	187.2	322.2	-3.1674 µg/L	-3.1674 ppb	05:27:25
1	Co 228.616†	1585.2	1569.3	69.635 µg/L	69.635 ppb	05:27:25
1	Cr 267.716†	4213.0	4224.8	86.193 µg/L	86.193 ppb	05:27:04
1	Cu 324.752†	10298.1	7341.4	62.643 µg/L	62.643 ppb	05:27:04
1	Mn 257.610†	615918.1	611017.9	1958.0 µg/L	1958.0 ppb	05:26:59
1	Mo 202.031†	55.9	58.7	9.6980 µg/L	9.6980 ppb	05:27:25
1	Ni 231.604†	1530.6	1209.0	62.322 µg/L	62.322 ppb	05:27:25
1	P 214.914†	305.0	286.2	495.50 µg/L	495.50 ppb	05:27:25
1	Pb 220.353†	383.4	285.4	68.872 µg/L	68.872 ppb	05:27:25
1	S 181.975 Axial†	44.0	26.3	109.22 µg/L	109.22 ppb	05:27:25
1	Sb 206.836†	30.1	7.7	5.3621 µg/L	5.3621 ppb	05:27:25
1	Se 196.026†	-35.4	-50.1	196.75 µg/L	196.75 ppb	05:27:25
1	SiO2†	311188.5	307075.4	61492 µg/L	61492 ppb	05:26:59
1	Si 251.611†	372589.1	369148.2	28492 µg/L	28492 ppb	05:26:59
1	Sn 189.927†	30.1	25.1	0.8178 µg/L	0.8178 ppb	05:27:25
1	Ti 334.940†	644821.3	639232.6	1453.5 µg/L	1453.5 ppb	05:26:59
1	Tl 190.801†	-43.5	-20.9	9.3153 µg/L	9.3153 ppb	05:27:25
1	U 409.014†	-930.5	-921.9	-92.751 µg/L	-92.751 ppb	05:26:59
1	V 292.402†	5204.2	5256.3	63.965 µg/L	63.965 ppb	05:27:04
1	Zn 213.857†	12686.0	12076.9	279.51 µg/L	279.51 ppb	05:27:04
2	Sc RADIAL	59021.3	59021.3	100.0 %		05:25:59
2	Al 396.153Radial†	59588.6	59619.9	44571 µg/L	44571 ppb	05:25:59
2	Ca 317.933Radial†	10295.9	10106.8	9270.6 µg/L	9270.6 ppb	05:26:20
2	Fe 238.204 Radial†	11567.6	11556.6	99205 µg/L	99205 ppb	05:26:20
2	K 766.490 Radial†	7872.2	7676.7	5278.7 µg/L	5278.7 ppb	05:25:59
2	Mg 279.077 IEC†	723.2	711.4	6818.1 µg/L	6818.1 ppb	05:26:20
2	Na 589.592 Radial†	5313.8	4842.1	1583.0 µg/L	1583.0 ppb	05:25:59
2	Sr 421.552†	8492.1	8453.9	83.146 µg/L	83.146 ppb	05:25:59
2	Sc 361.383	2091093.0	2091093.0	99.593 %		05:27:32
2	Y 371.029	1510666.5	1510666.5	103.79 %		05:27:32
2	Ag 328.068†	-1537.4	-1080.5	-1.4600 µg/L	-1.4600 ppb	05:27:38
2	As 188.979†	15.0	15.3	32.857 µg/L	32.857 ppb	05:27:58
2	B 249.677†	817.3	495.1	-31.370 µg/L	-31.370 ppb	05:27:38
2	Ba 233.527†	20516.7	20618.8	505.37 µg/L	505.37 ppb	05:27:38
2	Be 313.107†	7583.0	11372.9	6.3169 µg/L	6.3169 ppb	05:27:38
2	Cd 226.502†	182.2	319.6	-3.1072 µg/L	-3.1072 ppb	05:27:58
2	Co 228.616†	1585.4	1589.3	70.576 µg/L	70.576 ppb	05:27:58
2	Cr 267.716†	4250.3	4315.1	88.035 µg/L	88.035 ppb	05:27:38
2	Cu 324.752†	10456.6	7629.6	64.400 µg/L	64.400 ppb	05:27:38
2	Mn 257.610†	605587.3	608363.2	1949.4 µg/L	1949.4 ppb	05:27:32
2	Mo 202.031†	65.6	69.1	10.698 µg/L	10.698 ppb	05:27:58
2	Ni 231.604†	1512.2	1209.8	62.343 µg/L	62.343 ppb	05:27:58
2	P 214.914†	305.7	290.7	505.09 µg/L	505.09 ppb	05:27:58
2	Pb 220.353†	397.3	304.1	73.527 µg/L	73.527 ppb	05:27:58

2	S 181.975 Axial†	41.1	24.0	99.305 µg/L	99.305 ppb	05:27:58
2	Sb 206.836†	29.6	7.6	5.2679 µg/L	5.2679 ppb	05:27:58
2	Se 196.026†	-41.3	-56.4	185.15 µg/L	185.15 ppb	05:27:58
2	SiO2†	306183.1	305949.2	61267 µg/L	61267 ppb	05:27:32
2	Si 251.611†	366188.9	367390.9	28357 µg/L	28357 ppb	05:27:32
2	Sn 189.927†	35.1	30.5	3.2310 µg/L	3.2310 ppb	05:27:58
2	Ti 334.940†	634160.6	636608.9	1447.5 µg/L	1447.5 ppb	05:27:32
2	Tl 190.801†	-49.6	-27.5	0.1928 µg/L	0.1928 ppb	05:27:58
2	U 409.014†	-943.8	-946.9	-94.707 µg/L	-94.707 ppb	05:27:32
2	V 292.402†	5256.3	5373.8	65.007 µg/L	65.007 ppb	05:27:38
2	Zn 213.857†	12769.8	12320.0	285.31 µg/L	285.31 ppb	05:27:38
3	Sc RADIAL	58800.1	58800.1	99.6 %		05:26:25
3	Al 396.153Radial†	59289.4	59543.6	44514 µg/L	44514 ppb	05:26:25
3	Ca 317.933Radial†	10294.5	10144.2	9304.9 µg/L	9304.9 ppb	05:26:46
3	Fe 238.204 Radial†	11567.1	11599.7	99575 µg/L	99575 ppb	05:26:46
3	K 766.490 Radial†	7887.7	7722.0	5309.7 µg/L	5309.7 ppb	05:26:25
3	Mg 279.077 IEC†	725.4	716.3	6865.2 µg/L	6865.2 ppb	05:26:46
3	Na 589.592 Radial†	5313.8	4862.1	1589.5 µg/L	1589.5 ppb	05:26:25
3	Sr 421.552†	8503.0	8496.8	83.568 µg/L	83.568 ppb	05:26:25
3	Sc 361.383	2097742.9	2097742.9	99.910 %		05:28:06
3	Y 371.029	1515441.1	1515441.1	104.12 %		05:28:06
3	Ag 328.068†	-1432.5	-970.7	-0.6346 µg/L	-0.6346 ppb	05:28:12
3	As 188.979†	7.1	7.4	18.511 µg/L	18.511 ppb	05:28:32
3	B 249.677†	816.5	491.8	-31.705 µg/L	-31.705 ppb	05:28:12
3	Ba 233.527†	19735.7	19771.9	484.61 µg/L	484.61 ppb	05:28:12
3	Be 313.107†	7114.3	10879.6	6.0319 µg/L	6.0319 ppb	05:28:12
3	Cd 226.502†	154.6	291.4	-3.8624 µg/L	-3.8624 ppb	05:28:32
3	Co 228.616†	1463.6	1462.3	64.766 µg/L	64.766 ppb	05:28:32
3	Cr 267.716†	4049.8	4100.8	83.663 µg/L	83.663 ppb	05:28:12
3	Cu 324.752†	10194.5	7333.9	62.490 µg/L	62.490 ppb	05:28:12
3	Mn 257.610†	594930.7	595769.3	1909.4 µg/L	1909.4 ppb	05:28:06
3	Mo 202.031†	59.6	63.0	10.096 µg/L	10.096 ppb	05:28:32
3	Ni 231.604†	1452.4	1145.1	59.087 µg/L	59.087 ppb	05:28:32
3	P 214.914†	273.9	257.9	439.80 µg/L	439.80 ppb	05:28:32
3	Pb 220.353†	378.2	283.8	68.500 µg/L	68.500 ppb	05:28:32
3	S 181.975 Axial†	41.3	24.0	99.479 µg/L	99.479 ppb	05:28:32
3	Sb 206.836†	30.2	8.2	5.7968 µg/L	5.7968 ppb	05:28:32
3	Se 196.026†	-31.0	-46.0	200.40 µg/L	200.40 ppb	05:28:32
3	SiO2†	303234.6	302023.5	60480 µg/L	60480 ppb	05:28:06
3	Si 251.611†	362819.8	362853.2	28006 µg/L	28006 ppb	05:28:06
3	Sn 189.927†	32.3	27.7	1.9804 µg/L	1.9804 ppb	05:28:32
3	Ti 334.940†	621349.1	621767.3	1413.7 µg/L	1413.7 ppb	05:28:06
3	Tl 190.801†	-43.3	-21.1	8.3925 µg/L	8.3925 ppb	05:28:32
3	U 409.014†	-922.0	-922.0	-92.656 µg/L	-92.656 ppb	05:28:06
3	V 292.402†	5004.4	5104.9	62.378 µg/L	62.378 ppb	05:28:12
3	Zn 213.857†	12336.6	11845.8	274.11 µg/L	274.11 ppb	05:28:12

Mean Data: 245979005|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2102118.8	100.12 %	0.655			0.65%
Sc RADIAL	58780.8	99.6 %	0.42			0.43%
Y 371.029	1518590.2	104.34 %	0.679			0.65%
Ag 328.068†	-1044.6	-1.1692 µg/L	0.46354	-1.1692 ppb	0.46354	39.65%
Al 396.153Radial†	59575.4	44538 µg/L	29.7	44538 ppb	29.7	0.07%
As 188.979†	12.8	28.323 µg/L	8.5055	28.323 ppb	8.5055	30.03%
B 249.677†	486.7	-31.973 µg/L	0.7738	-31.973 ppb	0.7738	2.42%
Ba 233.527†	20187.7	494.80 µg/L	10.385	494.80 ppb	10.385	2.10%
Be 313.107†	11151.9	6.1870 µg/L	0.14418	6.1870 ppb	0.14418	2.33%
Ca 317.933Radial†	10147.9	9308.3 µg/L	39.42	9308.3 ppb	39.42	0.42%
Cd 226.502†	311.1	-3.3790 µg/L	0.41971	-3.3790 ppb	0.41971	12.42%
Co 228.616†	1540.3	68.326 µg/L	3.1188	68.326 ppb	3.1188	4.56%
Cr 267.716†	4213.6	85.964 µg/L	2.1949	85.964 ppb	2.1949	2.55%
Cu 324.752†	7434.9	63.178 µg/L	1.0612	63.178 ppb	1.0612	1.68%
Fe 238.204 Radial†	11614.2	99700 µg/L	567.8	99700 ppb	567.8	0.57%
K 766.490 Radial†	7690.0	5287.8 µg/L	19.09	5287.8 ppb	19.09	0.36%
Mg 279.077 IEC†	716.2	6864.1 µg/L	45.42	6864.1 ppb	45.42	0.66%
Mn 257.610†	605050.1	1938.9 µg/L	25.96	1938.9 ppb	25.96	1.34%
Mo 202.031†	63.6	10.164 µg/L	0.5032	10.164 ppb	0.5032	4.95%
Na 589.592 Radial†	4850.0	1585.6 µg/L	3.46	1585.6 ppb	3.46	0.22%

Ni 231.604†	1188.0	61.250 µg/L	1.8738	61.250 ppb	1.8738	3.06%
P 214.914†	278.3	480.13 µg/L	35.255	480.13 ppb	35.255	7.34%
Pb 220.353†	291.1	70.300 µg/L	2.8013	70.300 ppb	2.8013	3.98%
S 181.975 Axial†	24.8	102.67 µg/L	5.674	102.67 ppb	5.674	5.53%
Sb 206.836†	7.8	5.4756 µg/L	0.28210	5.4756 ppb	0.28210	5.15%
Se 196.026†	-50.8	194.10 µg/L	7.965	194.10 ppb	7.965	4.10%
SiO2†	305016.0	61080 µg/L	531.1	61080 ppb	531.1	0.87%
Si 251.611†	366464.1	28285 µg/L	250.7	28285 ppb	250.7	0.89%
Sn 189.927†	27.8	2.0097 µg/L	1.20689	2.0097 ppb	1.20689	60.05%
Sr 421.552†	8494.2	83.542 µg/L	0.3838	83.542 ppb	0.3838	0.46%
Ti 334.940†	632536.3	1438.2 µg/L	21.42	1438.2 ppb	21.42	1.49%
Tl 190.801†	-23.2	5.9668 µg/L	5.02172	5.9668 ppb	5.02172	84.16%
U 409.014†	-930.3	-93.371 µg/L	1.1581	-93.371 ppb	1.1581	1.24%
V 292.402†	5245.0	63.783 µg/L	1.3238	63.783 ppb	1.3238	2.08%
Zn 213.857†	12080.9	279.64 µg/L	5.598	279.64 ppb	5.598	2.00%

Sequence No.: 108

Sample ID: 245979007|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 428

Date Collected: 2/21/2010 05:28:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979007|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58529.3	58529.3	99.1 %		05:29:14
1	Al 396.153Radial†	46500.4	46917.8	35075 µg/L	35075 ppb	05:29:14
1	Ca 317.933Radial†	9193.7	9081.6	8330.2 µg/L	8330.2 ppb	05:29:34
1	Fe 238.204 Radial†	9465.9	9533.7	81840 µg/L	81840 ppb	05:29:34
1	K 766.490 Radial†	7097.4	6961.4	4786.7 µg/L	4786.7 ppb	05:29:14
1	Mg 279.077 IEC†	654.5	648.1	6220.8 µg/L	6220.8 ppb	05:29:34
1	Na 589.592 Radial†	4461.8	4027.3	1316.6 µg/L	1316.6 ppb	05:29:14
1	Sr 421.552†	6806.8	6825.2	67.128 µg/L	67.128 ppb	05:29:14
1	Sc 361.383	2110487.7	2110487.7	100.52 %		05:30:38
1	Y 371.029	1534171.0	1534171.0	105.41 %		05:30:38
1	Ag 328.068†	-1401.9	-931.5	-1.4130 µg/L	-1.4130 ppb	05:30:44
1	As 188.979†	16.8	17.0	34.924 µg/L	34.924 ppb	05:31:05
1	B 249.677†	700.6	371.5	-27.257 µg/L	-27.257 ppb	05:30:44
1	Ba 233.527†	11804.8	11762.5	288.35 µg/L	288.35 ppb	05:30:44
1	Be 313.107†	6133.2	9860.5	5.4434 µg/L	5.4434 ppb	05:30:44
1	Cd 226.502†	144.3	280.1	-2.1111 µg/L	-2.1111 ppb	05:31:05
1	Co 228.616†	826.4	819.5	35.148 µg/L	35.148 ppb	05:31:05
1	Cr 267.716†	7575.3	7583.7	154.70 µg/L	154.70 ppb	05:30:44
1	Cu 324.752†	5008.1	2112.6	25.390 µg/L	25.390 ppb	05:30:44
1	Mn 257.610†	726517.0	723083.0	2312.3 µg/L	2312.3 ppb	05:30:38
1	Mo 202.031†	30.2	33.4	6.4566 µg/L	6.4566 ppb	05:31:05
1	Ni 231.604†	2056.7	1737.4	88.828 µg/L	88.828 ppb	05:31:05
1	P 214.914†	221.6	204.3	348.31 µg/L	348.31 ppb	05:31:05
1	Pb 220.353†	268.7	172.6	41.452 µg/L	41.452 ppb	05:31:05
1	S 181.975 Axial†	41.2	23.6	98.030 µg/L	98.030 ppb	05:31:05
1	Sb 206.836†	27.7	5.4	2.5310 µg/L	2.5310 ppb	05:31:05
1	Se 196.026†	-29.9	-44.7	154.48 µg/L	154.48 ppb	05:31:05
1	SiO2†	278711.5	275793.6	55228 µg/L	55228 ppb	05:30:38
1	Si 251.611†	333365.1	331357.0	25575 µg/L	25575 ppb	05:30:38
1	Sn 189.927†	1.1	-3.6	-9.5579 µg/L	-9.5579 ppb	05:31:05
1	Ti 334.940†	593820.9	590625.1	1342.9 µg/L	1342.9 ppb	05:30:38
1	Tl 190.801†	-42.4	-19.9	7.8011 µg/L	7.8011 ppb	05:31:05
1	U 409.014†	-2086.9	-2075.4	-188.01 µg/L	-188.01 ppb	05:30:38
1	V 292.402†	5758.5	5824.8	67.451 µg/L	67.451 ppb	05:30:44
1	Zn 213.857†	7953.0	7410.2	170.23 µg/L	170.23 ppb	05:30:44
2	Sc RADIAL	58889.2	58889.2	99.7 %		05:29:40
2	Al 396.153Radial†	46715.4	46846.6	35022 µg/L	35022 ppb	05:29:40
2	Ca 317.933Radial†	9204.7	9035.9	8288.3 µg/L	8288.3 ppb	05:30:00
2	Fe 238.204 Radial†	9480.2	9489.7	81462 µg/L	81462 ppb	05:30:00
2	K 766.490 Radial†	7130.2	6950.5	4779.3 µg/L	4779.3 ppb	05:29:40
2	Mg 279.077 IEC†	648.8	638.4	6126.1 µg/L	6126.1 ppb	05:30:00
2	Na 589.592 Radial†	4442.5	3980.4	1301.3 µg/L	1301.3 ppb	05:29:40
2	Sr 421.552†	6843.3	6819.9	67.075 µg/L	67.075 ppb	05:29:40
2	Sc 361.383	2108212.2	2108212.2	100.41 %		05:31:13
2	Y 371.029	1533069.7	1533069.7	105.33 %		05:31:13
2	Ag 328.068†	-1451.6	-982.6	-1.8113 µg/L	-1.8113 ppb	05:31:18
2	As 188.979†	19.0	19.3	38.943 µg/L	38.943 ppb	05:31:39
2	B 249.677†	730.2	401.8	-25.820 µg/L	-25.820 ppb	05:31:18
2	Ba 233.527†	11890.0	11860.0	290.74 µg/L	290.74 ppb	05:31:18
2	Be 313.107†	6122.2	9856.1	5.4414 µg/L	5.4414 ppb	05:31:18
2	Cd 226.502†	135.5	271.6	-2.2838 µg/L	-2.2838 ppb	05:31:39
2	Co 228.616†	816.1	810.2	34.719 µg/L	34.719 ppb	05:31:39
2	Cr 267.716†	7651.9	7668.2	156.42 µg/L	156.42 ppb	05:31:18
2	Cu 324.752†	5077.6	2187.2	25.832 µg/L	25.832 ppb	05:31:18
2	Mn 257.610†	724261.0	721616.3	2307.6 µg/L	2307.6 ppb	05:31:13
2	Mo 202.031†	25.7	29.0	5.9971 µg/L	5.9971 ppb	05:31:39
2	Ni 231.604†	2061.8	1744.7	89.192 µg/L	89.192 ppb	05:31:39
2	P 214.914†	236.1	218.9	377.69 µg/L	377.69 ppb	05:31:39
2	Pb 220.353†	271.0	175.1	42.092 µg/L	42.092 ppb	05:31:39

2	S 181.975 Axial†	41.8	24.3	100.79 µg/L	100.79 ppb	05:31:39
2	Sb 206.836†	22.3	0.1	-2.3831 µg/L	-2.3831 ppb	05:31:39
2	Se 196.026†	-38.6	-53.4	141.66 µg/L	141.66 ppb	05:31:39
2	SiO2†	277836.6	275221.6	55113 µg/L	55113 ppb	05:31:13
2	Si 251.611†	332665.4	331018.2	25549 µg/L	25549 ppb	05:31:13
2	Sn 189.927†	4.0	-0.7	-8.3142 µg/L	-8.3142 ppb	05:31:39
2	Ti 334.940†	592338.3	589786.2	1341.0 µg/L	1341.0 ppb	05:31:13
2	Tl 190.801†	-40.9	-18.5	9.5857 µg/L	9.5857 ppb	05:31:39
2	U 409.014†	-2137.7	-2128.3	-192.44 µg/L	-192.44 ppb	05:31:13
2	V 292.402†	5845.9	5918.2	68.326 µg/L	68.326 ppb	05:31:18
2	Zn 213.857†	8018.0	7483.4	171.98 µg/L	171.98 ppb	05:31:18
3	Sc RADIAL	58486.1	58486.1	99.1 %		05:30:06
3	Al 396.153Radial†	46732.8	47187.0	35277 µg/L	35277 ppb	05:30:06
3	Ca 317.933Radial†	9179.8	9074.4	8323.6 µg/L	8323.6 ppb	05:30:26
3	Fe 238.204 Radial†	9485.0	9560.0	82066 µg/L	82066 ppb	05:30:26
3	K 766.490 Radial†	7070.0	6939.0	4771.4 µg/L	4771.4 ppb	05:30:06
3	Mg 279.077 IEC†	652.7	646.9	6208.1 µg/L	6208.1 ppb	05:30:26
3	Na 589.592 Radial†	4454.1	4022.8	1315.2 µg/L	1315.2 ppb	05:30:06
3	Sr 421.552†	6859.9	6883.9	67.705 µg/L	67.705 ppb	05:30:06
3	Sc 361.383	2084380.0	2084380.0	99.274 %		05:31:46
3	Y 371.029	1513434.6	1513434.6	103.98 %		05:31:46
3	Ag 328.068†	-1351.7	-898.5	-1.1626 µg/L	-1.1626 ppb	05:31:52
3	As 188.979†	14.0	14.4	30.173 µg/L	30.173 ppb	05:32:12
3	B 249.677†	676.8	356.3	-28.010 µg/L	-28.010 ppb	05:31:52
3	Ba 233.527†	11277.5	11378.4	278.93 µg/L	278.93 ppb	05:31:52
3	Be 313.107†	5608.2	9408.1	5.1868 µg/L	5.1868 ppb	05:31:52
3	Cd 226.502†	113.6	251.0	-2.8765 µg/L	-2.8765 ppb	05:32:12
3	Co 228.616†	751.1	754.1	32.207 µg/L	32.207 ppb	05:32:12
3	Cr 267.716†	7157.2	7257.0	148.03 µg/L	148.03 ppb	05:31:52
3	Cu 324.752†	4932.9	2099.3	25.333 µg/L	25.333 ppb	05:31:52
3	Mn 257.610†	696152.8	701549.7	2243.8 µg/L	2243.8 ppb	05:31:46
3	Mo 202.031†	24.6	28.1	5.9321 µg/L	5.9321 ppb	05:32:12
3	Ni 231.604†	1882.9	1588.1	81.285 µg/L	81.285 ppb	05:32:12
3	P 214.914†	209.1	194.4	328.61 µg/L	328.61 ppb	05:32:12
3	Pb 220.353†	253.6	160.7	38.530 µg/L	38.530 ppb	05:32:12
3	S 181.975 Axial†	31.4	14.3	59.459 µg/L	59.459 ppb	05:32:12
3	Sb 206.836†	28.5	6.6	3.7075 µg/L	3.7075 ppb	05:32:12
3	Se 196.026†	-19.2	-34.3	169.43 µg/L	169.43 ppb	05:32:12
3	SiO2†	269223.7	269709.4	54010 µg/L	54010 ppb	05:31:46
3	Si 251.611†	322168.4	324232.4	25025 µg/L	25025 ppb	05:31:46
3	Sn 189.927†	5.5	0.9	-7.6875 µg/L	-7.6875 ppb	05:32:12
3	Ti 334.940†	567385.4	571395.8	1299.2 µg/L	1299.2 ppb	05:31:46
3	Tl 190.801†	-38.3	-16.3	12.034 µg/L	12.034 ppb	05:32:12
3	U 409.014†	-2009.2	-2023.2	-183.61 µg/L	-183.61 ppb	05:31:46
3	V 292.402†	5526.5	5662.9	65.861 µg/L	65.861 ppb	05:31:52
3	Zn 213.857†	7678.2	7232.4	166.06 µg/L	166.06 ppb	05:31:52

Mean Data: 245979007|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2101026.6	100.07 %	0.689			0.69%
Sc RADIAL	58634.9	99.3 %	0.37			0.38%
Y 371.029	1526891.8	104.91 %	0.802			0.76%
Ag 328.068†	-937.5	-1.4623 µg/L	0.32717	-1.4623 ppb	0.32717	22.37%
Al 396.153Radial†	46983.8	35125 µg/L	134.2	35125 ppb	134.2	0.38%
As 188.979†	16.9	34.680 µg/L	4.3902	34.680 ppb	4.3902	12.66%
B 249.677†	376.5	-27.029 µg/L	1.1127	-27.029 ppb	1.1127	4.12%
Ba 233.527†	11666.9	286.01 µg/L	6.242	286.01 ppb	6.242	2.18%
Be 313.107†	9708.2	5.3572 µg/L	0.14759	5.3572 ppb	0.14759	2.75%
Ca 317.933Radial†	9063.9	8314.0 µg/L	22.54	8314.0 ppb	22.54	0.27%
Cd 226.502†	267.6	-2.4238 µg/L	0.40143	-2.4238 ppb	0.40143	16.56%
Co 228.616†	794.6	34.025 µg/L	1.5886	34.025 ppb	1.5886	4.67%
Cr 267.716†	7502.9	153.05 µg/L	4.430	153.05 ppb	4.430	2.89%
Cu 324.752†	2133.0	25.518 µg/L	0.2734	25.518 ppb	0.2734	1.07%
Fe 238.204 Radial†	9527.8	81789 µg/L	305.2	81789 ppb	305.2	0.37%
K 766.490 Radial†	6950.3	4779.2 µg/L	7.67	4779.2 ppb	7.67	0.16%
Mg 279.077 IEC†	644.5	6185.0 µg/L	51.44	6185.0 ppb	51.44	0.83%
Mn 257.610†	715416.4	2287.9 µg/L	38.27	2287.9 ppb	38.27	1.67%
Mo 202.031†	30.1	6.1286 µg/L	0.28594	6.1286 ppb	0.28594	4.67%
Na 589.592 Radial†	4010.2	1311.0 µg/L	8.46	1311.0 ppb	8.46	0.65%

Ni 231.604†	1690.1	86.435 µg/L	4.4635	86.435 ppb	4.4635	5.16%
P 214.914†	205.9	351.54 µg/L	24.701	351.54 ppb	24.701	7.03%
Pb 220.353†	169.5	40.691 µg/L	1.8990	40.691 ppb	1.8990	4.67%
S 181.975 Axial†	20.8	86.093 µg/L	23.1073	86.093 ppb	23.1073	26.84%
Sb 206.836†	4.0	1.2851 µg/L	3.23080	1.2851 ppb	3.23080	251.40%
Se 196.026†	-44.2	155.19 µg/L	13.900	155.19 ppb	13.900	8.96%
SiO2†	273574.9	54784 µg/L	672.8	54784 ppb	672.8	1.23%
Si 251.611†	328869.2	25383 µg/L	310.2	25383 ppb	310.2	1.22%
Sn 189.927†	-1.1	-8.5199 µg/L	0.95200	-8.5199 ppb	0.95200	11.17%
Sr 421.552†	6843.0	67.303 µg/L	0.3494	67.303 ppb	0.3494	0.52%
Ti 334.940†	583935.7	1327.7 µg/L	24.72	1327.7 ppb	24.72	1.86%
Tl 190.801†	-18.3	9.8071 µg/L	2.12537	9.8071 ppb	2.12537	21.67%
U 409.014†	-2075.6	-188.02 µg/L	4.417	-188.02 ppb	4.417	2.35%
V 292.402†	5802.0	67.212 µg/L	1.2495	67.212 ppb	1.2495	1.86%
Zn 213.857†	7375.3	169.42 µg/L	3.042	169.42 ppb	3.042	1.80%

Sequence No.: 109

Sample ID: 245979014|948764|1

Analyst: JWW

Initial Sample Wt:

Dilution:

Autosampler Location: 429

Date Collected: 2/21/2010 05:32:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979014|948764|1

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58282.9	58282.9	98.7 %		05:32:54
1	Al 396.153Radial†	65605.9	66470.9	49693 µg/L	49693 ppb	05:32:54
1	Ca 317.933Radial†	12907.1	12882.6	11817 µg/L	11817 ppb	05:33:14
1	Fe 238.204 Radial†	11357.5	11490.3	98636 µg/L	98636 ppb	05:33:14
1	K 766.490 Radial†	12300.0	12262.2	8431.7 µg/L	8431.7 ppb	05:32:54
1	Mg 279.077 IEC†	1024.3	1025.6	9876.9 µg/L	9876.9 ppb	05:33:14
1	Na 589.592 Radial†	1931.4	1482.9	484.79 µg/L	484.79 ppb	05:32:54
1	Sr 421.552†	12181.0	12298.7	120.96 µg/L	120.96 ppb	05:32:54
1	Sc 361.383	2104175.5	2104175.5	100.22 %		05:34:19
1	Y 371.029	1473358.4	1473358.4	101.23 %		05:34:19
1	Ag 328.068†	-1516.4	-1050.1	-0.4155 µg/L	-0.4155 ppb	05:34:24
1	As 188.979†	13.5	13.7	29.845 µg/L	29.845 ppb	05:34:45
1	B 249.677†	881.4	554.0	-28.595 µg/L	-28.595 ppb	05:34:24
1	Ba 233.527†	23503.0	23470.6	575.49 µg/L	575.49 ppb	05:34:24
1	Be 313.107†	10926.8	14662.1	7.6877 µg/L	7.6877 ppb	05:34:24
1	Cd 226.502†	215.2	351.3	-2.2327 µg/L	-2.2327 ppb	05:34:45
1	Co 228.616†	997.2	992.4	39.561 µg/L	39.561 ppb	05:34:45
1	Cr 267.716†	6331.6	6365.3	129.93 µg/L	129.93 ppb	05:34:24
1	Cu 324.752†	23357.5	20437.4	149.28 µg/L	149.28 ppb	05:34:24
1	Mn 257.610†	704648.1	703429.5	2251.8 µg/L	2251.8 ppb	05:34:19
1	Mo 202.031†	8.9	12.2	4.9684 µg/L	4.9684 ppb	05:34:45
1	Ni 231.604†	1756.7	1444.2	74.218 µg/L	74.218 ppb	05:34:45
1	P 214.914†	275.9	259.0	435.01 µg/L	435.01 ppb	05:34:45
1	Pb 220.353†	5562.3	5455.5	1341.1 µg/L	1341.1 ppb	05:34:24
1	S 181.975 Axial†	87.5	70.0	290.14 µg/L	290.14 ppb	05:34:45
1	Sb 206.836†	30.4	8.2	5.0133 µg/L	5.0133 ppb	05:34:45
1	Se 196.026†	-38.4	-53.3	184.42 µg/L	184.42 ppb	05:34:45
1	SiO2†	298734.9	296605.6	59396 µg/L	59396 ppb	05:34:19
1	Si 251.611†	357598.5	356533.1	27518 µg/L	27518 ppb	05:34:19
1	Sn 189.927†	13.4	8.7	-5.6836 µg/L	-5.6836 ppb	05:34:45
1	Ti 334.940†	1350120.6	1347064.4	3063.2 µg/L	3063.2 ppb	05:34:19
1	Tl 190.801†	-53.7	-31.4	10.611 µg/L	10.611 ppb	05:34:45
1	U 409.014†	-279.9	-278.5	-38.065 µg/L	-38.065 ppb	05:34:24
1	V 292.402†	18383.1	18439.4	194.30 µg/L	194.30 ppb	05:34:24
1	Zn 213.857†	9455.1	8932.7	205.03 µg/L	205.03 ppb	05:34:24
2	Sc RADIAL	58421.4	58421.4	98.9 %		05:33:20
2	Al 396.153Radial†	65762.0	66471.2	49693 µg/L	49693 ppb	05:33:20
2	Ca 317.933Radial†	12967.4	12912.6	11844 µg/L	11844 ppb	05:33:40
2	Fe 238.204 Radial†	11381.0	11486.9	98606 µg/L	98606 ppb	05:33:40
2	K 766.490 Radial†	12353.4	12286.6	8448.5 µg/L	8448.5 ppb	05:33:20
2	Mg 279.077 IEC†	1030.3	1029.2	9911.9 µg/L	9911.9 ppb	05:33:40
2	Na 589.592 Radial†	1902.5	1449.1	473.74 µg/L	473.74 ppb	05:33:20
2	Sr 421.552†	12232.4	12321.3	121.18 µg/L	121.18 ppb	05:33:20
2	Sc 361.383	2110774.5	2110774.5	100.53 %		05:34:52
2	Y 371.029	1478057.6	1478057.6	101.55 %		05:34:52
2	Ag 328.068†	-1492.6	-1021.6	-0.2086 µg/L	-0.2086 ppb	05:34:58
2	As 188.979†	8.4	8.6	20.590 µg/L	20.590 ppb	05:35:19
2	B 249.677†	879.7	549.6	-28.762 µg/L	-28.762 ppb	05:34:58
2	Ba 233.527†	23420.8	23315.5	571.69 µg/L	571.69 ppb	05:34:58
2	Be 313.107†	10758.4	14460.5	7.5689 µg/L	7.5689 ppb	05:34:58
2	Cd 226.502†	221.6	357.1	-2.0866 µg/L	-2.0866 ppb	05:35:19
2	Co 228.616†	998.8	990.9	39.508 µg/L	39.508 ppb	05:35:19
2	Cr 267.716†	6289.8	6304.0	128.68 µg/L	128.68 ppb	05:34:58
2	Cu 324.752†	23299.6	20306.9	148.41 µg/L	148.41 ppb	05:34:58
2	Mn 257.610†	704226.7	700812.1	2243.5 µg/L	2243.5 ppb	05:34:52
2	Mo 202.031†	2.9	6.2	4.3705 µg/L	4.3705 ppb	05:35:19
2	Ni 231.604†	1727.1	1409.4	72.456 µg/L	72.456 ppb	05:35:19
2	P 214.914†	284.7	267.0	450.83 µg/L	450.83 ppb	05:35:19
2	Pb 220.353†	5536.4	5412.4	1330.5 µg/L	1330.5 ppb	05:34:58

2	S 181.975 Axial†	82.3	64.5	267.56 µg/L	267.56 ppb	05:35:19
2	Sb 206.836†	45.4	23.0	18.540 µg/L	18.540 ppb	05:35:19
2	Se 196.026†	-40.9	-55.7	181.00 µg/L	181.00 ppb	05:35:19
2	SiO2†	298993.5	295930.9	59260 µg/L	59260 ppb	05:34:52
2	Si 251.611†	357895.3	355712.7	27455 µg/L	27455 ppb	05:34:52
2	Sn 189.927†	10.8	6.0	-6.8195 µg/L	-6.8195 ppb	05:35:19
2	Ti 334.940†	1350954.6	1343682.2	3055.5 µg/L	3055.5 ppb	05:34:52
2	Tl 190.801†	-53.2	-30.7	11.399 µg/L	11.399 ppb	05:35:19
2	U 409.014†	-353.4	-350.8	-44.196 µg/L	-44.196 ppb	05:34:58
2	V 292.402†	18384.3	18383.3	193.72 µg/L	193.72 ppb	05:34:58
2	Zn 213.857†	9420.2	8868.6	203.52 µg/L	203.52 ppb	05:34:58
3	Sc RADIAL	58734.9	58734.9	99.5 %		05:33:46
3	Al 396.153Radial†	66103.6	66459.8	49685 µg/L	49685 ppb	05:33:46
3	Ca 317.933Radial†	12920.9	12795.9	11737 µg/L	11737 ppb	05:34:06
3	Fe 238.204 Radial†	11360.1	11404.4	97899 µg/L	97899 ppb	05:34:06
3	K 766.490 Radial†	12361.2	12227.7	8408.0 µg/L	8408.0 ppb	05:33:46
3	Mg 279.077 IEC†	1029.6	1022.9	9851.5 µg/L	9851.5 ppb	05:34:06
3	Na 589.592 Radial†	1924.3	1460.7	477.54 µg/L	477.54 ppb	05:33:46
3	Sr 421.552†	12311.7	12335.0	121.32 µg/L	121.32 ppb	05:33:46
3	Sc 361.383	2091888.7	2091888.7	99.631 %		05:35:26
3	Y 371.029	1464237.6	1464237.6	100.60 %		05:35:26
3	Ag 328.068†	-1491.4	-1033.8	-0.3669 µg/L	-0.3669 ppb	05:35:31
3	As 188.979†	6.5	6.8	17.281 µg/L	17.281 ppb	05:35:52
3	B 249.677†	865.1	542.8	-28.677 µg/L	-28.677 ppb	05:35:31
3	Ba 233.527†	22988.9	23092.3	566.21 µg/L	566.21 ppb	05:35:31
3	Be 313.107†	10334.7	14131.9	7.3907 µg/L	7.3907 ppb	05:35:31
3	Cd 226.502†	189.9	327.2	-2.7606 µg/L	-2.7606 ppb	05:35:52
3	Co 228.616†	945.0	946.0	37.536 µg/L	37.536 ppb	05:35:52
3	Cr 267.716†	6102.2	6172.2	125.99 µg/L	125.99 ppb	05:35:31
3	Cu 324.752†	22880.1	20095.0	146.91 µg/L	146.91 ppb	05:35:31
3	Mn 257.610†	687771.4	690620.2	2211.0 µg/L	2211.0 ppb	05:35:26
3	Mo 202.031†	3.9	7.2	4.4423 µg/L	4.4423 ppb	05:35:52
3	Ni 231.604†	1650.8	1348.3	69.363 µg/L	69.363 ppb	05:35:52
3	P 214.914†	267.5	252.2	422.26 µg/L	422.26 ppb	05:35:52
3	Pb 220.353†	5477.6	5403.1	1328.3 µg/L	1328.3 ppb	05:35:31
3	S 181.975 Axial†	87.8	70.8	293.53 µg/L	293.53 ppb	05:35:52
3	Sb 206.836†	34.0	12.0	8.5353 µg/L	8.5353 ppb	05:35:52
3	Se 196.026†	-30.0	-45.1	193.73 µg/L	193.73 ppb	05:35:52
3	SiO2†	293315.3	292916.8	58657 µg/L	58657 ppb	05:35:26
3	Si 251.611†	351164.9	352171.5	27182 µg/L	27182 ppb	05:35:26
3	Sn 189.927†	9.2	4.5	-7.4032 µg/L	-7.4032 ppb	05:35:52
3	Ti 334.940†	1315562.0	1320290.7	3002.3 µg/L	3002.3 ppb	05:35:26
3	Tl 190.801†	-50.7	-28.6	13.506 µg/L	13.506 ppb	05:35:52
3	U 409.014†	-285.8	-286.1	-38.599 µg/L	-38.599 ppb	05:35:31
3	V 292.402†	17871.5	18033.7	190.18 µg/L	190.18 ppb	05:35:31
3	Zn 213.857†	9223.7	8755.9	200.92 µg/L	200.92 ppb	05:35:31

Mean Data: 245979014|948764|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2102279.6	100.13 %	0.456			0.46%
Sc RADIAL	58479.7	99.0 %	0.39			0.40%
Y 371.029	1471884.5	101.13 %	0.483			0.48%
Ag 328.068†	-1035.1	-0.3304 µg/L	0.10820	-0.3304 ppb	0.10820	32.75%
Al 396.153Radial†	66467.3	49690 µg/L	4.9	49690 ppb	4.9	0.01%
As 188.979†	9.7	22.572 µg/L	6.5122	22.572 ppb	6.5122	28.85%
B 249.677†	548.8	-28.678 µg/L	0.0837	-28.678 ppb	0.0837	0.29%
Ba 233.527†	23292.8	571.13 µg/L	4.664	571.13 ppb	4.664	0.82%
Be 313.107†	14418.1	7.5491 µg/L	0.14949	7.5491 ppb	0.14949	1.98%
Ca 317.933Radial†	12863.7	11799 µg/L	55.6	11799 ppb	55.6	0.47%
Cd 226.502†	345.2	-2.3600 µg/L	0.35457	-2.3600 ppb	0.35457	15.02%
Co 228.616†	976.5	38.868 µg/L	1.1541	38.868 ppb	1.1541	2.97%
Cr 267.716†	6280.5	128.20 µg/L	2.014	128.20 ppb	2.014	1.57%
Cu 324.752†	20279.8	148.20 µg/L	1.201	148.20 ppb	1.201	0.81%
Fe 238.204 Radial†	11460.5	98380 µg/L	417.5	98380 ppb	417.5	0.42%
K 766.490 Radial†	12258.8	8429.4 µg/L	20.33	8429.4 ppb	20.33	0.24%
Mg 279.077 IEC†	1025.9	9880.1 µg/L	30.33	9880.1 ppb	30.33	0.31%
Mn 257.610†	698287.3	2235.4 µg/L	21.60	2235.4 ppb	21.60	0.97%
Mo 202.031†	8.5	4.5937 µg/L	0.32649	4.5937 ppb	0.32649	7.11%
Na 589.592 Radial†	1464.2	478.69 µg/L	5.615	478.69 ppb	5.615	1.17%

Ni 231.604†	1400.6	72.012 µg/L	2.4576	72.012 ppb	2.4576	3.41%
P 214.914†	259.4	436.03 µg/L	14.312	436.03 ppb	14.312	3.28%
Pb 220.353†	5423.6	1333.3 µg/L	6.86	1333.3 ppb	6.86	0.51%
S 181.975 Axial†	68.5	283.74 µg/L	14.116	283.74 ppb	14.116	4.97%
Sb 206.836†	14.4	10.696 µg/L	7.0175	10.696 ppb	7.0175	65.61%
Se 196.026†	-51.4	186.38 µg/L	6.590	186.38 ppb	6.590	3.54%
SiO2†	295151.1	59104 µg/L	393.3	59104 ppb	393.3	0.67%
Si 251.611†	354805.7	27385 µg/L	178.9	27385 ppb	178.9	0.65%
Sn 189.927†	6.4	-6.6354 µg/L	0.87447	-6.6354 ppb	0.87447	13.18%
Sr 421.552†	12318.3	121.15 µg/L	0.181	121.15 ppb	0.181	0.15%
Ti 334.940†	1337012.5	3040.3 µg/L	33.16	3040.3 ppb	33.16	1.09%
Tl 190.801†	-30.2	11.839 µg/L	1.4965	11.839 ppb	1.4965	12.64%
U 409.014†	-305.1	-40.287 µg/L	3.3959	-40.287 ppb	3.3959	8.43%
V 292.402†	18285.4	192.73 µg/L	2.228	192.73 ppb	2.228	1.16%
Zn 213.857†	8852.4	203.16 µg/L	2.080	203.16 ppb	2.080	1.02%

Sequence No.: 110

Sample ID: 245979015|948764|1

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 430

Date Collected: 2/21/2010 05:36:01

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979015|948764|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56839.6	56839.6	96.3 %		05:36:34
1	Al 396.153Radial†	17329.9	18010.6	13464 µg/L	13464 ppb	05:36:34
1	Ca 317.933Radial†	7090.3	7172.3	6578.9 µg/L	6578.9 ppb	05:36:34
1	Fe 238.204 Radial†	10615.2	11011.4	94526 µg/L	94526 ppb	05:36:34
1	K 766.490 Radial†	4853.6	4843.4	3330.4 µg/L	3330.4 ppb	05:36:34
1	Mg 279.077 IEC†	271.2	269.7	2523.4 µg/L	2523.4 ppb	05:36:54
1	Na 589.592 Radial†	6492.8	6270.8	2050.1 µg/L	2050.1 ppb	05:36:34
1	Sr 421.552†	3282.4	3368.3	33.128 µg/L	33.128 ppb	05:36:34
1	Sc 361.383	2074829.6	2074829.6	98.819 %		05:37:58
1	Y 371.029	1537573.6	1537573.6	105.64 %		05:37:58
1	Ag 328.068†	-1367.5	-920.7	-0.7421 µg/L	-0.7421 ppb	05:38:04
1	As 188.979†	7.1	7.5	18.604 µg/L	18.604 ppb	05:38:24
1	B 249.677†	702.6	385.5	-33.372 µg/L	-33.372 ppb	05:38:04
1	Ba 233.527†	8795.1	8918.6	218.60 µg/L	218.60 ppb	05:38:04
1	Be 313.107†	5589.3	9415.0	4.9944 µg/L	4.9944 ppb	05:38:04
1	Cd 226.502†	169.7	308.3	-2.8502 µg/L	-2.8502 ppb	05:38:04
1	Co 228.616†	1386.7	1400.7	61.074 µg/L	61.074 ppb	05:38:24
1	Cr 267.716†	5403.5	5515.5	112.50 µg/L	112.50 ppb	05:38:04
1	Cu 324.752†	10027.4	7277.6	61.414 µg/L	61.414 ppb	05:38:04
1	Mn 257.610†	704580.0	713305.5	2283.0 µg/L	2283.0 ppb	05:37:58
1	Mo 202.031†	51.3	55.3	9.1293 µg/L	9.1293 ppb	05:38:24
1	Ni 231.604†	1722.8	1434.7	73.661 µg/L	73.661 ppb	05:38:04
1	P 214.914†	419.7	408.4	734.21 µg/L	734.21 ppb	05:38:24
1	Pb 220.353†	444.8	355.3	84.635 µg/L	84.635 ppb	05:38:24
1	S 181.975 Axial†	21.9	4.8	19.970 µg/L	19.970 ppb	05:38:24
1	Sb 206.836†	31.1	9.4	6.8256 µg/L	6.8256 ppb	05:38:24
1	Se 196.026†	-35.8	-51.2	184.11 µg/L	184.11 ppb	05:38:24
1	SiO2†	170151.7	170701.3	34183 µg/L	34183 ppb	05:38:04
1	Si 251.611†	206022.1	208191.5	16069 µg/L	16069 ppb	05:37:58
1	Sn 189.927†	19.6	15.1	-3.3625 µg/L	-3.3625 ppb	05:38:24
1	Ti 334.940†	788910.4	798199.7	1815.3 µg/L	1815.3 ppb	05:37:58
1	Tl 190.801†	-46.2	-24.5	5.8143 µg/L	5.8143 ppb	05:38:24
1	U 409.014†	-1445.1	-1461.6	-137.57 µg/L	-137.57 ppb	05:37:58
1	V 292.402†	2495.9	2621.7	37.233 µg/L	37.233 ppb	05:38:04
1	Zn 213.857†	20233.2	19973.2	466.35 µg/L	466.35 ppb	05:38:04
2	Sc RADIAL	57901.7	57901.7	98.1 %		05:37:00
2	Al 396.153Radial†	17644.9	18001.6	13458 µg/L	13458 ppb	05:37:00
2	Ca 317.933Radial†	7226.5	7176.0	6582.3 µg/L	6582.3 ppb	05:37:00
2	Fe 238.204 Radial†	10814.9	11012.8	94538 µg/L	94538 ppb	05:37:00
2	K 766.490 Radial†	4985.1	4885.0	3359.0 µg/L	3359.0 ppb	05:37:00
2	Mg 279.077 IEC†	265.2	258.3	2412.9 µg/L	2412.9 ppb	05:37:20
2	Na 589.592 Radial†	6538.4	6193.6	2024.9 µg/L	2024.9 ppb	05:37:00
2	Sr 421.552†	3329.9	3354.2	32.989 µg/L	32.989 ppb	05:37:00
2	Sc 361.383	2080443.4	2080443.4	99.086 %		05:38:32
2	Y 371.029	1541950.4	1541950.4	105.94 %		05:38:32
2	Ag 328.068†	-1363.0	-912.5	-0.6774 µg/L	-0.6774 ppb	05:38:38
2	As 188.979†	8.6	8.9	21.194 µg/L	21.194 ppb	05:38:58
2	B 249.677†	719.9	401.0	-32.744 µg/L	-32.744 ppb	05:38:38
2	Ba 233.527†	8743.4	8842.4	216.73 µg/L	216.73 ppb	05:38:38
2	Be 313.107†	5612.4	9423.0	5.0007 µg/L	5.0007 ppb	05:38:38
2	Cd 226.502†	156.0	294.1	-3.2108 µg/L	-3.2108 ppb	05:38:38
2	Co 228.616†	1370.0	1380.1	60.127 µg/L	60.127 ppb	05:38:58
2	Cr 267.716†	5402.2	5499.4	112.17 µg/L	112.17 ppb	05:38:38
2	Cu 324.752†	9905.3	7127.0	60.417 µg/L	60.417 ppb	05:38:38
2	Mn 257.610†	704474.3	711274.9	2276.6 µg/L	2276.6 ppb	05:38:32
2	Mo 202.031†	48.5	52.3	8.8296 µg/L	8.8296 ppb	05:38:58
2	Ni 231.604†	1724.2	1431.5	73.498 µg/L	73.498 ppb	05:38:38
2	P 214.914†	420.4	408.0	733.55 µg/L	733.55 ppb	05:38:58
2	Pb 220.353†	431.8	341.0	81.127 µg/L	81.127 ppb	05:38:58

2	S 181.975 Axial†	23.8	6.7	27.755 µg/L	27.755 ppb	05:38:58
2	Sb 206.836†	29.7	7.8	5.3832 µg/L	5.3832 ppb	05:38:58
2	Se 196.026†	-36.9	-52.2	182.86 µg/L	182.86 ppb	05:38:58
2	SiO2†	169058.2	169133.2	33869 µg/L	33869 ppb	05:38:38
2	Si 251.611†	206340.2	207949.9	16050 µg/L	16050 ppb	05:38:32
2	Sn 189.927†	24.0	19.5	-1.4896 µg/L	-1.4896 ppb	05:38:58
2	Ti 334.940†	789408.1	796547.8	1811.6 µg/L	1811.6 ppb	05:38:32
2	Tl 190.801†	-44.8	-22.9	7.8301 µg/L	7.8301 ppb	05:38:58
2	U 409.014†	-1460.7	-1473.4	-138.58 µg/L	-138.58 ppb	05:38:32
2	V 292.402†	2540.9	2660.4	37.612 µg/L	37.612 ppb	05:38:38
2	Zn 213.857†	20102.7	19786.1	461.94 µg/L	461.94 ppb	05:38:38
3	Sc RADIAL	57496.5	57496.5	97.4 %		05:37:26
3	Al 396.153Radial†	17634.9	18118.2	13545 µg/L	13545 ppb	05:37:26
3	Ca 317.933Radial†	7247.3	7249.4	6649.6 µg/L	6649.6 ppb	05:37:26
3	Fe 238.204 Radial†	10788.5	11063.4	94972 µg/L	94972 ppb	05:37:26
3	K 766.490 Radial†	4937.3	4871.8	3349.9 µg/L	3349.9 ppb	05:37:26
3	Mg 279.077 IEC†	264.0	259.0	2419.4 µg/L	2419.4 ppb	05:37:46
3	Na 589.592 Radial†	6609.7	6313.8	2064.2 µg/L	2064.2 ppb	05:37:26
3	Sr 421.552†	3353.6	3402.5	33.464 µg/L	33.464 ppb	05:37:26
3	Sc 361.383	2079575.0	2079575.0	99.045 %		05:39:06
3	Y 371.029	1536406.2	1536406.2	105.56 %		05:39:06
3	Ag 328.068†	-1287.3	-836.6	-0.0895 µg/L	-0.0895 ppb	05:39:11
3	As 188.979†	7.3	7.6	18.850 µg/L	18.850 ppb	05:39:32
3	B 249.677†	694.3	375.5	-34.026 µg/L	-34.026 ppb	05:39:11
3	Ba 233.527†	8383.9	8483.1	207.93 µg/L	207.93 ppb	05:39:11
3	Be 313.107†	4999.4	8806.5	4.6497 µg/L	4.6497 ppb	05:39:11
3	Cd 226.502†	137.2	275.1	-3.7388 µg/L	-3.7388 ppb	05:39:11
3	Co 228.616†	1260.6	1270.1	55.153 µg/L	55.153 ppb	05:39:32
3	Cr 267.716†	5051.1	5147.2	104.99 µg/L	104.99 ppb	05:39:11
3	Cu 324.752†	9699.4	6923.2	59.126 µg/L	59.126 ppb	05:39:11
3	Mn 257.610†	685633.3	692549.0	2217.0 µg/L	2217.0 ppb	05:39:06
3	Mo 202.031†	43.7	47.5	8.3658 µg/L	8.3658 ppb	05:39:32
3	Ni 231.604†	1679.5	1387.0	71.264 µg/L	71.264 ppb	05:39:11
3	P 214.914†	383.7	371.2	660.03 µg/L	660.03 ppb	05:39:32
3	Pb 220.353†	418.2	327.4	77.754 µg/L	77.754 ppb	05:39:32
3	S 181.975 Axial†	17.1	-0.0	-0.0173 µg/L	-0.0173 ppb	05:39:32
3	Sb 206.836†	23.0	1.2	-0.6341 µg/L	-0.6341 ppb	05:39:32
3	Se 196.026†	-32.4	-47.7	190.20 µg/L	190.20 ppb	05:39:32
3	SiO2†	163479.5	163571.9	32755 µg/L	32755 ppb	05:39:11
3	Si 251.611†	201927.0	203581.1	15713 µg/L	15713 ppb	05:39:06
3	Sn 189.927†	16.7	12.1	-4.6865 µg/L	-4.6865 ppb	05:39:32
3	Ti 334.940†	764649.5	771883.1	1755.5 µg/L	1755.5 ppb	05:39:06
3	Tl 190.801†	-43.3	-21.5	9.1046 µg/L	9.1046 ppb	05:39:32
3	U 409.014†	-1378.7	-1391.2	-131.67 µg/L	-131.67 ppb	05:39:06
3	V 292.402†	2459.1	2578.9	36.844 µg/L	36.844 ppb	05:39:11
3	Zn 213.857†	19368.8	19053.7	444.65 µg/L	444.65 ppb	05:39:11

Mean Data: 245979015|948764|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2078282.7	98.983 %		0.1439			0.15%
Sc RADIAL	57412.6	97.2 %		0.91			0.93%
Y 371.029	1538643.4	105.71 %		0.201			0.19%
Ag 328.068†	-889.9	-0.5030 µg/L		0.35954	-0.5030 ppb	0.35954	71.48%
Al 396.153Radial†	18043.4	13489 µg/L		48.5	13489 ppb	48.5	0.36%
As 188.979†	8.0	19.549 µg/L		1.4300	19.549 ppb	1.4300	7.31%
B 249.677†	387.4	-33.381 µg/L		0.6410	-33.381 ppb	0.6410	1.92%
Ba 233.527†	8748.0	214.42 µg/L		5.700	214.42 ppb	5.700	2.66%
Be 313.107†	9214.8	4.8816 µg/L		0.20085	4.8816 ppb	0.20085	4.11%
Ca 317.933Radial†	7199.2	6603.6 µg/L		39.86	6603.6 ppb	39.86	0.60%
Cd 226.502†	292.5	-3.2666 µg/L		0.44692	-3.2666 ppb	0.44692	13.68%
Co 228.616†	1350.3	58.785 µg/L		3.1803	58.785 ppb	3.1803	5.41%
Cr 267.716†	5387.4	109.89 µg/L		4.245	109.89 ppb	4.245	3.86%
Cu 324.752†	7109.3	60.319 µg/L		1.1473	60.319 ppb	1.1473	1.90%
Fe 238.204 Radial†	11029.2	94678 µg/L		254.0	94678 ppb	254.0	0.27%
K 766.490 Radial†	4866.7	3346.4 µg/L		14.62	3346.4 ppb	14.62	0.44%
Mg 279.077 IEC†	262.3	2451.9 µg/L		62.00	2451.9 ppb	62.00	2.53%
Mn 257.610†	705709.8	2258.9 µg/L		36.39	2258.9 ppb	36.39	1.61%
Mo 202.031†	51.7	8.7749 µg/L		0.38465	8.7749 ppb	0.38465	4.38%
Na 589.592 Radial†	6259.4	2046.4 µg/L		19.91	2046.4 ppb	19.91	0.97%

Ni 231.604†	1417.7	72.808 µg/L	1.3397	72.808 ppb	1.3397	1.84%
P 214.914†	395.9	709.26 µg/L	42.639	709.26 ppb	42.639	6.01%
Pb 220.353†	341.2	81.172 µg/L	3.4404	81.172 ppb	3.4404	4.24%
S 181.975 Axial†	3.8	15.903 µg/L	14.3259	15.903 ppb	14.3259	90.09%
Sb 206.836†	6.1	3.8583 µg/L	3.95677	3.8583 ppb	3.95677	102.55%
Se 196.026†	-50.3	185.72 µg/L	3.925	185.72 ppb	3.925	2.11%
SiO2†	167802.1	33603 µg/L	750.2	33603 ppb	750.2	2.23%
Si 251.611†	206574.2	15944 µg/L	200.3	15944 ppb	200.3	1.26%
Sn 189.927†	15.6	-3.1795 µg/L	1.60626	-3.1795 ppb	1.60626	50.52%
Sr 421.552†	3375.0	33.194 µg/L	0.2443	33.194 ppb	0.2443	0.74%
Ti 334.940†	788876.9	1794.1 µg/L	33.52	1794.1 ppb	33.52	1.87%
Tl 190.801†	-23.0	7.5830 µg/L	1.65902	7.5830 ppb	1.65902	21.88%
U 409.014†	-1442.1	-135.94 µg/L	3.736	-135.94 ppb	3.736	2.75%
V 292.402†	2620.3	37.230 µg/L	0.3842	37.230 ppb	0.3842	1.03%
Zn 213.857†	19604.3	457.65 µg/L	11.471	457.65 ppb	11.471	2.51%

Sequence No.: 111

Sample ID: 245979006|948764|50

Analyst: JWJ

Initial Sample Wt:

Dilution:

Autosampler Location: 431

Date Collected: 2/21/2010 05:39:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245979006|948764|50

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57900.3	57900.3	98.1	%		05:40:14
1	Al 396.153Radial†	548.4	568.0	424.60	µg/L	424.60 ppb	05:40:14
1	Ca 317.933Radial†	531.3	348.8	319.94	µg/L	319.94 ppb	05:40:34
1	Fe 238.204 Radial†	173.9	161.9	1390.0	µg/L	1390.0 ppb	05:40:34
1	K 766.490 Radial†	317.2	125.1	85.990	µg/L	85.990 ppb	05:40:14
1	Mg 279.077 IEC†	17.6	5.8	55.411	µg/L	55.411 ppb	05:40:34
1	Na 589.592 Radial†	479.4	15.2	4.9638	µg/L	4.9638 ppb	05:40:14
1	Sr 421.552†	227.9	191.0	1.8790	µg/L	1.8790 ppb	05:40:14
1	Sc 361.383	2084189.6	2084189.6	99.264	%		05:41:37
1	Y 371.029	1443701.6	1443701.6	99.190	%		05:41:37
1	Ag 328.068†	-292.2	168.8	1.3620	µg/L	1.3620 ppb	05:41:42
1	As 188.979†	-3.3	-3.1	-5.5000	µg/L	-5.5000 ppb	05:42:03
1	B 249.677†	322.2	-0.8	-0.7565	µg/L	-0.7565 ppb	05:42:03
1	Ba 233.527†	674.6	698.0	17.108	µg/L	17.108 ppb	05:42:03
1	Be 313.107†	951.3	4717.2	2.8353	µg/L	2.8353 ppb	05:41:42
1	Cd 226.502†	-144.3	-8.8	-0.3756	µg/L	-0.3756 ppb	05:42:03
1	Co 228.616†	6.7	4.1	0.1168	µg/L	0.1168 ppb	05:42:03
1	Cr 267.716†	54.8	102.6	2.0941	µg/L	2.0941 ppb	05:41:42
1	Cu 324.752†	872156.2	875749.0	5809.5	µg/L	5809.5 ppb	05:41:37
1	Mn 257.610†	6321.6	6671.0	21.417	µg/L	21.417 ppb	05:41:42
1	Mo 202.031†	1.1	4.5	0.4993	µg/L	0.4993 ppb	05:42:03
1	Ni 231.604†	344.0	37.9	1.9320	µg/L	1.9320 ppb	05:42:03
1	P 214.914†	99.8	84.3	-446.65	µg/L	-446.65 ppb	05:41:42
1	Pb 220.353†	446.8	355.3	77.576	µg/L	77.576 ppb	05:42:03
1	S 181.975 Axial†	17.6	0.5	1.9620	µg/L	1.9620 ppb	05:42:03
1	Sb 206.836†	29.4	7.5	6.7748	µg/L	6.7748 ppb	05:42:03
1	Se 196.026†	11.7	-3.2	-0.7088	µg/L	-0.7088 ppb	05:42:03
1	SiO2†	4599.0	3148.7	630.53	µg/L	630.53 ppb	05:41:42
1	Si 251.611†	4084.0	3820.7	294.89	µg/L	294.89 ppb	05:41:42
1	Sn 189.927†	39.7	35.2	14.926	µg/L	14.926 ppb	05:42:03
1	Ti 334.940†	15828.0	15803.6	35.944	µg/L	35.944 ppb	05:41:42
1	Tl 190.801†	-20.5	1.5	2.7183	µg/L	2.7183 ppb	05:42:03
1	U 409.014†	508.2	512.7	43.294	µg/L	43.294 ppb	05:41:42
1	V 292.402†	141.4	238.5	2.5762	µg/L	2.5762 ppb	05:41:42
1	Zn 213.857†	90872.3	91043.7	2139.3	µg/L	2139.3 ppb	05:41:42
2	Sc RADIAL	57694.1	57694.1	97.7	%		05:40:40
2	Al 396.153Radial†	553.0	574.6	429.58	µg/L	429.58 ppb	05:40:40
2	Ca 317.933Radial†	515.5	334.6	306.87	µg/L	306.87 ppb	05:41:00
2	Fe 238.204 Radial†	176.8	165.6	1421.3	µg/L	1421.3 ppb	05:41:00
2	K 766.490 Radial†	288.3	96.6	66.458	µg/L	66.458 ppb	05:40:40
2	Mg 279.077 IEC†	22.6	11.0	106.00	µg/L	106.00 ppb	05:41:00
2	Na 589.592 Radial†	527.9	66.6	21.760	µg/L	21.760 ppb	05:40:40
2	Sr 421.552†	190.5	153.6	1.5110	µg/L	1.5110 ppb	05:40:40
2	Sc 361.383	2083162.4	2083162.4	99.216	%		05:42:09
2	Y 371.029	1441419.4	1441419.4	99.034	%		05:42:09
2	Ag 328.068†	-249.3	211.8	1.6860	µg/L	1.6860 ppb	05:42:15
2	As 188.979†	-1.1	-0.8	-1.3535	µg/L	-1.3535 ppb	05:42:35
2	B 249.677†	318.8	-4.1	-0.9085	µg/L	-0.9085 ppb	05:42:35
2	Ba 233.527†	669.0	692.6	16.978	µg/L	16.978 ppb	05:42:35
2	Be 313.107†	790.9	4556.0	2.7381	µg/L	2.7381 ppb	05:42:15
2	Cd 226.502†	-148.2	-12.8	-0.4804	µg/L	-0.4804 ppb	05:42:35
2	Co 228.616†	27.2	24.8	1.0753	µg/L	1.0753 ppb	05:42:35
2	Cr 267.716†	36.1	83.8	1.7103	µg/L	1.7103 ppb	05:42:15
2	Cu 324.752†	871681.6	875703.9	5809.2	µg/L	5809.2 ppb	05:42:09
2	Mn 257.610†	6305.1	6657.5	21.376	µg/L	21.376 ppb	05:42:15
2	Mo 202.031†	-5.7	-2.4	-0.1873	µg/L	-0.1873 ppb	05:42:35
2	Ni 231.604†	353.2	47.4	2.4107	µg/L	2.4107 ppb	05:42:35
2	P 214.914†	70.4	54.7	-505.43	µg/L	-505.43 ppb	05:42:15
2	Pb 220.353†	447.8	356.6	77.873	µg/L	77.873 ppb	05:42:35

2	S 181.975 Axial†	17.2	-0.0	-0.0153 µg/L	-0.0153 ppb	05:42:35
2	Sb 206.836†	28.6	6.7	6.1081 µg/L	6.1081 ppb	05:42:35
2	Se 196.026†	2.3	-12.7	-13.708 µg/L	-13.708 ppb	05:42:35
2	SiO2†	4564.9	3116.6	624.11 µg/L	624.11 ppb	05:42:15
2	Si 251.611†	4066.0	3804.7	293.66 µg/L	293.66 ppb	05:42:15
2	Sn 189.927†	31.1	26.6	11.250 µg/L	11.250 ppb	05:42:35
2	Ti 334.940†	15590.6	15572.2	35.414 µg/L	35.414 ppb	05:42:15
2	Tl 190.801†	-22.9	-0.9	-0.5582 µg/L	-0.5582 ppb	05:42:35
2	U 409.014†	499.0	503.7	42.527 µg/L	42.527 ppb	05:42:15
2	V 292.402†	155.3	252.5	2.7120 µg/L	2.7120 ppb	05:42:15
2	Zn 213.857†	90393.6	90606.4	2128.9 µg/L	2128.9 ppb	05:42:15
3	Sc RADIAL	57532.6	57532.6	97.4 %		05:41:05
3	Al 396.153Radial†	537.2	560.0	418.66 µg/L	418.66 ppb	05:41:05
3	Ca 317.933Radial†	525.3	346.2	317.51 µg/L	317.51 ppb	05:41:26
3	Fe 238.204 Radial†	176.0	165.2	1418.1 µg/L	1418.1 ppb	05:41:26
3	K 766.490 Radial†	354.7	165.6	113.88 µg/L	113.88 ppb	05:41:05
3	Mg 279.077 IEC†	21.9	10.4	99.550 µg/L	99.550 ppb	05:41:26
3	Na 589.592 Radial†	511.9	51.6	16.872 µg/L	16.872 ppb	05:41:05
3	Sr 421.552†	203.1	167.0	1.6427 µg/L	1.6427 ppb	05:41:05
3	Sc 361.383	2072515.1	2072515.1	98.708 %		05:42:41
3	Y 371.029	1435925.7	1435925.7	98.656 %		05:42:41
3	Ag 328.068†	-272.6	186.9	1.5023 µg/L	1.5023 ppb	05:42:47
3	As 188.979†	3.8	4.1	7.4808 µg/L	7.4808 ppb	05:43:08
3	B 249.677†	333.9	12.8	-0.2145 µg/L	-0.2145 ppb	05:43:08
3	Ba 233.527†	579.4	605.3	14.838 µg/L	14.838 ppb	05:43:08
3	Be 313.107†	510.9	4276.4	2.5702 µg/L	2.5702 ppb	05:42:47
3	Cd 226.502†	-140.5	-5.7	-0.3025 µg/L	-0.3025 ppb	05:43:08
3	Co 228.616†	15.2	12.9	0.5257 µg/L	0.5257 ppb	05:43:08
3	Cr 267.716†	10.8	58.3	1.1904 µg/L	1.1904 ppb	05:42:47
3	Cu 324.752†	828877.8	836853.6	5551.5 µg/L	5551.5 ppb	05:42:41
3	Mn 257.610†	5733.3	6110.9	19.636 µg/L	19.636 ppb	05:42:47
3	Mo 202.031†	-11.8	-8.6	-0.8087 µg/L	-0.8087 ppb	05:43:08
3	Ni 231.604†	339.8	35.6	1.8151 µg/L	1.8151 ppb	05:43:08
3	P 214.914†	76.2	61.0	-465.75 µg/L	-465.75 ppb	05:42:47
3	Pb 220.353†	403.7	314.2	67.903 µg/L	67.903 ppb	05:43:08
3	S 181.975 Axial†	17.4	0.3	1.2474 µg/L	1.2474 ppb	05:43:08
3	Sb 206.836†	17.2	-4.6	-4.2981 µg/L	-4.2981 ppb	05:43:08
3	Se 196.026†	14.2	-0.6	2.8330 µg/L	2.8330 ppb	05:43:08
3	SiO2†	4367.0	2939.7	588.68 µg/L	588.68 ppb	05:42:47
3	Si 251.611†	3828.4	3584.9	276.70 µg/L	276.70 ppb	05:42:47
3	Sn 189.927†	31.2	26.9	11.349 µg/L	11.349 ppb	05:43:08
3	Ti 334.940†	14389.7	14436.3	32.831 µg/L	32.831 ppb	05:42:47
3	Tl 190.801†	-21.3	0.7	1.4746 µg/L	1.4746 ppb	05:43:08
3	U 409.014†	317.2	322.2	27.123 µg/L	27.123 ppb	05:42:47
3	V 292.402†	186.2	284.7	3.0073 µg/L	3.0073 ppb	05:42:47
3	Zn 213.857†	83885.7	84481.3	1984.8 µg/L	1984.8 ppb	05:42:47

Mean Data: 245979006|948764|50

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2079955.7	99.063 %	0.3079			0.31%
Sc RADIAL	57709.0	97.7 %	0.31			0.32%
Y 371.029	1440348.9	98.960 %	0.2746			0.28%
Ag 328.068†	189.2	1.5168 µg/L	0.16247	1.5168 ppb	0.16247	10.71%
Al 396.153Radial†	567.5	424.28 µg/L	5.464	424.28 ppb	5.464	1.29%
As 188.979†	0.1	0.2091 µg/L	6.63000	0.2091 ppb	6.63000	>999.9%
B 249.677†	2.6	-0.6265 µg/L	0.36480	-0.6265 ppb	0.36480	58.23%
Ba 233.527†	665.3	16.308 µg/L	1.2747	16.308 ppb	1.2747	7.82%
Be 313.107†	4516.6	2.7145 µg/L	0.13409	2.7145 ppb	0.13409	4.94%
Ca 317.933Radial†	343.2	314.78 µg/L	6.949	314.78 ppb	6.949	2.21%
Cd 226.502†	-9.1	-0.3862 µg/L	0.08946	-0.3862 ppb	0.08946	23.17%
Co 228.616†	13.9	0.5726 µg/L	0.48099	0.5726 ppb	0.48099	84.00%
Cr 267.716†	81.6	1.6649 µg/L	0.45354	1.6649 ppb	0.45354	27.24%
Cu 324.752†	862768.9	5723.4 µg/L	148.88	5723.4 ppb	148.88	2.60%
Fe 238.204 Radial†	164.2	1409.8 µg/L	17.23	1409.8 ppb	17.23	1.22%
K 766.490 Radial†	129.1	88.777 µg/L	23.8348	88.777 ppb	23.8348	26.85%
Mg 279.077 IEC†	9.1	86.988 µg/L	27.5355	86.988 ppb	27.5355	31.65%
Mn 257.610†	6479.8	20.810 µg/L	1.0167	20.810 ppb	1.0167	4.89%
Mo 202.031†	-2.2	-0.1656 µg/L	0.65424	-0.1656 ppb	0.65424	395.15%
Na 589.592 Radial†	44.4	14.532 µg/L	8.6390	14.532 ppb	8.6390	59.45%

Ni 231.604†	40.3	2.0526 µg/L	0.31559	2.0526 ppb	0.31559	15.38%
P 214.914†	66.7	-472.61 µg/L	29.982	-472.61 ppb	29.982	6.34%
Pb 220.353†	342.0	74.451 µg/L	5.6720	74.451 ppb	5.6720	7.62%
S 181.975 Axial†	0.3	1.0647 µg/L	1.00124	1.0647 ppb	1.00124	94.04%
Sb 206.836†	3.2	2.8616 µg/L	6.20947	2.8616 ppb	6.20947	216.99%
Se 196.026†	-5.5	-3.8614 µg/L	8.70970	-3.8614 ppb	8.70970	225.56%
SiO2†	3068.3	614.44 µg/L	22.542	614.44 ppb	22.542	3.67%
Si 251.611†	3736.8	288.42 µg/L	10.168	288.42 ppb	10.168	3.53%
Sn 189.927†	29.6	12.508 µg/L	2.0944	12.508 ppb	2.0944	16.74%
Sr 421.552†	170.6	1.6776 µg/L	0.18643	1.6776 ppb	0.18643	11.11%
Ti 334.940†	15270.7	34.730 µg/L	1.6656	34.730 ppb	1.6656	4.80%
Tl 190.801†	0.4	1.2116 µg/L	1.65402	1.2116 ppb	1.65402	136.52%
U 409.014†	446.2	37.648 µg/L	9.1232	37.648 ppb	9.1232	24.23%
V 292.402†	258.6	2.7652 µg/L	0.22040	2.7652 ppb	0.22040	7.97%
Zn 213.857†	88710.5	2084.3 µg/L	86.35	2084.3 ppb	86.35	4.14%

Sequence No.: 112

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/21/2010 05:43:18

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58165.4	58165.4	98.5 %		05:43:56
1	Al 396.153Radial†	6804.3	6915.8	5159.5 µg/L	5159.5 ppb	05:43:56
1	Ca 317.933Radial†	5591.0	5482.5	5028.9 µg/L	5028.9 ppb	05:44:17
1	Fe 238.204 Radial†	606.2	599.9	5160.9 µg/L	5160.9 ppb	05:44:17
1	K 766.490 Radial†	7336.7	7249.1	4984.6 µg/L	4984.6 ppb	05:43:56
1	Mg 279.077 IEC†	545.4	541.5	5273.9 µg/L	5273.9 ppb	05:44:17
1	Na 589.592 Radial†	31345.9	31345.5	10248 µg/L	10248 ppb	05:43:56
1	Sr 421.552†	49056.5	49755.9	489.36 µg/L	489.36 ppb	05:43:56
1	Sc 361.383	2074843.9	2074843.9	98.819 %		05:45:21
1	Y 371.029	1431203.5	1431203.5	98.332 %		05:45:21
1	Ag 328.068†	66126.8	67380.0	506.30 µg/L	506.30 ppb	05:45:26
1	As 188.979†	283.7	287.4	516.33 µg/L	516.33 ppb	05:45:47
1	B 249.677†	12359.1	12181.3	496.46 µg/L	496.46 ppb	05:45:26
1	Ba 233.527†	20474.0	20737.0	509.09 µg/L	509.09 ppb	05:45:26
1	Be 313.107†	819041.5	832585.8	502.64 µg/L	502.64 ppb	05:45:21
1	Cd 226.502†	19912.5	20287.0	510.41 µg/L	510.41 ppb	05:45:26
1	Co 228.616†	10950.1	11078.3	512.39 µg/L	512.39 ppb	05:45:26
1	Cr 267.716†	24782.6	25126.1	512.74 µg/L	512.74 ppb	05:45:26
1	Cu 324.752†	78421.6	76488.9	508.10 µg/L	508.10 ppb	05:45:26
1	Mn 257.610†	157143.3	159323.3	507.62 µg/L	507.62 ppb	05:45:21
1	Mo 202.031†	5136.6	5201.3	521.35 µg/L	521.35 ppb	05:45:47
1	Ni 231.604†	10354.4	10169.4	513.41 µg/L	513.41 ppb	05:45:26
1	P 214.914†	1302.9	1302.2	2540.7 µg/L	2540.7 ppb	05:45:47
1	Pb 220.353†	2146.6	2077.5	511.36 µg/L	511.36 ppb	05:45:47
1	S 181.975 Axial†	264.7	250.5	1038.5 µg/L	1038.5 ppb	05:45:47
1	Sb 206.836†	565.4	550.1	504.47 µg/L	504.47 ppb	05:45:47
1	Se 196.026†	386.9	376.5	523.79 µg/L	523.79 ppb	05:45:47
1	SiO2†	28397.7	27252.5	5457.3 µg/L	5457.3 ppb	05:45:26
1	Si 251.611†	32950.7	33050.9	2551.0 µg/L	2551.0 ppb	05:45:26
1	Sn 189.927†	1231.2	1241.2	530.84 µg/L	530.84 ppb	05:45:47
1	Ti 334.940†	219483.3	221963.9	504.50 µg/L	504.50 ppb	05:45:21
1	Tl 190.801†	358.3	384.8	520.35 µg/L	520.35 ppb	05:45:47
1	U 409.014†	6017.5	6090.1	515.81 µg/L	515.81 ppb	05:45:26
1	V 292.402†	50587.6	51288.0	513.69 µg/L	513.69 ppb	05:45:26
1	Zn 213.857†	22088.4	21850.3	512.06 µg/L	512.06 ppb	05:45:26
2	Sc RADIAL	57977.3	57977.3	98.2 %		05:44:23
2	Al 396.153Radial†	6792.9	6926.5	5167.7 µg/L	5167.7 ppb	05:44:23
2	Ca 317.933Radial†	5641.4	5552.2	5092.8 µg/L	5092.8 ppb	05:44:43
2	Fe 238.204 Radial†	608.3	604.1	5196.4 µg/L	5196.4 ppb	05:44:43
2	K 766.490 Radial†	7312.8	7248.9	4984.5 µg/L	4984.5 ppb	05:44:23
2	Mg 279.077 IEC†	549.6	547.6	5333.2 µg/L	5333.2 ppb	05:44:43
2	Na 589.592 Radial†	31347.2	31450.1	10282 µg/L	10282 ppb	05:44:23
2	Sr 421.552†	49082.9	49944.4	491.21 µg/L	491.21 ppb	05:44:23
2	Sc 361.383	2082140.4	2082140.4	99.167 %		05:45:54
2	Y 371.029	1436667.9	1436667.9	98.707 %		05:45:54
2	Ag 328.068†	65536.9	66550.6	500.08 µg/L	500.08 ppb	05:46:00
2	As 188.979†	281.0	283.6	509.58 µg/L	509.58 ppb	05:46:20
2	B 249.677†	12242.5	12019.9	489.83 µg/L	489.83 ppb	05:46:00
2	Ba 233.527†	20246.7	20435.2	501.68 µg/L	501.68 ppb	05:46:00
2	Be 313.107†	819648.1	830293.1	501.26 µg/L	501.26 ppb	05:45:54
2	Cd 226.502†	19671.9	19973.8	502.52 µg/L	502.52 ppb	05:46:00
2	Co 228.616†	10845.7	10934.2	505.71 µg/L	505.71 ppb	05:46:00
2	Cr 267.716†	24557.7	24811.4	506.32 µg/L	506.32 ppb	05:46:00
2	Cu 324.752†	77805.6	75589.5	502.14 µg/L	502.14 ppb	05:46:00
2	Mn 257.610†	157346.0	158970.5	506.50 µg/L	506.50 ppb	05:45:54
2	Mo 202.031†	5076.7	5122.7	513.47 µg/L	513.47 ppb	05:46:20
2	Ni 231.604†	10218.9	9996.1	504.66 µg/L	504.66 ppb	05:46:00
2	P 214.914†	1292.8	1287.4	2511.6 µg/L	2511.6 ppb	05:46:20
2	Pb 220.353†	2145.4	2068.6	509.19 µg/L	509.19 ppb	05:46:20

2	S 181.975 Axial†	263.7	248.7	1030.7 µg/L	1030.7 ppb	05:46:20
2	Sb 206.836†	573.3	556.0	509.81 µg/L	509.81 ppb	05:46:20
2	Se 196.026†	383.8	372.0	517.66 µg/L	517.66 ppb	05:46:20
2	SiO2†	28154.0	26906.1	5388.0 µg/L	5388.0 ppb	05:46:00
2	Si 251.611†	32737.2	32718.7	2525.3 µg/L	2525.3 ppb	05:46:00
2	Sn 189.927†	1198.0	1203.4	514.66 µg/L	514.66 ppb	05:46:20
2	Ti 334.940†	219609.8	221313.2	503.01 µg/L	503.01 ppb	05:45:54
2	Tl 190.801†	351.4	376.6	509.37 µg/L	509.37 ppb	05:46:20
2	U 409.014†	5856.5	5906.4	500.21 µg/L	500.21 ppb	05:46:00
2	V 292.402†	50172.3	50689.8	507.68 µg/L	507.68 ppb	05:46:00
2	Zn 213.857†	21849.1	21530.7	504.56 µg/L	504.56 ppb	05:46:00
3	Sc RADIAL	58036.6	58036.6	98.3 %		05:44:49
3	Al 396.153Radial†	6841.3	6968.8	5200.9 µg/L	5200.9 ppb	05:44:49
3	Ca 317.933Radial†	5600.8	5505.1	5049.6 µg/L	5049.6 ppb	05:45:09
3	Fe 238.204 Radial†	608.0	603.2	5187.8 µg/L	5187.8 ppb	05:45:09
3	K 766.490 Radial†	7297.8	7226.0	4968.7 µg/L	4968.7 ppb	05:44:49
3	Mg 279.077 IEC†	541.8	539.1	5248.8 µg/L	5248.8 ppb	05:45:09
3	Na 589.592 Radial†	31476.9	31549.3	10314 µg/L	10314 ppb	05:44:49
3	Sr 421.552†	49311.8	50126.1	493.00 µg/L	493.00 ppb	05:44:49
3	Sc 361.383	2088751.0	2088751.0	99.482 %		05:46:27
3	Y 371.029	1441637.0	1441637.0	99.048 %		05:46:27
3	Ag 328.068†	62471.2	63259.8	475.23 µg/L	475.23 ppb	05:46:33
3	As 188.979†	249.3	250.8	450.72 µg/L	450.72 ppb	05:46:54
3	B 249.677†	11619.8	11354.9	462.54 µg/L	462.54 ppb	05:46:33
3	Ba 233.527†	18784.9	18901.2	464.01 µg/L	464.01 ppb	05:46:33
3	Be 313.107†	777060.4	784867.6	473.83 µg/L	473.83 ppb	05:46:27
3	Cd 226.502†	18163.0	18394.2	462.73 µg/L	462.73 ppb	05:46:33
3	Co 228.616†	9934.6	9983.8	461.69 µg/L	461.69 ppb	05:46:33
3	Cr 267.716†	21954.5	22116.3	451.33 µg/L	451.33 ppb	05:46:33
3	Cu 324.752†	71650.9	69154.4	459.45 µg/L	459.45 ppb	05:46:33
3	Mn 257.610†	149424.9	150506.0	479.56 µg/L	479.56 ppb	05:46:27
3	Mo 202.031†	4275.7	4301.3	431.17 µg/L	431.17 ppb	05:46:54
3	Ni 231.604†	9414.2	9154.7	462.19 µg/L	462.19 ppb	05:46:33
3	P 214.914†	1107.8	1097.3	2137.0 µg/L	2137.0 ppb	05:46:54
3	Pb 220.353†	1877.5	1792.5	441.12 µg/L	441.12 ppb	05:46:54
3	S 181.975 Axial†	232.2	216.1	895.89 µg/L	895.89 ppb	05:46:54
3	Sb 206.836†	486.3	466.7	427.62 µg/L	427.62 ppb	05:46:54
3	Se 196.026†	343.3	330.1	460.26 µg/L	460.26 ppb	05:46:54
3	SiO2†	26558.5	25212.5	5048.8 µg/L	5048.8 ppb	05:46:33
3	Si 251.611†	30748.7	30615.4	2363.0 µg/L	2363.0 ppb	05:46:33
3	Sn 189.927†	998.8	999.3	427.36 µg/L	427.36 ppb	05:46:54
3	Ti 334.940†	207333.7	208272.2	473.36 µg/L	473.36 ppb	05:46:27
3	Tl 190.801†	316.8	340.7	461.18 µg/L	461.18 ppb	05:46:54
3	U 409.014†	5369.3	5398.0	457.06 µg/L	457.06 ppb	05:46:33
3	V 292.402†	45728.0	46062.3	461.10 µg/L	461.10 ppb	05:46:33
3	Zn 213.857†	20090.4	19693.1	461.45 µg/L	461.45 ppb	05:46:33

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2081911.8	99.156 %	0.3313			0.33%
Sc RADIAL	58059.8	98.3 %	0.16			0.17%
Y 371.029	1436502.8	98.696 %	0.3586			0.36%
Ag 328.068†	65730.1	493.87 µg/L	16.442	493.87 ppb	16.442	3.33%
QC value within limits for Ag 328.068 Recovery = 98.77%						
Al 396.153Radial†	6937.0	5176.0 µg/L	21.95	5176.0 ppb	21.95	0.42%
QC value within limits for Al 396.153Radial Recovery = 103.52%						
As 188.979†	274.0	492.21 µg/L	36.089	492.21 ppb	36.089	7.33%
QC value within limits for As 188.979 Recovery = 98.44%						
B 249.677†	11852.0	482.94 µg/L	17.977	482.94 ppb	17.977	3.72%
QC value within limits for B 249.677 Recovery = 96.59%						
Ba 233.527†	20024.5	491.59 µg/L	24.175	491.59 ppb	24.175	4.92%
QC value within limits for Ba 233.527 Recovery = 98.32%						
Be 313.107†	815915.5	492.58 µg/L	16.247	492.58 ppb	16.247	3.30%
QC value within limits for Be 313.107 Recovery = 98.52%						
Ca 317.933Radial†	5513.2	5057.1 µg/L	32.63	5057.1 ppb	32.63	0.65%
QC value within limits for Ca 317.933Radial Recovery = 101.14%						
Cd 226.502†	19551.7	491.89 µg/L	25.558	491.89 ppb	25.558	5.20%
QC value within limits for Cd 226.502 Recovery = 98.38%						
Co 228.616†	10665.4	493.27 µg/L	27.546	493.27 ppb	27.546	5.58%

QC value within limits for Co 228.616 Recovery = 98.65%							
Cr 267.716†	24017.9	490.13 µg/L	33.757	490.13 ppb	33.757	6.89%	
QC value within limits for Cr 267.716 Recovery = 98.03%							
Cu 324.752†	73744.3	489.90 µg/L	26.535	489.90 ppb	26.535	5.42%	
QC value within limits for Cu 324.752 Recovery = 97.98%							
Fe 238.204 Radial†	602.4	5181.7 µg/L	18.51	5181.7 ppb	18.51	0.36%	
QC value within limits for Fe 238.204 Radial Recovery = 103.63%							
K 766.490 Radial†	7241.3	4979.3 µg/L	9.13	4979.3 ppb	9.13	0.18%	
QC value within limits for K 766.490 Radial Recovery = 99.59%							
Mg 279.077 IEC†	542.7	5285.3 µg/L	43.32	5285.3 ppb	43.32	0.82%	
QC value within limits for Mg 279.077 IEC Recovery = 105.71%							
Mn 257.610†	156266.6	497.90 µg/L	15.888	497.90 ppb	15.888	3.19%	
QC value within limits for Mn 257.610 Recovery = 99.58%							
Mo 202.031†	4875.1	488.66 µg/L	49.948	488.66 ppb	49.948	10.22%	
QC value within limits for Mo 202.031 Recovery = 97.73%							
Na 589.592 Radial†	31448.3	10281 µg/L	33.3	10281 ppb	33.3	0.32%	
QC value within limits for Na 589.592 Radial Recovery = 102.81%							
Ni 231.604†	9773.4	493.42 µg/L	27.400	493.42 ppb	27.400	5.55%	
QC value within limits for Ni 231.604 Recovery = 98.68%							
P 214.914†	1229.0	2396.4 µg/L	225.17	2396.4 ppb	225.17	9.40%	
QC value within limits for P 214.914 Recovery = 95.86%							
Pb 220.353†	1979.5	487.22 µg/L	39.939	487.22 ppb	39.939	8.20%	
QC value within limits for Pb 220.353 Recovery = 97.44%							
S 181.975 Axial†	238.4	988.36 µg/L	80.175	988.36 ppb	80.175	8.11%	
QC value within limits for S 181.975 Axial Recovery = 98.84%							
Sb 206.836†	524.3	480.63 µg/L	45.990	480.63 ppb	45.990	9.57%	
QC value within limits for Sb 206.836 Recovery = 96.13%							
Se 196.026†	359.5	500.57 µg/L	35.042	500.57 ppb	35.042	7.00%	
QC value within limits for Se 196.026 Recovery = 100.11%							
SiO2†	26457.0	5298.0 µg/L	218.61	5298.0 ppb	218.61	4.13%	
QC value within limits for SiO2 Recovery = 99.08%							
Si 251.611†	32128.3	2479.8 µg/L	101.94	2479.8 ppb	101.94	4.11%	
QC value within limits for Si 251.611 Recovery = 99.19%							
Sn 189.927†	1148.0	490.95 µg/L	55.661	490.95 ppb	55.661	11.34%	
QC value within limits for Sn 189.927 Recovery = 98.19%							
Sr 421.552†	49942.1	491.19 µg/L	1.820	491.19 ppb	1.820	0.37%	
QC value within limits for Sr 421.552 Recovery = 98.24%							
Ti 334.940†	217183.1	493.62 µg/L	17.565	493.62 ppb	17.565	3.56%	
QC value within limits for Ti 334.940 Recovery = 98.72%							
Tl 190.801†	367.4	496.97 µg/L	31.476	496.97 ppb	31.476	6.33%	
QC value within limits for Tl 190.801 Recovery = 99.39%							
U 409.014†	5798.2	491.02 µg/L	30.429	491.02 ppb	30.429	6.20%	
QC value within limits for U 409.014 Recovery = 98.20%							
V 292.402†	49346.7	494.15 µg/L	28.785	494.15 ppb	28.785	5.83%	
QC value within limits for V 292.402 Recovery = 98.83%							
Zn 213.857†	21024.7	492.69 µg/L	27.312	492.69 ppb	27.312	5.54%	
QC value within limits for Zn 213.857 Recovery = 98.54%							

All analyte(s) passed QC.

Sequence No.: 113

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/21/2010 05:47:03

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58090.5	58090.5	98.4 %		05:47:36
1	Al 396.153Radial†	-6.6	2.0	1.5002 µg/L	1.5002 ppb	05:47:36
1	Ca 317.933Radial†	188.3	-1.5	-1.4193 µg/L	-1.4193 ppb	05:47:57
1	Fe 238.204 Radial†	14.9	-0.3	-2.1623 µg/L	-2.1623 ppb	05:47:57
1	K 766.490 Radial†	178.0	-17.5	-12.036 µg/L	-12.036 ppb	05:47:36
1	Mg 279.077 IEC†	10.9	-1.0	-9.3960 µg/L	-9.3960 ppb	05:47:57
1	Na 589.592 Radial†	446.6	-19.8	-6.4711 µg/L	-6.4711 ppb	05:47:36
1	Sr 421.552†	44.3	3.6	0.0357 µg/L	0.0357 ppb	05:47:36
1	Sc 361.383	2098037.5	2098037.5	99.924 %		05:48:58
1	Y 371.029	1453573.3	1453573.3	99.869 %		05:48:58
1	Ag 328.068†	-399.2	63.6	0.4746 µg/L	0.4746 ppb	05:49:04
1	As 188.979†	1.5	1.8	3.2125 µg/L	3.2125 ppb	05:49:24
1	B 249.677†	355.9	30.7	1.2554 µg/L	1.2554 ppb	05:49:24
1	Ba 233.527†	-13.0	5.4	0.1321 µg/L	0.1321 ppb	05:49:24
1	Be 313.107†	-3655.7	100.4	0.0604 µg/L	0.0604 ppb	05:49:04
1	Cd 226.502†	-141.5	-5.0	-0.1254 µg/L	-0.1254 ppb	05:49:24
1	Co 228.616†	6.5	4.0	0.1832 µg/L	0.1832 ppb	05:49:24
1	Cr 267.716†	-54.9	-7.6	-0.1540 µg/L	-0.1540 ppb	05:49:04
1	Cu 324.752†	3013.7	146.2	0.9697 µg/L	0.9697 ppb	05:49:04
1	Mn 257.610†	-220.5	81.9	0.2608 µg/L	0.2608 ppb	05:49:24
1	Mo 202.031†	-0.8	2.5	0.2493 µg/L	0.2493 ppb	05:49:24
1	Ni 231.604†	313.0	4.6	0.2322 µg/L	0.2322 ppb	05:49:24
1	P 214.914†	7.3	-8.9	-17.854 µg/L	-17.854 ppb	05:49:24
1	Pb 220.353†	91.6	-3.1	-0.7762 µg/L	-0.7762 ppb	05:49:24
1	S 181.975 Axial†	17.7	0.5	1.8837 µg/L	1.8837 ppb	05:49:24
1	Sb 206.836†	24.4	2.3	2.1369 µg/L	2.1369 ppb	05:49:24
1	Se 196.026†	18.5	3.5	4.8174 µg/L	4.8174 ppb	05:49:24
1	SiO2†	1544.9	61.7	12.349 µg/L	12.349 ppb	05:49:04
1	Si 251.611†	390.4	97.2	7.5007 µg/L	7.5007 ppb	05:49:24
1	Sn 189.927†	2.8	-1.9	-0.8028 µg/L	-0.8028 ppb	05:49:24
1	Ti 334.940†	351.8	210.4	0.4793 µg/L	0.4793 ppb	05:49:04
1	Tl 190.801†	-26.4	-4.2	-5.5535 µg/L	-5.5535 ppb	05:49:24
1	U 409.014†	42.6	43.4	3.6855 µg/L	3.6855 ppb	05:49:04
1	V 292.402†	-95.0	1.0	0.0147 µg/L	0.0147 ppb	05:49:04
1	Zn 213.857†	541.1	39.5	0.9308 µg/L	0.9308 ppb	05:49:24
2	Sc RADIAL	57504.2	57504.2	97.4 %		05:48:02
2	Al 396.153Radial†	-6.1	2.4	1.7680 µg/L	1.7680 ppb	05:48:02
2	Ca 317.933Radial†	186.3	-1.7	-1.5389 µg/L	-1.5389 ppb	05:48:22
2	Fe 238.204 Radial†	17.2	2.3	19.622 µg/L	19.622 ppb	05:48:22
2	K 766.490 Radial†	220.8	28.3	19.456 µg/L	19.456 ppb	05:48:02
2	Mg 279.077 IEC†	13.6	1.9	18.188 µg/L	18.188 ppb	05:48:22
2	Na 589.592 Radial†	433.1	-29.0	-9.4915 µg/L	-9.4915 ppb	05:48:02
2	Sr 421.552†	31.3	-9.2	-0.0902 µg/L	-0.0902 ppb	05:48:02
2	Sc 361.383	2097112.8	2097112.8	99.880 %		05:49:30
2	Y 371.029	1452487.5	1452487.5	99.794 %		05:49:30
2	Ag 328.068†	-426.4	36.2	0.2723 µg/L	0.2723 ppb	05:49:36
2	As 188.979†	-5.1	-4.9	-8.7510 µg/L	-8.7510 ppb	05:49:57
2	B 249.677†	360.1	35.1	1.4256 µg/L	1.4256 ppb	05:49:57
2	Ba 233.527†	-12.4	6.0	0.1466 µg/L	0.1466 ppb	05:49:57
2	Be 313.107†	-3514.1	240.6	0.1449 µg/L	0.1449 ppb	05:49:36
2	Cd 226.502†	-151.2	-14.8	-0.3744 µg/L	-0.3744 ppb	05:49:57
2	Co 228.616†	13.8	11.2	0.5193 µg/L	0.5193 ppb	05:49:57
2	Cr 267.716†	-50.5	-3.2	-0.0646 µg/L	-0.0646 ppb	05:49:36
2	Cu 324.752†	3024.9	158.8	1.0560 µg/L	1.0560 ppb	05:49:36
2	Mn 257.610†	-76.6	225.8	0.7208 µg/L	0.7208 ppb	05:49:57
2	Mo 202.031†	4.1	7.5	0.7481 µg/L	0.7481 ppb	05:49:57
2	Ni 231.604†	302.8	-5.4	-0.2750 µg/L	-0.2750 ppb	05:49:57
2	P 214.914†	22.8	6.6	13.092 µg/L	13.092 ppb	05:49:57
2	Pb 220.353†	88.4	-6.3	-1.5482 µg/L	-1.5482 ppb	05:49:57

2	S 181.975 Axial†	13.2	-4.0	-16.742 µg/L	-16.742 ppb	05:49:57
2	Sb 206.836†	22.0	-0.1	-0.0418 µg/L	-0.0418 ppb	05:49:57
2	Se 196.026†	15.1	0.1	0.1933 µg/L	0.1933 ppb	05:49:57
2	SiO2†	1538.0	55.5	11.105 µg/L	11.105 ppb	05:49:36
2	Si 251.611†	422.1	129.0	9.9596 µg/L	9.9596 ppb	05:49:57
2	Sn 189.927†	6.5	1.8	0.7671 µg/L	0.7671 ppb	05:49:57
2	Ti 334.940†	557.7	416.7	0.9463 µg/L	0.9463 ppb	05:49:36
2	Tl 190.801†	-22.4	-0.2	-0.2449 µg/L	-0.2449 ppb	05:49:57
2	U 409.014†	-75.6	-74.9	-6.3578 µg/L	-6.3578 ppb	05:49:36
2	V 292.402†	-83.1	12.8	0.1280 µg/L	0.1280 ppb	05:49:36
2	Zn 213.857†	548.9	47.6	1.1221 µg/L	1.1221 ppb	05:49:57
3	Sc RADIAL	57238.3	57238.3	96.9 %		05:48:28
3	Al 396.153Radial†	-31.7	-24.0	-17.932 µg/L	-17.932 ppb	05:48:28
3	Ca 317.933Radial†	197.3	10.6	9.6893 µg/L	9.6893 ppb	05:48:48
3	Fe 238.204 Radial†	17.8	3.0	25.775 µg/L	25.775 ppb	05:48:48
3	K 766.490 Radial†	214.1	22.5	15.479 µg/L	15.479 ppb	05:48:28
3	Mg 279.077 IEC†	13.6	1.9	18.784 µg/L	18.784 ppb	05:48:48
3	Na 589.592 Radial†	431.9	-28.2	-9.2169 µg/L	-9.2169 ppb	05:48:28
3	Sr 421.552†	25.4	-15.2	-0.1493 µg/L	-0.1493 ppb	05:48:28
3	Sc 361.383	2093698.1	2093698.1	99.717 %		05:50:03
3	Y 371.029	1451067.7	1451067.7	99.696 %		05:50:03
3	Ag 328.068†	-465.1	-3.3	-0.0228 µg/L	-0.0228 ppb	05:50:08
3	As 188.979†	1.9	2.2	3.9927 µg/L	3.9927 ppb	05:50:29
3	B 249.677†	358.7	34.3	1.3885 µg/L	1.3885 ppb	05:50:29
3	Ba 233.527†	-11.3	7.0	0.1724 µg/L	0.1724 ppb	05:50:29
3	Be 313.107†	-3523.2	225.6	0.1361 µg/L	0.1361 ppb	05:50:08
3	Cd 226.502†	-140.2	-4.0	-0.1022 µg/L	-0.1022 ppb	05:50:29
3	Co 228.616†	7.3	4.8	0.2220 µg/L	0.2220 ppb	05:50:29
3	Cr 267.716†	-58.6	-11.4	-0.2315 µg/L	-0.2315 ppb	05:50:08
3	Cu 324.752†	2971.1	109.8	0.7319 µg/L	0.7319 ppb	05:50:08
3	Mn 257.610†	-198.5	103.5	0.3322 µg/L	0.3322 ppb	05:50:29
3	Mo 202.031†	8.1	11.5	1.1505 µg/L	1.1505 ppb	05:50:29
3	Ni 231.604†	311.5	3.7	0.1873 µg/L	0.1873 ppb	05:50:29
3	P 214.914†	5.1	-11.1	-22.283 µg/L	-22.283 ppb	05:50:29
3	Pb 220.353†	85.7	-8.8	-2.1678 µg/L	-2.1678 ppb	05:50:29
3	S 181.975 Axial†	16.6	-0.6	-2.4873 µg/L	-2.4873 ppb	05:50:29
3	Sb 206.836†	19.6	-2.4	-2.1956 µg/L	-2.1956 ppb	05:50:29
3	Se 196.026†	12.9	-2.1	-2.8216 µg/L	-2.8216 ppb	05:50:29
3	SiO2†	1499.7	19.5	3.9132 µg/L	3.9132 ppb	05:50:08
3	Si 251.611†	400.1	107.7	8.3095 µg/L	8.3095 ppb	05:50:29
3	Sn 189.927†	-0.8	-5.5	-2.3683 µg/L	-2.3683 ppb	05:50:29
3	Ti 334.940†	329.6	188.8	0.4281 µg/L	0.4281 ppb	05:50:08
3	Tl 190.801†	-27.4	-5.3	-7.0252 µg/L	-7.0252 ppb	05:50:29
3	U 409.014†	-88.9	-88.4	-7.5064 µg/L	-7.5064 ppb	05:50:08
3	V 292.402†	-90.6	5.2	0.0545 µg/L	0.0545 ppb	05:50:08
3	Zn 213.857†	527.4	27.0	0.6327 µg/L	0.6327 ppb	05:50:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2096282.8	99.840 %	0.1089			0.11%
Sc RADIAL	57611.0	97.6 %	0.74			0.76%
Y 371.029	1452376.1	99.786 %	0.0863			0.09%
Ag 328.068†	32.2	0.2414 µg/L	0.25017	0.2414 ppb	0.25017	103.63%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.5	-4.8878 µg/L	11.29711	-4.8878 ppb	11.29711	231.13%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.3	-0.5152 µg/L	7.14300	-0.5152 ppb	7.14300	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	33.3	1.3565 µg/L	0.08951	1.3565 ppb	0.08951	6.60%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.1	0.1504 µg/L	0.02044	0.1504 ppb	0.02044	13.59%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	188.9	0.1138 µg/L	0.04644	0.1138 ppb	0.04644	40.80%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.4	2.2437 µg/L	6.44835	2.2437 ppb	6.44835	287.40%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	-7.9	-0.2007 µg/L	0.15092	-0.2007 ppb	0.15092	75.21%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	6.7	0.3082 µg/L	0.18386	0.3082 ppb	0.18386	59.66%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated				
	-7.4	-0.1500 µg/L	0.08354	-0.1500 ppb	0.08354	55.68%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated				
	138.3	0.9192 µg/L	0.16782	0.9192 ppb	0.16782	18.26%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated				
	1.7	14.411 µg/L	14.6793	14.411 ppb	14.6793	101.86%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated				
	11.1	7.6329 µg/L	17.14951	7.6329 ppb	17.14951	224.68%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated				
	0.9	9.1918 µg/L	16.10027	9.1918 ppb	16.10027	175.16%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated				
	137.1	0.4379 µg/L	0.24755	0.4379 ppb	0.24755	56.53%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated				
	7.1	0.7160 µg/L	0.45145	0.7160 ppb	0.45145	63.05%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated				
	-25.7	-8.3932 µg/L	1.67024	-8.3932 ppb	1.67024	19.90%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated				
	1.0	0.0482 µg/L	0.28075	0.0482 ppb	0.28075	582.96%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated				
	-4.5	-9.0150 µg/L	19.27319	-9.0150 ppb	19.27319	213.79%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated				
	-6.1	-1.4974 µg/L	0.69717	-1.4974 ppb	0.69717	46.56%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated				
	-1.4	-5.7819 µg/L	9.74014	-5.7819 ppb	9.74014	168.46%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated				
	-0.1	-0.0335 µg/L	2.16627	-0.0335 ppb	2.16627	>999.9%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated				
	0.5	0.7297 µg/L	3.84769	0.7297 ppb	3.84769	527.29%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated				
	45.6	9.1223 µg/L	4.55380	9.1223 ppb	4.55380	49.92%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated				
	111.3	8.5900 µg/L	1.25322	8.5900 ppb	1.25322	14.59%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated				
	-1.9	-0.8013 µg/L	1.56771	-0.8013 ppb	1.56771	195.63%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated				
	-6.9	-0.0679 µg/L	0.09445	-0.0679 ppb	0.09445	139.02%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated				
	272.0	0.6179 µg/L	0.28552	0.6179 ppb	0.28552	46.21%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated				
	-3.2	-4.2745 µg/L	3.56650	-4.2745 ppb	3.56650	83.44%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated				
	-40.0	-3.3929 µg/L	6.15694	-3.3929 ppb	6.15694	181.47%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated				
	6.3	0.0658 µg/L	0.05748	0.0658 ppb	0.05748	87.39%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated				
	38.1	0.8952 µg/L	0.24664	0.8952 ppb	0.24664	27.55%
	QC value within limits for Zn 213.857	Recovery = Not calculated				

All analyte(s) passed QC.

ICPMS#3 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, February 25, 2010 11:13:55

Sample Description:

Method File: c:\elandata\Method\daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.6314

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Number of Replicates: 5

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD
Be	9.0		604.8		604.813		12.736		2.1
Mg	24.0		23048.2		23048.183		431.946		1.9
Co	58.9		15820.4		15820.356		204.312		1.3
Rh	102.9		48331.0		48331.027		581.662		1.2
In	114.9		74225.8		74225.758		973.246		1.3
Pb	208.0		46154.8		46154.846		481.702		1.0
[> Ba	137.9		50694.6		50694.646		676.987		1.3
[Ba++	69.0		871.2		0.017		0.000		2.5
[> Ce	139.9		65986.0		65986.047		291.490		0.4
[CeO	155.9		1622.9		0.025		0.000		1.8
Bkgd	220.0		1.7		1.700		0.570		33.5

Current Optimization File Data

Current Value	Description
1.07	Nebulizer Gas Flow
6.50	Lens Voltage
1450.00	ICP RF Power
-1855.00	Analog Stage Voltage
1350.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	6.8	765.7
Co	59	25	8.3	14164.4
In	115	25	9.5	92786.0

ICPMS#3 Instrument Tuning Report

File Name: 100225.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	582	2060	0.645
Be	9.0	9.0	2052	2060	0.635
Mg	24.0	24.0	5702	2110	0.587
Mg	25.0	25.0	5916	2020	0.642
Mg	26.0	25.9	6198	2140	0.689
Co	58.9	58.9	14205	2115	0.631
Rh	102.9	103.0	24909	2165	0.647
In	114.9	114.9	27835	2180	0.651
Ce	139.9	139.9	33910	2220	0.619
Pb	206.0	206.0	49992	2280	0.644
Pb	207.0	207.0	50296	2310	0.678
Pb	208.0	208.0	50474	2300	0.649
U	238.1	238.0	57839	2340	0.680

ICPMS#3 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 25, 2010 17:52:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\Blank.088

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		4	
Be	9		ug/L		2	
B	11		ug/L		132	
Na	23		ug/L		3334	
Mg	24		ug/L		333	
Al	27		ug/L		667	
P	31		ug/L		1342	
K	39		ug/L		44069	
Ca	43		ug/L		27	
> Sc	45		ug/L		169119	
Ti	47		ug/L		44	
V	51		ug/L		-1805	
Cr	52		ug/L		1697	
Cr	53		ug/L		12160	
Mn	55		ug/L		111	
Fe	57		ug/L		573	
Co	59		ug/L		12	
Ni	60		ug/L		22	
Cu	63		ug/L		128	
Cu	65		ug/L		61	
Zn	66		ug/L		141	
Zn	67		ug/L		2214	
Zn	68		ug/L		230	
> Ge	74		ug/L		80044	
As	75		ug/L		36	
Se	77		ug/L		1130	
Se	82		ug/L		8	
Kr	83		ug/L		19	
Sr	88		ug/L		191	
Y	89		ug/L		5	
Zr	90		ug/L		126	
Mo	98		ug/L		65	
Ag	107		ug/L		10	
Cd	111		ug/L		2	
Cd	114		ug/L		11	
> In	115		ug/L		72081	
Sn	120		ug/L		83	
Sb	121		ug/L		72	
Sb	123		ug/L		58	
Ba	135		ug/L		14	
Ba	137		ug/L		19	
Ho	165		ug/L		3	
> Lu	175		ug/L		148095	
Tl	205		ug/L		583	
Pb	208		ug/L		116	
Th	232		ug/L		324	
U	238		ug/L		282	

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 17:55:21

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	
Be	9Linear Thru Zero	
B	11Linear Thru Zero	
Na	23Linear Thru Zero	
Mg	24Linear Thru Zero	
Al	27Linear Thru Zero	
P	31Linear Thru Zero	
K	39Linear Thru Zero	
Ca	43Linear Thru Zero	
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	
V	51Linear Thru Zero	
Cr	52Linear Thru Zero	
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	
Fe	57Linear Thru Zero	
Co	59Linear Thru Zero	
Ni	60Linear Thru Zero	
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	
Zn	66Linear Thru Zero	
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	
Mo	98Linear Thru Zero	
Ag	107Linear Thru Zero	
Cd	111Linear Thru Zero	
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	
Sb	121Linear Thru Zero	
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	
Pb	208Linear Thru Zero	
Th	232Linear Thru Zero	
U	238Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115					
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 25, 2010 17:58:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\Standard 1.089

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	3.464	1057	0.006
Be	9	10.000	ug/L	4.955	568	0.003
B	11	20.000	ug/L	4.919	1480	0.008
Na	23	1000.000	ug/L	0.500	570502	3.445
Mg	24	1000.000	ug/L	10.833	468269	2.843
Al	27	1000.000	ug/L	8.770	600065	3.641
P	31	1000.000	ug/L	1.156	39835	0.234
K	39	1000.000	ug/L	4.826	889573	5.141
Ca	43	1000.000	ug/L	4.059	2001	0.012
> Sc	45		ug/L		164662	164662.252
Ti	47	10.000	ug/L	2.448	1237	0.007
V	51	10.000	ug/L	10.057	10039	0.072
Cr	52	10.000	ug/L	2.065	13212	0.070
Cr	53		ug/L		11190	-0.004
Mn	55	10.000	ug/L	1.875	15998	0.097
Fe	57	1000.000	ug/L	1.683	30179	0.180
Co	59	10.000	ug/L	1.434	11308	0.069
Ni	60	10.000	ug/L	1.363	2409	0.015
Cu	63		ug/L		6077	0.036
Cu	65	10.000	ug/L	3.300	3216	0.019
Zn	66	10.000	ug/L	4.740	2122	0.025
Zn	67		ug/L		2393	0.002
Zn	68		ug/L		1776	0.019
> Ge	74		ug/L		79743	79742.542
As	75	10.000	ug/L	6.845	2487	0.031
Se	77		ug/L		1194	0.001
Se	82	10.000	ug/L	10.280	253	0.003
Kr	83		ug/L		15	-0.000
Sr	88	10.000	ug/L	0.418	32210	0.441
Y	89		ug/L		8	0.000
Zr	90	10.000	ug/L	4.053	14534	0.198
Mo	98	10.000	ug/L	2.672	8597	0.117
Ag	107	10.000	ug/L	1.033	17086	0.235
Cd	111	10.000	ug/L	2.193	4225	0.058
Cd	114		ug/L		10245	0.141
> In	115		ug/L		72615	72615.438
Sn	120	10.000	ug/L	1.696	17526	0.240
Sb	121	10.000	ug/L	6.240	10716	0.146
Sb	123		ug/L		8241	0.113
Ba	135		ug/L		3605	0.024
Ba	137	10.000	ug/L	0.975	6365	0.042
Ho	165		ug/L		2	-0.000
> Lu	175		ug/L		151788	151787.770
Tl	205	10.000	ug/L	0.845	70177	0.458
Pb	208	10.000	ug/L	0.734	80948	0.533
Th	232	10.000	ug/L	5.309	86210	0.565
U	238	10.000	ug/L	0.661	98357	0.646

Sample ID: Standard 1

Report Date/Time: Thursday, February 25, 2010 18:01:02

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	1.0000
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
|>	Sc	45				
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
|>	Ge	74				
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
|>	In	115				
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
|>	Lu	175				
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 25, 2010 18:04:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\Standard 2.090

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	99.973	ug/L	1.647	9835	0.062
Be	9	99.936	ug/L	1.844	5103	0.032
B	11	199.846	ug/L	2.126	12151	0.076
Na	23	9997.104	ug/L	4.441	5288399	33.471
Mg	24	9990.937	ug/L	7.034	4111687	26.044
Al	27	9991.835	ug/L	2.628	5313598	33.637
P	31	10000.887	ug/L	1.709	374269	2.361
K	39	9991.317	ug/L	3.051	7505903	47.262
Ca	43	9998.464	ug/L	2.063	18673	0.118
> Sc	45		ug/L		157981	157981.123
Ti	47	99.984	ug/L	1.475	11317	0.071
V	51	99.947	ug/L	2.681	105692	0.680
Cr	52	100.012	ug/L	1.662	113877	0.711
Cr	53		ug/L		20934	0.061
Mn	55	100.009	ug/L	1.810	153994	0.974
Fe	57	10000.255	ug/L	0.690	285489	1.804
Co	59	99.987	ug/L	0.459	107034	0.677
Ni	60	99.993	ug/L	1.147	22762	0.144
Cu	63		ug/L		56122	0.355
Cu	65	99.981	ug/L	1.470	29756	0.188
Zn	66	99.975	ug/L	0.805	19291	0.243
Zn	67		ug/L		5336	0.040
Zn	68		ug/L		15187	0.189
> Ge	74		ug/L		78968	78967.819
As	75	100.027	ug/L	1.152	24968	0.316
Se	77		ug/L		2950	0.023
Se	82	100.072	ug/L	2.653	2613	0.033
Kr	83		ug/L		23	0.000
Sr	88	99.991	ug/L	0.867	312246	4.369
Y	89		ug/L		28	0.000
Zr	90	100.175	ug/L	2.617	172064	2.408
Mo	98	100.024	ug/L	1.164	86111	1.204
Ag	107	99.989	ug/L	1.534	166203	2.327
Cd	111	99.983	ug/L	1.382	40836	0.572
Cd	114		ug/L		98934	1.385
> In	115		ug/L		71441	71440.511
Sn	120	100.001	ug/L	1.018	171809	2.404
Sb	121	100.126	ug/L	3.285	120050	1.679
Sb	123		ug/L		92495	1.293
Ba	135		ug/L		35592	0.232
Ba	137	99.986	ug/L	1.653	63304	0.412
Ho	165		ug/L		4	0.000
> Lu	175		ug/L		153476	153476.373
Tl	205	99.978	ug/L	1.433	688858	4.483
Pb	208	99.978	ug/L	0.428	799839	5.211
Th	232	100.036	ug/L	0.076	900398	5.865
U	238	99.981	ug/L	1.178	973082	6.340

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 18:06:43

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 18:06:43

Page 2

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175					
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 18:06:43

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ICPMS#3 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 25, 2010 18:09:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 1.091

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.747	ug/L	1.446	5260	0.032
Be	9	50.837	ug/L	2.058	2735	0.016
B	11	104.184	ug/L	3.408	6735	0.040
Na	23	5235.841	ug/L	8.688	2920260	17.530
Mg	24	4593.109	ug/L	4.488	1993120	11.973
Al	27	5209.836	ug/L	8.964	2920269	17.538
P	31	4853.614	ug/L	1.754	192014	1.146
K	39	5107.539	ug/L	8.693	4060903	24.160
Ca	43	4979.023	ug/L	2.291	9809	0.059
Sc	45		ug/L		166405	166404.978
Ti	47	48.757	ug/L	2.451	5836	0.035
V	51	49.004	ug/L	1.573	53685	0.333
Cr	52	49.891	ug/L	2.248	60668	0.355
Cr	53		ug/L		15390	0.021
Mn	55	50.181	ug/L	0.991	81441	0.489
Fe	57	4875.275	ug/L	1.544	146871	0.879
Co	59	49.455	ug/L	0.599	55770	0.335
Ni	60	50.622	ug/L	1.119	12148	0.073
Cu	63		ug/L		30267	0.181
Cu	65	50.268	ug/L	1.249	15792	0.095
Zn	66	52.139	ug/L	2.288	10533	0.126
Zn	67		ug/L		3830	0.019
Zn	68		ug/L		8269	0.098
Ge	74		ug/L		82146	82146.035
As	75	48.397	ug/L	1.444	12586	0.153
Se	77		ug/L		1977	0.010
Se	82	51.770	ug/L	3.177	1411	0.017
Kr	83		ug/L		21	0.000
Sr	88	51.925	ug/L	1.490	166411	2.269
Y	89		ug/L		12	0.000
Zr	90	45.520	ug/L	5.727	80333	1.094
Mo	98	48.964	ug/L	1.748	43269	0.590
Ag	107	50.972	ug/L	1.258	86925	1.186
Cd	111	50.431	ug/L	0.527	21129	0.288
Cd	114		ug/L		51661	0.705
In	115		ug/L		73270	73270.397
Sn	120	50.024	ug/L	0.827	88204	1.203
Sb	121	49.168	ug/L	6.517	60495	0.824
Sb	123		ug/L		46470	0.633
Ba	135		ug/L		18532	0.120
Ba	137	50.970	ug/L	2.141	32531	0.210
Ho	165		ug/L		9	0.000
Lu	175		ug/L		154680	154679.640
Tl	205	49.086	ug/L	1.733	340989	2.201
Pb	208	50.772	ug/L	1.600	409397	2.646
Th	232	51.978	ug/L	1.144	471698	3.047
U	238	53.142	ug/L	1.906	521320	3.370

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 18:12:24

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li	7	101.495				
|	Be	9	101.675				
|	B	11	104.184				
|	Na	23	104.717				
|	Mg	24	91.862				
|	Al	27	103.165				
|	P	31	97.072				
|	K	39	102.151				
|	Ca	43	99.580				
>	Sc	45		98.4			
|	Ti	47	97.513				
|	V	51	98.009				
|	Cr	52	99.782				
|	Cr	53					
|	Mn	55	100.362				
|	Fe	57	97.505				
|	Co	59	98.910				
|	Ni	60	101.244				
|	Cu	63					
|	Cu	65	100.535				
|	Zn	66	104.278				
|	Zn	67					
|	Zn	68					
>	Ge	74		102.6			
|	As	75	96.794				
|	Se	77					
|	Se	82	103.539				
|	Kr	83					
|	Sr	88	103.851				
|	Y	89					
|	Zr	90	91.040				
|	Mo	98	97.928				
|	Ag	107	101.943				
|	Cd	111	100.862				
|	Cd	114					
>	In	115		101.7			
|	Sn	120	100.049				
|	Sb	121	98.336				
|	Sb	123					
|	Ba	135					
|	Ba	137	101.940				
|	Ho	165					
>	Lu	175		104.4			
|	Tl	205	98.171				
|	Pb	208	101.544				
|	Th	232	103.957				
|	U	238	106.284				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 18:12:24

Page 3

ICPMS#3 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 25, 2010 18:15:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 2.092

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.009	ug/L	119.195	3	-0.000
Be	9	-0.024	ug/L	43.326	1	-0.000
B	11	4.952	ug/L	16.965	451	0.002
Na	23	3.557	ug/L	29.834	5334	0.012
Mg	24	0.005	ug/L	26355.797	333	0.000
Al	27	0.008	ug/L	26217.083	667	0.000
P	31	-1.090	ug/L	125.350	1296	-0.000
K	39	-3.260	ug/L	213.826	41394	-0.015
Ca	43	6.717	ug/L	70.293	41	0.000
> Sc	45		ug/L		168740	168739.752
Ti	47	-0.005	ug/L	1009.472	44	-0.000
V	51	0.381	ug/L	228.189	-1365	0.003
Cr	52	-0.204	ug/L	16.865	1448	-0.001
Cr	53		ug/L		9655	-0.015
Mn	55	0.000	ug/L	7310.269	111	0.000
Fe	57	-0.330	ug/L	171.466	562	-0.000
Co	59	-0.000	ug/L	866.464	11	-0.000
Ni	60	-0.015	ug/L	120.474	18	-0.000
Cu	63		ug/L		122	-0.000
Cu	65	0.010	ug/L	257.888	64	0.000
Zn	66	-0.051	ug/L	92.934	135	-0.000
Zn	67		ug/L		2085	-0.002
Zn	68		ug/L		205	-0.000
> Ge	74		ug/L		81950	81949.537
As	75	0.403	ug/L	100.265	142	0.001
Se	77		ug/L		981	-0.002
Se	82	0.943	ug/L	44.293	34	0.000
Kr	83		ug/L		17	-0.000
Sr	88	-0.001	ug/L	635.702	194	-0.000
Y	89		ug/L		8	0.000
Zr	90	0.351	ug/L	6.803	753	0.008
Mo	98	0.219	ug/L	18.408	261	0.003
Ag	107	0.004	ug/L	44.688	17	0.000
Cd	111	-0.003	ug/L	207.332	1	-0.000
Cd	114		ug/L		9	-0.000
> In	115		ug/L		74001	74001.371
Sn	120	0.060	ug/L	22.497	191	0.001
Sb	121	1.003	ug/L	9.543	1317	0.017
Sb	123		ug/L		1018	0.013
Ba	135		ug/L		10	-0.000
Ba	137	0.003	ug/L	320.503	22	0.000
Ho	165		ug/L		4	0.000
> Lu	175		ug/L		154950	154950.226
Tl	205	0.171	ug/L	24.353	1796	0.008
Pb	208	0.002	ug/L	67.055	139	0.000
Th	232	0.266	ug/L	9.536	2757	0.016
U	238	0.009	ug/L	22.743	378	0.001

Sample ID: QC Std 2

Report Date/Time: Thursday, February 25, 2010 18:18:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			99.8		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			102.4		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			102.7		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			104.6		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 25, 2010 18:21:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 3.093

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.027	ug/L	1.441	1156	0.007
Be	9	0.542	ug/L	23.134	31	0.000
B	11	18.151	ug/L	4.600	1291	0.007
Na	23	265.706	ug/L	14.360	152486	0.890
Mg	24	20.590	ug/L	16.847	9336	0.054
Al	27	36.611	ug/L	23.459	21350	0.123
P	31	47.990	ug/L	2.310	3232	0.011
K	39	338.075	ug/L	8.706	312052	1.599
Ca	43	208.087	ug/L	2.417	439	0.002
> Sc	45		ug/L		167760	167759.949
Ti	47	8.536	ug/L	2.653	1066	0.006
V	51	11.132	ug/L	11.373	10912	0.076
Cr	52	10.597	ug/L	3.066	14316	0.075
Cr	53		ug/L		11373	-0.004
Mn	55	5.607	ug/L	1.927	9271	0.055
Fe	57	103.818	ug/L	2.296	3710	0.019
Co	59	1.083	ug/L	3.209	1242	0.007
Ni	60	2.089	ug/L	4.327	526	0.003
Cu	63		ug/L		739	0.004
Cu	65	1.036	ug/L	5.582	388	0.002
Zn	66	11.213	ug/L	1.020	2362	0.027
Zn	67		ug/L		2431	0.002
Zn	68		ug/L		1940	0.021
> Ge	74		ug/L		81549	81548.923
As	75	5.884	ug/L	6.370	1551	0.019
Se	77		ug/L		1076	-0.001
Se	82	5.365	ug/L	7.220	153	0.002
Kr	83		ug/L		18	-0.000
Sr	88	11.273	ug/L	0.865	36443	0.493
Y	89		ug/L		9	0.000
Zr	90	1.990	ug/L	1.995	3650	0.048
Mo	98	0.629	ug/L	0.756	624	0.008
Ag	107	1.046	ug/L	1.690	1801	0.024
Cd	111	1.076	ug/L	2.738	455	0.006
Cd	114		ug/L		1135	0.015
> In	115		ug/L		73604	73603.780
Sn	120	5.323	ug/L	1.296	9504	0.128
Sb	121	3.175	ug/L	4.466	3993	0.053
Sb	123		ug/L		3117	0.042
Ba	135		ug/L		805	0.005
Ba	137	2.135	ug/L	5.727	1378	0.009
Ho	165		ug/L		6	0.000
> Lu	175		ug/L		154351	154351.217
Tl	205	1.092	ug/L	2.557	8170	0.049
Pb	208	2.202	ug/L	0.966	17832	0.115
Th	232	0.998	ug/L	8.007	9378	0.059
U	238	0.218	ug/L	5.943	2424	0.014

Sample ID: QC Std 3

Report Date/Time: Thursday, February 25, 2010 18:23:52

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	110.275				
Be	9	108.374				
B	11	121.009				
Na	23	106.282				
Mg	24	137.267				
Al	27	122.038				
P	31	95.981				
K	39	112.692				
Ca	43	104.044				
> Sc	45		99.2			
Ti	47	85.363				
V	51	111.325				
Cr	52	105.973				
Cr	53					
Mn	55	112.136				
Fe	57	103.818				
Co	59	108.288				
Ni	60	104.438				
Cu	63					
Cu	65	103.596				
Zn	66	112.131				
Zn	67					
Zn	68					
> Ge	74		101.9			
As	75	117.672				
Se	77					
Se	82	107.303				
Kr	83					
Sr	88	112.730				
Y	89					
Zr	90	99.516				
Mo	98	125.894				
Ag	107	104.595				
Cd	111	107.559				
Cd	114					
> In	115		102.1			
Sn	120	106.465				
Sb	121	105.849				
Sb	123					
Ba	135					
Ba	137	106.752				
Ho	165					
> Lu	175		104.2			
Tl	205	109.220				
Pb	208	110.077				
Th	232	99.793				
U	238	108.881				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Mg	24CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 25, 2010 18:26:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 4.094

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.063	ug/L	37.026	8	0.000
Be	9	0.048	ug/L	159.518	3	0.000
B	11	1.688	ug/L	16.301	174	0.001
Na	23	93010.452	ug/L	5.085	38103079	311.407
Mg	24	81373.301	ug/L	4.498	25964480	212.123
Al	27	98264.180	ug/L	4.889	40469013	330.797
P	31	97552.705	ug/L	0.478	2820772	23.031
K	39	100146.467	ug/L	5.061	58043842	473.719
Ca	43	96310.187	ug/L	0.504	139233	1.137
Sc	45		ug/L		122424	122423.802
Ti	47	1693.795	ug/L	0.166	148040	1.209
V	51	1.503	ug/L	47.964	-49	0.010
Cr	52	3.188	ug/L	3.531	4003	0.023
Cr	53		ug/L		7775	-0.008
Mn	55	6.405	ug/L	2.559	7720	0.062
Fe	57	107361.094	ug/L	0.682	2371203	19.364
Co	59	0.249	ug/L	4.006	215	0.002
Ni	60	3.186	ug/L	8.176	577	0.005
Cu	63		ug/L		1032	0.008
Cu	65	2.843	ug/L	2.769	699	0.005
Zn	66	2.982	ug/L	10.232	603	0.007
Zn	67		ug/L		1725	-0.002
Zn	68		ug/L		274	0.001
Ge	74		ug/L		66986	66986.442
As	75	1.174	ug/L	79.186	275	0.004
Se	77		ug/L		1188	0.004
Se	82	1.827	ug/L	49.339	47	0.001
Kr	83		ug/L		72	0.001
Sr	88	2.632	ug/L	2.516	7284	0.115
Y	89		ug/L		67	0.001
Zr	90	4.732	ug/L	61.404	7064	0.114
Mo	98	1903.589	ug/L	0.586	1419566	22.921
Ag	107	0.114	ug/L	16.463	172	0.003
Cd	111	0.486	ug/L	35.155	173	0.003
Cd	114		ug/L		2028	0.033
In	115		ug/L		61934	61933.565
Sn	120	0.297	ug/L	7.057	513	0.007
Sb	121	0.568	ug/L	19.001	650	0.010
Sb	123		ug/L		494	0.007
Ba	135		ug/L		236	0.002
Ba	137	0.732	ug/L	8.852	406	0.003
Ho	165		ug/L		2464	0.019
Lu	175		ug/L		128966	128966.434
Tl	205	0.023	ug/L	3.448	643	0.001
Pb	208	0.213	ug/L	3.175	1530	0.011
Th	232	0.332	ug/L	32.763	2776	0.019
U	238	-0.021	ug/L	5.553	72	-0.001

Sample ID: QC Std 4

Report Date/Time: Thursday, February 25, 2010 18:29:35

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23	93.010				
Mg	24	81.373				
Al	27	98.264				
P	31	97.553				
K	39	100.146				
Ca	43	96.310				
> Sc	45		72.4			
Ti	47	84.690				
V	51					
Cr	52	96.607				
Cr	53					
Mn	55	110.431				
Fe	57	107.361				
Co	59	105.803				
Ni	60	96.243				
Cu	63					
Cu	65	85.111				
Zn	66	79.313				
Zn	67					
Zn	68					
> Ge	74		83.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88	88.906				
Y	89					
Zr	90					
Mo	98	95.179				
Ag	107					
Cd	111	109.399				
Cd	114					
> In	115		85.9			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137	91.736				
Ho	165					
> Lu	175		87.1			
Tl	205					
Pb	208	112.603				
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Sc 45 Int Std for QC Sc		45
QC Std 4	Zr	90ICSA is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 4
 Report Date/Time: Thursday, February 25, 2010 18:29:35
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ICPMS#3 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 25, 2010 18:32:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 5.095

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	16.859	ug/L	0.702	1282	0.010
Be	9	16.290	ug/L	3.267	643	0.005
B	11	17.446	ug/L	3.511	905	0.007
Na	23	96075.880	ug/L	6.991	39167411	321.670
Mg	24	82409.091	ug/L	1.988	26196305	214.823
Al	27	91151.271	ug/L	2.559	37422958	306.852
P	31	97597.700	ug/L	1.939	2809811	23.042
K	39	98037.385	ug/L	3.328	56527772	463.743
Ca	43	95969.257	ug/L	1.387	138124	1.133
Sc	45		ug/L		121898	121898.008
Ti	47	1674.768	ug/L	1.485	145719	1.195
V	51	24.136	ug/L	4.071	18693	0.164
Cr	52	26.356	ug/L	1.417	24053	0.187
Cr	53		ug/L		9765	0.008
Mn	55	29.279	ug/L	1.820	34839	0.285
Fe	57	107653.768	ug/L	1.980	2366581	19.416
Co	59	20.257	ug/L	0.947	16738	0.137
Ni	60	21.496	ug/L	2.768	3787	0.031
Cu	63		ug/L		8415	0.068
Cu	65	19.292	ug/L	1.951	4465	0.036
Zn	66	17.306	ug/L	2.450	2947	0.042
Zn	67		ug/L		2070	0.003
Zn	68		ug/L		2391	0.033
Ge	74		ug/L		67372	67371.536
As	75	20.960	ug/L	2.159	4488	0.066
Se	77		ug/L		1452	0.007
Se	82	20.899	ug/L	5.739	471	0.007
Kr	83		ug/L		64	0.001
Sr	88	22.069	ug/L	0.558	61451	0.964
Y	89		ug/L		62	0.001
Zr	90	18.686	ug/L	0.894	28658	0.449
Mo	98	1859.480	ug/L	0.747	1423123	22.390
Ag	107	18.209	ug/L	0.440	26942	0.424
Cd	111	18.807	ug/L	2.999	6837	0.108
Cd	114		ug/L		18238	0.287
In	115		ug/L		63558	63558.455
Sn	120	19.380	ug/L	0.754	29689	0.466
Sb	121	20.353	ug/L	2.305	21754	0.341
Sb	123		ug/L		16638	0.261
Ba	135		ug/L		6432	0.051
Ba	137	21.492	ug/L	0.863	11271	0.089
Ho	165		ug/L		2434	0.019
Lu	175		ug/L		126929	126928.803
Tl	205	19.392	ug/L	0.888	110890	0.870
Pb	208	20.118	ug/L	1.136	133196	1.049
Th	232	20.535	ug/L	1.380	153111	1.204
U	238	22.322	ug/L	0.312	179909	1.415

Sample ID: QC Std 5

Report Date/Time: Thursday, February 25, 2010 18:35:18

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	84.296				
Be	9	81.452				
B	11	87.230				
Na	23	96.076				
Mg	24	82.409				
Al	27	91.151				
P	31	97.598				
K	39	98.037				
Ca	43	95.969				
> Sc	45		72.1			
Ti	47	83.738				
V	51	120.682				
Cr	52	113.116				
Cr	53					
Mn	55	113.486				
Fe	57	107.654				
Co	59	100.110				
Ni	60	92.219				
Cu	63					
Cu	65	82.658				
Zn	66	72.838				
Zn	67					
Zn	68					
> Ge	74		84.2			
As	75	104.799				
Se	77					
Se	82	104.494				
Kr	83					
Sr	88	96.121				
Y	89					
Zr	90	93.430				
Mo	98	92.974				
Ag	107	91.046				
Cd	111	91.994				
Cd	114					
> In	115		88.2			
Sn	120	96.900				
Sb	121	101.766				
Sb	123					
Ba	135					
Ba	137	103.337				
Ho	165					
> Lu	175		85.7			
Tl	205	96.959				
Pb	208	99.649				
Th	232	102.676				
U	238	111.612				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	
QC Std 5	V		51ICSAB is out of limits
QC Std 5	Zn		66ICSAB is out of limits

QC Action

Sample ID: QC Std 5
Report Date/Time: Thursday, February 25, 2010 18:35:18
Page 3

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 18:38:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.096

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	44.522	ug/L	4.092	4583	0.028
Be	9	51.034	ug/L	1.609	2727	0.016
B	11	95.453	ug/L	0.110	6141	0.036
Na	23	4791.865	ug/L	5.624	2654177	16.044
Mg	24	4690.629	ug/L	6.318	2020570	12.227
Al	27	5271.682	ug/L	1.925	2933867	17.747
P	31	4773.354	ug/L	0.909	187591	1.127
K	39	5539.481	ug/L	5.875	4375623	26.203
Ca	43	4978.563	ug/L	2.551	9743	0.059
> Sc	45		ug/L		165289	165289.432
Ti	47	48.194	ug/L	1.968	5730	0.034
V	51	48.989	ug/L	4.535	53312	0.333
Cr	52	49.808	ug/L	0.762	60163	0.354
Cr	53		ug/L		14772	0.017
Mn	55	50.791	ug/L	0.524	81874	0.495
Fe	57	4923.425	ug/L	0.341	147331	0.888
Co	59	50.247	ug/L	1.432	56280	0.340
Ni	60	51.011	ug/L	1.931	12158	0.073
Cu	63		ug/L		30140	0.182
Cu	65	50.833	ug/L	0.918	15860	0.096
Zn	66	53.485	ug/L	1.072	10843	0.130
Zn	67		ug/L		3812	0.019
Zn	68		ug/L		8366	0.099
> Ge	74		ug/L		82445	82444.742
As	75	48.405	ug/L	1.464	12632	0.153
Se	77		ug/L		1912	0.009
Se	82	49.647	ug/L	2.609	1357	0.016
Kr	83		ug/L		17	-0.000
Sr	88	52.241	ug/L	0.469	170196	2.282
Y	89		ug/L		16	0.000
Zr	90	41.002	ug/L	11.008	73605	0.986
Mo	98	49.496	ug/L	1.288	44458	0.596
Ag	107	49.781	ug/L	0.808	86299	1.159
Cd	111	50.524	ug/L	0.962	21520	0.289
Cd	114		ug/L		52074	0.699
> In	115		ug/L		74484	74483.530
Sn	120	49.993	ug/L	0.232	89607	1.202
Sb	121	48.877	ug/L	5.758	61127	0.819
Sb	123		ug/L		46809	0.627
Ba	135		ug/L		18469	0.121
Ba	137	51.805	ug/L	0.088	32521	0.214
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		152076	152076.285
Tl	205	48.513	ug/L	0.784	331475	2.176
Pb	208	50.274	ug/L	0.985	398580	2.620
Th	232	51.371	ug/L	0.669	458357	3.012
U	238	52.037	ug/L	1.053	502153	3.300

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 18:41:02

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li	7	89.044				
|	Be	9	102.068				
|	B	11	95.453				
|	Na	23	95.837				
|	Mg	24	93.813				
|	Al	27	104.390				
|	P	31	95.467				
|	K	39	110.790				
|	Ca	43	99.571				
>	Sc	45		97.7			
|	Ti	47	96.388				
|	V	51	97.977				
|	Cr	52	99.616				
|	Cr	53					
|	Mn	55	101.582				
|	Fe	57	98.469				
|	Co	59	100.494				
|	Ni	60	102.022				
|	Cu	63					
|	Cu	65	101.666				
|	Zn	66	106.970				
|	Zn	67					
|	Zn	68					
>	Ge	74		103.0			
|	As	75	96.810				
|	Se	77					
|	Se	82	99.294				
|	Kr	83					
|	Sr	88	104.482				
|	Y	89					
|	Zr	90	82.004				
|	Mo	98	98.993				
|	Ag	107	99.562				
|	Cd	111	101.048				
|	Cd	114					
>	In	115		103.3			
|	Sn	120	99.986				
|	Sb	121	97.754				
|	Sb	123					
|	Ba	135					
|	Ba	137	103.611				
|	Ho	165					
>	Lu	175		102.7			
|	Tl	205	97.025				
|	Pb	208	100.549				
|	Th	232	102.741				
|	U	238	104.075				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	K	39	39CCV is out of limits (+/- 10%)
QC Std 6	Zr	90	90CCV is out of limits (+/- 10%)

QC Action

Sample ID: QC Std 6
 Report Date/Time: Thursday, February 25, 2010 18:41:02
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QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 18:44:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.097

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.023	ug/L	39.070	2	-0.000
Be	9	0.011	ug/L	420.139	3	0.000
B	11	2.973	ug/L	32.302	335	0.001
Na	23	4.377	ug/L	120.340	6001	0.015
Mg	24	0.689	ug/L	181.578	667	0.002
Al	27	-0.611	ug/L	158.692	333	-0.002
P	31	-2.918	ug/L	90.671	1270	-0.001
K	39	-1.968	ug/L	127.494	44068	-0.009
Ca	43	1.505	ug/L	426.361	31	0.000
> Sc	45		ug/L		175406	175406.186
Ti	47	0.435	ug/L	17.807	100	0.000
V	51	0.893	ug/L	91.533	-797	0.006
Cr	52	0.152	ug/L	37.239	1950	0.001
Cr	53		ug/L		9563	-0.017
Mn	55	-0.006	ug/L	67.289	106	-0.000
Fe	57	1.915	ug/L	59.603	655	0.000
Co	59	0.001	ug/L	221.408	13	0.000
Ni	60	-0.005	ug/L	88.058	22	-0.000
Cu	63		ug/L		129	-0.000
Cu	65	0.006	ug/L	95.834	66	0.000
Zn	66	-0.055	ug/L	151.991	139	-0.000
Zn	67		ug/L		2063	-0.003
Zn	68		ug/L		196	-0.001
> Ge	74		ug/L		85009	85009.051
As	75	0.511	ug/L	64.232	175	0.002
Se	77		ug/L		1036	-0.002
Se	82	0.793	ug/L	29.404	31	0.000
Kr	83		ug/L		16	-0.000
Sr	88	-0.001	ug/L	562.708	198	-0.000
Y	89		ug/L		5	-0.000
Zr	90	0.322	ug/L	4.882	714	0.008
Mo	98	0.291	ug/L	9.434	331	0.003
Ag	107	0.003	ug/L	93.548	15	0.000
Cd	111	-0.003	ug/L	32.094	1	-0.000
Cd	114		ug/L		9	-0.000
> In	115		ug/L		75173	75173.427
Sn	120	0.047	ug/L	9.696	171	0.001
Sb	121	0.791	ug/L	6.206	1071	0.013
Sb	123		ug/L		810	0.010
Ba	135		ug/L		12	-0.000
Ba	137	0.001	ug/L	464.184	20	0.000
Ho	165		ug/L		4	0.000
> Lu	175		ug/L		153862	153861.819
Tl	205	0.147	ug/L	30.585	1613	0.007
Pb	208	0.003	ug/L	41.641	145	0.000
Th	232	0.252	ug/L	4.686	2606	0.015
U	238	0.007	ug/L	53.832	364	0.000

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 18:46:48

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45	103.7			
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
[	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74	106.2			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	104.3			
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	103.9			
|	Tl	205				
|	Pb	208				
|	Th	232				
[	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Thursday, February 25, 2010 18:49:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 10.098

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	856.067	ug/L	0.298	66155	0.533
Be	9	878.339	ug/L	1.833	35231	0.284
B	11	1.294	ug/L	28.151	158	0.000
Na	23	46706.458	ug/L	2.629	19417404	156.377
Mg	24	42219.572	ug/L	1.079	13664838	110.057
Al	27	46441.742	ug/L	1.312	19411800	156.342
P	31	22541.878	ug/L	1.745	661752	5.322
K	39	50100.173	ug/L	3.527	29455084	236.987
Ca	43	48713.820	ug/L	0.702	71437	0.575
> Sc	45		ug/L		124158	124157.766
Ti	47	45.067	ug/L	3.094	4026	0.032
V	51	990.139	ug/L	1.648	834673	6.733
Cr	52	984.083	ug/L	1.375	869503	6.993
Cr	53		ug/L		105156	0.775
Mn	55	965.936	ug/L	0.812	1168094	9.407
Fe	57	47016.443	ug/L	0.634	1053262	8.480
Co	59	901.927	ug/L	0.446	758752	6.111
Ni	60	888.180	ug/L	1.246	158769	1.279
Cu	63		ug/L		368810	2.970
Cu	65	834.104	ug/L	1.355	194794	1.569
Zn	66	1947.136	ug/L	1.004	319286	4.724
Zn	67		ug/L		58532	0.839
Zn	68		ug/L		264927	3.918
> Ge	74		ug/L		67569	67568.767
As	75	896.085	ug/L	0.235	191125	2.828
Se	77		ug/L		9184	0.122
Se	82	465.184	ug/L	1.290	10367	0.153
Kr	83		ug/L		24	0.000
Sr	88	906.895	ug/L	1.113	2486017	39.622
Y	89		ug/L		68	0.001
Zr	90	436.796	ug/L	0.180	658848	10.499
Mo	98	922.156	ug/L	0.110	696724	11.104
Ag	107	229.644	ug/L	0.841	335330	5.344
Cd	111	945.970	ug/L	1.202	339353	5.409
Cd	114		ug/L		803573	12.808
> In	115		ug/L		62742	62741.886
Sn	120	906.543	ug/L	0.846	1367475	21.795
Sb	121	236.287	ug/L	2.462	248610	3.961
Sb	123		ug/L		190124	3.029
Ba	135		ug/L		299035	2.266
Ba	137	965.632	ug/L	0.964	525755	3.984
Ho	165		ug/L		34	0.000
> Lu	175		ug/L		131987	131987.318
Tl	205	461.633	ug/L	1.299	2733036	20.702
Pb	208	4855.844	ug/L	1.088	33406579	253.081
Th	232	2496.484	ug/L	1.097	19319275	146.355
U	238	5327.679	ug/L	1.519	44593822	337.829

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 18:52:32

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 18:52:32

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	85.607				
Be	9	87.834				
B	11					
Na	23	93.413				
Mg	24	84.439				
Al	27	92.883				
P	31	90.168				
K	39	100.200				
Ca	43	97.428				
> Sc	45		73.4			
Ti	47					
V	51	99.014				
Cr	52	98.408				
Cr	53					
Mn	55	96.594				
Fe	57	94.033				
Co	59	90.193				
Ni	60	88.818				
Cu	63					
Cu	65	83.410				
Zn	66	77.885				
Zn	67					
Zn	68					
> Ge	74		84.4			
As	75	89.609				
Se	77					
Se	82	93.037				
Kr	83					
Sr	88	90.689				
Y	89					
Zr	90	87.359				
Mo	98	92.216				
Ag	107	91.857				
Cd	111	94.597				
Cd	114					
> In	115		87.0			
Sn	120	90.654				
Sb	121	94.515				
Sb	123					
Ba	135					
Ba	137	96.563				
Ho	165					
> Lu	175		89.1			
Tl	205	92.327				
Pb	208	97.117				
Th	232	99.859				
U	238	106.554				

QC Out Of Limits

Measurement Type	Analyte	Mass Out of Limits Message
QC Std 10	Li	7LRS is out of limits (+/- 10%)
QC Std 10	Be	9LRS is out of limits (+/- 10%)
QC Std 10	Mg	24LRS is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45
QC Std 10	Ni	60LRS is out of limits (+/- 10%)
QC Std 10	Cu	65LRS is out of limits (+/- 10%)
QC Std 10	Zn	66LRS is out of limits (+/- 10%)

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 18:52:32

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QC Std 10	As	75LRS is out of limits (+/- 10%)
QC Std 10	Zr	90LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Thursday, February 25, 2010 18:55:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 11.099

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	45.339	ug/L	2.169	4526	0.028
Be	9	52.646	ug/L	2.053	2727	0.017
B	11	99.680	ug/L	4.261	6210	0.038
Na	23	5274.640	ug/L	5.716	2833783	17.660
Mg	24	4890.389	ug/L	10.798	2041921	12.748
Al	27	5383.259	ug/L	10.235	2903271	18.122
P	31	4861.536	ug/L	2.814	185239	1.148
K	39	5436.387	ug/L	1.685	4162426	25.716
Ca	43	5051.611	ug/L	0.336	9585	0.060
> Sc	45		ug/L		160262	160261.935
Ti	47	47.750	ug/L	2.221	5505	0.034
V	51	49.376	ug/L	2.916	52110	0.336
Cr	52	49.742	ug/L	2.165	58259	0.353
Cr	53		ug/L		14041	0.016
Mn	55	50.034	ug/L	1.391	78204	0.487
Fe	57	4909.811	ug/L	1.398	142472	0.886
Co	59	49.714	ug/L	0.355	53994	0.337
Ni	60	51.209	ug/L	1.810	11836	0.074
Cu	63		ug/L		29348	0.182
Cu	65	50.680	ug/L	1.393	15331	0.095
Zn	66	53.396	ug/L	2.494	10466	0.130
Zn	67		ug/L		3760	0.020
Zn	68		ug/L		8187	0.100
> Ge	74		ug/L		79722	79721.683
As	75	48.940	ug/L	0.980	12348	0.154
Se	77		ug/L		1886	0.010
Se	82	54.389	ug/L	1.328	1437	0.018
Kr	83		ug/L		17	-0.000
Sr	88	52.286	ug/L	1.680	164575	2.284
Y	89		ug/L		13	0.000
Zr	90	53.728	ug/L	4.195	93019	1.291
Mo	98	50.524	ug/L	1.087	43854	0.608
Ag	107	50.093	ug/L	0.309	83932	1.166
Cd	111	51.180	ug/L	0.437	21068	0.293
Cd	114		ug/L		50919	0.707
> In	115		ug/L		71984	71984.014
Sn	120	50.858	ug/L	1.567	88085	1.223
Sb	121	51.391	ug/L	2.809	62120	0.862
Sb	123		ug/L		47661	0.661
Ba	135		ug/L		17709	0.118
Ba	137	51.051	ug/L	1.733	31579	0.211
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		149833	149833.016
Tl	205	48.867	ug/L	1.697	329008	2.191
Pb	208	50.497	ug/L	1.226	394500	2.632
Th	232	52.676	ug/L	0.667	463046	3.088
U	238	52.850	ug/L	1.367	502489	3.351

Sample ID: QC Std 11

Report Date/Time: Thursday, February 25, 2010 18:58:14

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7	90.678				
|	Be	9	105.293				
|	B	11	99.680				
|	Na	23	105.493				
|	Mg	24	97.808				
|	Al	27	106.599				
|	P	31	97.231				
|	K	39	108.728				
|	Ca	43	101.032				
>	Sc	45		94.8			
|	Ti	47	95.499				
|	V	51	98.751				
|	Cr	52	99.484				
|	Cr	53					
|	Mn	55	100.068				
|	Fe	57	98.196				
|	Co	59	99.428				
|	Ni	60	102.419				
|	Cu	63					
|	Cu	65	101.360				
[	Zn	66	106.793				
|	Zn	67					
|	Zn	68					
>	Ge	74		99.6			
|	As	75	97.880				
|	Se	77					
|	Se	82	108.779				
|	Kr	83					
[	Sr	88	104.571				
|	Y	89					
|	Zr	90	107.455				
|	Mo	98	101.049				
|	Ag	107	100.187				
|	Cd	111	102.361				
|	Cd	114					
>	In	115		99.9			
|	Sn	120	101.716				
|	Sb	121	102.781				
|	Sb	123					
[	Ba	135					
|	Ba	137	102.102				
|	Ho	165					
>	Lu	175		101.2			
|	Tl	205	97.734				
|	Pb	208	100.995				
|	Th	232	105.352				
|	U	238	105.700				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Thursday, February 25, 2010 19:01:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 12.100

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.038	ug/L	80.716	8	0.000
Be	9	0.006	ug/L	168.529	2	0.000
B	11	2.912	ug/L	26.408	318	0.001
Na	23	-0.564	ug/L	313.821	3000	-0.002
Mg	24	2.277	ug/L	115.364	1333	0.006
Al	27	1.192	ug/L	227.426	1333	0.004
P	31	-3.580	ug/L	17.852	1193	-0.001
K	39	-7.699	ug/L	47.772	37717	-0.036
Ca	43	2.081	ug/L	147.390	31	0.000
> Sc	45		ug/L		168266	168265.856
Ti	47	0.102	ug/L	98.987	56	0.000
V	51	0.747	ug/L	70.479	-942	0.005
Cr	52	0.342	ug/L	0.494	2097	0.002
Cr	53		ug/L		9115	-0.018
Mn	55	-0.001	ug/L	387.126	108	-0.000
Fe	57	0.620	ug/L	107.180	589	0.000
Co	59	0.008	ug/L	27.660	20	0.000
Ni	60	0.013	ug/L	144.384	25	0.000
Cu	63		ug/L		139	0.000
Cu	65	0.043	ug/L	36.514	75	0.000
Zn	66	-0.069	ug/L	205.899	132	-0.000
Zn	67		ug/L		2112	-0.002
Zn	68		ug/L		208	-0.000
> Ge	74		ug/L		82528	82527.552
As	75	0.093	ug/L	701.314	60	0.000
Se	77		ug/L		921	-0.003
Se	82	1.242	ug/L	9.234	42	0.000
Kr	83		ug/L		16	-0.000
Sr	88	0.005	ug/L	87.915	210	0.000
Y	89		ug/L		6	0.000
Zr	90	0.543	ug/L	5.969	1087	0.013
Mo	98	0.547	ug/L	13.249	549	0.007
Ag	107	0.007	ug/L	23.075	22	0.000
Cd	111	0.010	ug/L	28.605	6	0.000
Cd	114		ug/L		10	-0.000
> In	115		ug/L		73442	73441.855
Sn	120	0.303	ug/L	15.432	618	0.007
Sb	121	1.275	ug/L	6.863	1642	0.021
Sb	123		ug/L		1245	0.016
Ba	135		ug/L		13	-0.000
Ba	137	0.007	ug/L	45.422	23	0.000
Ho	165		ug/L		2	-0.000
> Lu	175		ug/L		149262	149262.304
Tl	205	0.289	ug/L	21.839	2517	0.013
Pb	208	0.017	ug/L	9.307	252	0.001
Th	232	0.478	ug/L	5.159	4508	0.028
U	238	0.048	ug/L	8.499	735	0.003

Sample ID: QC Std 12

Report Date/Time: Thursday, February 25, 2010 19:04:00

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass QC Std	% Recovery	Int Std	% Recovery	Spike	% Recovery	Dilution	% Diff	Dup. Rel.	% Diff
Li	7									
Be	9									
B	11									
Na	23									
Mg	24									
Al	27									
P	31									
K	39									
Ca	43									
> Sc	45							99.5		
Ti	47									
V	51									
Cr	52									
Cr	53									
Mn	55									
Fe	57									
Co	59									
Ni	60									
Cu	63									
Cu	65									
Zn	66									
Zn	67									
Zn	68									
> Ge	74							103.1		
As	75									
Se	77									
Se	82									
Kr	83									
Sr	88									
Y	89									
Zr	90									
Mo	98									
Ag	107									
Cd	111									
Cd	114									
> In	115							101.9		
Sn	120									
Sb	121									
Sb	123									
Ba	135									
Ba	137									
Ho	165									
> Lu	175							100.8		
Tl	205									
Pb	208									
Th	232									
U	238									

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 12	Mo	98CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

Sample ID: QC Std 12
 Report Date/Time: Thursday, February 25, 2010 19:04:00
 Page 3

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 20:04:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.111

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	44.471	ug/L	0.245	4767	0.028
Be	9	52.981	ug/L	1.107	2947	0.017
B	11	94.993	ug/L	4.820	6361	0.036
Na	23	5121.689	ug/L	7.474	2953521	17.148
Mg	24	4655.406	ug/L	9.806	2088599	12.136
Al	27	5497.510	ug/L	3.675	3185439	18.507
P	31	4845.035	ug/L	3.167	198205	1.144
K	39	5124.952	ug/L	4.085	4216571	24.242
Ca	43	4931.807	ug/L	3.169	10048	0.058
> Sc	45		ug/L		172065	172064.745
Ti	47	48.688	ug/L	2.002	6025	0.035
V	51	49.379	ug/L	0.905	55942	0.336
Cr	52	49.562	ug/L	1.997	62331	0.352
Cr	53		ug/L		15168	0.016
Mn	55	49.745	ug/L	1.380	83478	0.484
Fe	57	4891.489	ug/L	0.722	152379	0.882
Co	59	49.352	ug/L	0.889	57548	0.334
Ni	60	50.303	ug/L	1.066	12483	0.072
Cu	63		ug/L		31020	0.180
Cu	65	50.278	ug/L	0.554	16331	0.095
Zn	66	53.122	ug/L	1.719	11156	0.129
Zn	67		ug/L		4045	0.020
Zn	68		ug/L		8601	0.098
> Ge	74		ug/L		85418	85418.194
As	75	46.724	ug/L	0.970	12635	0.147
Se	77		ug/L		1960	0.009
Se	82	48.655	ug/L	5.430	1380	0.016
Kr	83		ug/L		22	0.000
Sr	88	52.157	ug/L	1.074	173768	2.279
Y	89		ug/L		13	0.000
Zr	90	47.836	ug/L	3.167	87723	1.150
Mo	98	48.994	ug/L	2.472	45005	0.590
Ag	107	49.573	ug/L	1.354	87875	1.154
Cd	111	50.943	ug/L	0.591	22189	0.291
Cd	114		ug/L		53623	0.704
> In	115		ug/L		76170	76170.386
Sn	120	49.921	ug/L	2.623	91497	1.200
Sb	121	47.416	ug/L	7.612	60655	0.795
Sb	123		ug/L		46398	0.608
Ba	135		ug/L		18724	0.120
Ba	137	50.651	ug/L	1.309	32704	0.209
Ho	165		ug/L		10	0.000
> Lu	175		ug/L		156440	156439.554
Tl	205	47.993	ug/L	0.328	337317	2.152
Pb	208	49.743	ug/L	0.513	405682	2.593
Th	232	50.148	ug/L	1.992	460430	2.940
U	238	52.033	ug/L	1.053	516358	3.299

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 20:07:23

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	88.943				
Be	9	105.962				
B	11	94.993				
Na	23	102.434				
Mg	24	93.108				
Al	27	108.862				
P	31	96.901				
K	39	102.499				
Ca	43	98.636				
Sc	45		101.7			
Ti	47	97.377				
V	51	98.759				
Cr	52	99.124				
Cr	53					
Mn	55	99.491				
Fe	57	97.830				
Co	59	98.704				
Ni	60	100.607				
Cu	63					
Cu	65	100.556				
Zn	66	106.244				
Zn	67					
Zn	68					
Ge	74		106.7			
As	75	93.448				
Se	77					
Se	82	97.309				
Kr	83					
Sr	88	104.315				
Y	89					
Zr	90	95.672				
Mo	98	97.989				
Ag	107	99.147				
Cd	111	101.885				
Cd	114					
In	115		105.7			
Sn	120	99.841				
Sb	121	94.833				
Sb	123					
Ba	135					
Ba	137	101.302				
Ho	165					
Lu	175		105.6			
Tl	205	95.986				
Pb	208	99.486				
Th	232	100.296				
U	238	104.066				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 6
Report Date/Time: Thursday, February 25, 2010 20:07:23
Page 3

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 20:10:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.112

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.014	ug/L	228.122	6	0.000
Be	9	-0.001	ug/L	1339.622	2	-0.000
B	11	2.923	ug/L	19.038	332	0.001
Na	23	-0.193	ug/L	1356.460	3334	-0.001
Mg	24	0.696	ug/L	361.484	667	0.002
Al	27	1.657	ug/L	58.987	1667	0.006
P	31	-4.365	ug/L	28.784	1209	-0.001
K	39	-2.693	ug/L	317.032	43400	-0.013
Ca	43	4.715	ug/L	108.684	38	0.000
> Sc	45		ug/L		175027	175027.448
Ti	47	0.004	ug/L	996.257	46	0.000
V	51	0.128	ug/L	100.585	-1716	0.001
Cr	52	0.018	ug/L	110.660	1778	0.000
Cr	53		ug/L		9526	-0.017
Mn	55	-0.003	ug/L	237.541	110	-0.000
Fe	57	0.087	ug/L	2467.118	596	0.000
Co	59	0.006	ug/L	19.486	20	0.000
Ni	60	-0.016	ug/L	76.045	19	-0.000
Cu	63		ug/L		128	-0.000
Cu	65	0.025	ug/L	107.968	72	0.000
Zn	66	-0.123	ug/L	55.807	126	-0.000
Zn	67		ug/L		2159	-0.002
Zn	68		ug/L		219	-0.000
> Ge	74		ug/L		85718	85717.625
As	75	0.324	ug/L	134.568	127	0.001
Se	77		ug/L		927	-0.003
Se	82	0.830	ug/L	17.309	32	0.000
Kr	83		ug/L		17	-0.000
Sr	88	0.002	ug/L	66.099	210	0.000
Y	89		ug/L		7	0.000
Zr	90	0.422	ug/L	3.460	907	0.010
Mo	98	0.187	ug/L	26.032	240	0.002
Ag	107	0.005	ug/L	69.530	20	0.000
Cd	111	0.006	ug/L	199.717	5	0.000
Cd	114		ug/L		12	0.000
> In	115		ug/L		76194	76193.532
Sn	120	0.063	ug/L	4.620	203	0.002
Sb	121	0.818	ug/L	10.226	1120	0.014
Sb	123		ug/L		847	0.010
Ba	135		ug/L		15	0.000
Ba	137	0.004	ug/L	127.049	22	0.000
Ho	165		ug/L		3	-0.000
> Lu	175		ug/L		154884	154884.294
Tl	205	0.121	ug/L	30.709	1448	0.005
Pb	208	0.009	ug/L	9.112	193	0.000
Th	232	0.249	ug/L	8.098	2596	0.015
U	238	0.012	ug/L	15.257	411	0.001

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 20:13:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45			103.5		
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74			107.1		
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115			105.7		
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175			104.6		
|	Tl	205					
|	Pb	208					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 20:13:10

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ICPMS#3 - Summary Report

Sample ID: 1202032619

Sample Date/Time: Thursday, February 25, 2010 20:17:28

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\1202032619.113

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Li	7	-0.010 ug/L	137.626	3	-0.000
|	Be	9	0.059 ug/L	122.394	5	0.000
|	B	11	0.677 ug/L	5.181	179	0.000
|	Na	23	5.098 ug/L	49.968	6335	0.017
|	Mg	24	4.509 ug/L	161.359	2334	0.012
|	Al	27	7.437 ug/L	59.908	5001	0.025
|	P	31	15.881 ug/L	11.853	2010	0.004
|	K	39	7.697 ug/L	124.254	51093	0.036
|	Ca	43	11.993 ug/L	97.641	52	0.000
>	Sc	45	ug/L		172027	172027.401
|	Ti	47	0.521 ug/L	19.005	109	0.000
|	V	51	1.143 ug/L	51.864	-497	0.008
|	Cr	52	0.131 ug/L	50.736	1886	0.001
|	Cr	53	ug/L		7215	-0.030
|	Mn	55	0.590 ug/L	3.339	1101	0.006
|	Fe	57	29.228 ug/L	3.960	1490	0.005
|	Co	59	0.057 ug/L	9.920	78	0.000
|	Ni	60	0.246 ug/L	6.629	83	0.000
|	Cu	63	ug/L		323	0.001
[	Cu	65	0.323 ug/L	13.238	167	0.001
|	Zn	66	1.245 ug/L	8.833	391	0.003
|	Zn	67	ug/L		1656	-0.007
|	Zn	68	ug/L		376	0.002
>	Ge	74	ug/L		81634	81634.452
|	As	75	-0.211 ug/L	133.666	-17	-0.001
|	Se	77	ug/L		644	-0.006
|	Se	82	0.014 ug/L	3081.639	9	0.000
[	Kr	83	ug/L		19	0.000
|	Sr	88	0.095 ug/L	7.160	513	0.004
|	Y	89	ug/L		40	0.000
|	Zr	90	1.470 ug/L	3.987	2808	0.035
|	Mo	98	0.133 ug/L	4.390	190	0.002
|	Ag	107	0.026 ug/L	23.367	56	0.001
|	Cd	111	0.049 ug/L	19.244	23	0.000
|	Cd	114	ug/L		47	0.000
>	In	115	ug/L		75685	75685.152
|	Sn	120	1.040 ug/L	4.009	1978	0.025
|	Sb	121	0.245 ug/L	8.080	387	0.004
[	Sb	123	ug/L		291	0.003
|	Ba	135	ug/L		123	0.001
|	Ba	137	0.322 ug/L	4.474	225	0.001
|	Ho	165	ug/L		6	0.000
>	Lu	175	ug/L		154582	154582.471
|	Tl	205	0.041 ug/L	1.317	891	0.002
|	Pb	208	0.047 ug/L	2.941	502	0.002
|	Th	232	0.180 ug/L	2.484	1970	0.011
[	U	238	-0.010 ug/L	15.977	193	-0.001

Sample ID: 1202032619

Report Date/Time: Thursday, February 25, 2010 20:20:12

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45	101.7			
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74	102.0			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	105.0			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	104.4			
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202032624

Sample Date/Time: Thursday, February 25, 2010 20:23:11

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948769|40|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\1202032624.114

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	2.170	ug/L	4.059	236	0.001
Be	9	20.646	ug/L	3.787	1144	0.007
B	11	32.987	ug/L	2.938	2286	0.013
Na	23	226.088	ug/L	9.138	132952	0.757
Mg	24	974.474	ug/L	4.231	435204	2.540
Al	27	3019.499	ug/L	13.544	1740283	10.165
P	31	180.854	ug/L	2.478	8669	0.043
K	39	1125.086	ug/L	4.366	955624	5.322
Ca	43	2513.826	ug/L	1.507	5110	0.030
> Sc	45		ug/L		171197	171197.414
Ti	47	109.078	ug/L	1.419	13374	0.078
V	51	22.371	ug/L	2.068	24219	0.152
Cr	52	54.960	ug/L	0.837	68581	0.391
Cr	53		ug/L		15405	0.018
Mn	55	132.916	ug/L	2.069	221743	1.294
Fe	57	4215.417	ug/L	0.650	130737	0.760
Co	59	22.513	ug/L	2.769	26124	0.153
Ni	60	32.522	ug/L	2.815	8038	0.047
Cu	63		ug/L		25559	0.149
Cu	65	41.971	ug/L	1.219	13574	0.079
Zn	66	154.071	ug/L	0.742	31504	0.374
Zn	67		ug/L		7190	0.058
Zn	68		ug/L		24232	0.286
> Ge	74		ug/L		83894	83894.159
As	75	25.044	ug/L	3.271	6670	0.079
Se	77		ug/L		2281	0.013
Se	82	69.190	ug/L	1.070	1922	0.023
Kr	83		ug/L		18	-0.000
Sr	88	56.939	ug/L	1.097	186416	2.488
Y	89		ug/L		9684	0.129
Zr	90	3.422	ug/L	3.578	6290	0.082
Mo	98	12.063	ug/L	1.296	10942	0.145
Ag	107	5.291	ug/L	1.290	9227	0.123
Cd	111	14.918	ug/L	1.487	6388	0.085
Cd	114		ug/L		15688	0.209
> In	115		ug/L		74863	74863.101
Sn	120	8.286	ug/L	2.220	15001	0.199
Sb	121	12.892	ug/L	2.526	16256	0.216
Sb	123		ug/L		12285	0.163
Ba	135		ug/L		17340	0.112
Ba	137	48.058	ug/L	2.410	30811	0.198
Ho	165		ug/L		989	0.006
> Lu	175		ug/L		155365	155364.738
Tl	205	28.897	ug/L	0.305	201938	1.296
Pb	208	21.343	ug/L	1.020	172908	1.112
Th	232	1.857	ug/L	10.331	17288	0.109
U	238	0.442	ug/L	1.528	4647	0.028

Sample ID: 1202032624

Report Date/Time: Thursday, February 25, 2010 20:25:55

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			101.2		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			104.8		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			103.9		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			104.9		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte
Ti 47 Upper, S, EEETi

MassOut of Limits Message
47Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 245979001

Sample Date/Time: Thursday, February 25, 2010 20:28:54

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979001.115

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	42.583	ug/L	0.850	4228	0.027
Be	9	2.846	ug/L	6.328	148	0.001
B	11	5.775	ug/L	5.127	475	0.002
Na	23	1096.332	ug/L	7.863	587889	3.671
Mg	24	4176.583	ug/L	1.710	1735791	10.887
Al	27	28312.603	ug/L	4.472	15196278	95.312
P	31	141.046	ug/L	1.742	6573	0.033
K	39	4539.391	ug/L	7.701	3461920	21.473
Ca	43	6086.675	ug/L	4.190	11477	0.072
> Sc	45		ug/L		159386	159385.532
Ti	47	744.981	ug/L	0.438	84794	0.532
V	51	47.824	ug/L	3.159	50146	0.325
Cr	52	21.810	ug/L	1.926	26305	0.155
Cr	53		ug/L		7954	-0.022
Mn	55	829.570	ug/L	1.078	1287938	8.079
Fe	57	43982.876	ug/L	1.084	1264828	7.933
Co	59	12.732	ug/L	0.563	13761	0.086
Ni	60	19.476	ug/L	0.878	4489	0.028
Cu	63		ug/L		8667	0.054
Cu	65	15.406	ug/L	0.937	4675	0.029
Zn	66	124.966	ug/L	2.004	23300	0.303
Zn	67		ug/L		5700	0.047
Zn	68		ug/L		19978	0.259
> Ge	74		ug/L		76419	76418.656
As	75	7.773	ug/L	4.932	1909	0.025
Se	77		ug/L		560	-0.007
Se	82	1.057	ug/L	47.550	34	0.000
Kr	83		ug/L		47	0.000
Sr	88	54.088	ug/L	0.707	167943	2.363
Y	89		ug/L		253509	3.572
Zr	90	91.632	ug/L	5.058	156541	2.203
Mo	98	4.701	ug/L	0.769	4083	0.057
Ag	107	0.381	ug/L	3.083	639	0.009
Cd	111	0.929	ug/L	19.482	379	0.005
Cd	114		ug/L		142	0.002
> In	115		ug/L		70988	70987.824
Sn	120	2.154	ug/L	2.243	3759	0.052
Sb	121	0.432	ug/L	9.158	586	0.007
Sb	123		ug/L		414	0.005
Ba	135		ug/L		80231	0.513
Ba	137	218.825	ug/L	1.483	141198	0.903
Ho	165		ug/L		26905	0.172
> Lu	175		ug/L		156440	156440.388
Tl	205	0.488	ug/L	8.102	4030	0.022
Pb	208	34.434	ug/L	1.301	280814	1.795
Th	232	25.089	ug/L	1.762	230361	1.471
U	238	3.295	ug/L	1.198	32982	0.209

Sample ID: 245979001

Report Date/Time: Thursday, February 25, 2010 20:31:38

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		94.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		95.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		105.6			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message
 Ti 47 Upper, S, EEETi 47Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202032620

Sample Date/Time: Thursday, February 25, 2010 20:34:38

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\1202032620.116

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	37.973	ug/L	2.714	3743	0.024
Be	9	2.220	ug/L	1.547	115	0.001
B	11	5.051	ug/L	10.111	428	0.002
Na	23	1014.049	ug/L	4.991	540386	3.395
Mg	24	3279.833	ug/L	4.383	1352503	8.550
Al	27	24610.512	ug/L	3.511	13112314	82.849
P	31	116.979	ug/L	2.912	5626	0.028
K	39	3847.849	ug/L	8.032	2920466	18.201
Ca	43	5734.368	ug/L	2.011	10738	0.068
> Sc	45		ug/L		158212	158211.952
Ti	47	696.600	ug/L	1.813	78712	0.497
V	51	40.313	ug/L	3.923	41694	0.274
Cr	52	17.143	ug/L	3.240	20863	0.122
Cr	53		ug/L		7054	-0.027
Mn	55	712.299	ug/L	1.652	1097753	6.937
Fe	57	38709.416	ug/L	2.010	1105119	6.982
Co	59	18.134	ug/L	1.403	19452	0.123
Ni	60	15.815	ug/L	1.738	3622	0.023
Cu	63		ug/L		7126	0.044
Cu	65	12.687	ug/L	0.612	3832	0.024
Zn	66	122.400	ug/L	1.860	22787	0.297
Zn	67		ug/L		5426	0.044
Zn	68		ug/L		19192	0.249
> Ge	74		ug/L		76307	76306.788
As	75	6.446	ug/L	3.154	1587	0.020
Se	77		ug/L		512	-0.007
Se	82	0.646	ug/L	14.966	24	0.000
Kr	83		ug/L		36	0.000
Sr	88	45.666	ug/L	1.100	142307	1.995
Y	89		ug/L		250961	3.523
Zr	90	90.564	ug/L	0.501	155216	2.177
Mo	98	4.556	ug/L	1.660	3972	0.055
Ag	107	0.342	ug/L	2.792	576	0.008
Cd	111	0.704	ug/L	9.570	289	0.004
Cd	114		ug/L		107	0.001
> In	115		ug/L		71242	71241.997
Sn	120	2.680	ug/L	0.289	4672	0.064
Sb	121	0.307	ug/L	6.530	438	0.005
Sb	123		ug/L		331	0.004
Ba	135		ug/L		66047	0.419
Ba	137	179.504	ug/L	0.950	116576	0.741
Ho	165		ug/L		26058	0.166
> Lu	175		ug/L		157417	157416.754
Tl	205	0.294	ug/L	2.467	2692	0.013
Pb	208	29.415	ug/L	0.083	241460	1.533
Th	232	23.577	ug/L	0.903	217935	1.382
U	238	4.406	ug/L	1.759	44273	0.279

Sample ID: 1202032620

Report Date/Time: Thursday, February 25, 2010 20:37:23

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			93.6		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			95.3		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			98.8		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			106.3		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Ti 47 Upper, S, EETi		47Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202032622

Sample Date/Time: Thursday, February 25, 2010 20:40:23

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\1202032622.117

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	66.997	ug/L	3.006	6609	0.042
Be	9	22.968	ug/L	4.643	1177	0.007
B	11	42.601	ug/L	4.424	2694	0.016
Na	23	1890.749	ug/L	8.517	1006432	6.330
Mg	24	4934.640	ug/L	9.458	2035733	12.864
Al	27	32566.686	ug/L	0.851	17368631	109.633
P	31	877.472	ug/L	0.733	34083	0.207
K	39	5619.961	ug/L	12.852	4247028	26.584
Ca	43	7515.300	ug/L	3.092	14080	0.089
Sc	45		ug/L		158436	158435.876
Ti	47	843.970	ug/L	1.350	95490	0.602
V	51	75.207	ug/L	3.288	79375	0.511
Cr	52	46.109	ug/L	1.119	53510	0.328
Cr	53		ug/L		10465	-0.006
Mn	55	1660.486	ug/L	1.303	2562369	16.172
Fe	57	45867.571	ug/L	0.917	1311197	8.273
Co	59	37.418	ug/L	0.584	40177	0.254
Ni	60	43.917	ug/L	2.650	10034	0.063
Cu	63		ug/L		19823	0.124
Cu	65	34.965	ug/L	0.640	10475	0.066
Zn	66	154.945	ug/L	1.811	28792	0.376
Zn	67		ug/L		6580	0.059
Zn	68		ug/L		24647	0.320
Ge	74		ug/L		76262	76261.543
As	75	40.279	ug/L	0.589	9729	0.127
Se	77		ug/L		647	-0.006
Se	82	6.963	ug/L	5.840	183	0.002
Kr	83		ug/L		43	0.000
Sr	88	80.080	ug/L	1.348	248854	3.499
Y	89		ug/L		269265	3.788
Zr	90	135.675	ug/L	2.552	231855	3.261
Mo	98	26.882	ug/L	1.881	23070	0.324
Ag	107	22.374	ug/L	1.462	37020	0.521
Cd	111	5.329	ug/L	2.265	2167	0.030
Cd	114		ug/L		4441	0.062
In	115		ug/L		71088	71088.499
Sn	120	18.987	ug/L	1.871	32523	0.456
Sb	121	52.225	ug/L	0.739	62302	0.876
Sb	123		ug/L		47754	0.671
Ba	135		ug/L		107071	0.684
Ba	137	292.023	ug/L	0.640	188607	1.205
Ho	165		ug/L		29054	0.186
Lu	175		ug/L		156561	156561.121
Tl	205	43.791	ug/L	1.041	308070	1.964
Pb	208	128.772	ug/L	0.624	1050950	6.711
Th	232	49.480	ug/L	0.460	454506	2.901
U	238	27.459	ug/L	1.170	272935	1.741

Sample ID: 1202032622

Report Date/Time: Thursday, February 25, 2010 20:43:07

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		93.7			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		95.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		98.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		105.7			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
Ti 47 Upper, S, EE	Ti	47Sample is out of limits (over linear range)_
Mn 55 Upper, S, EE	Mn	55Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 1202032622
 Report Date/Time: Thursday, February 25, 2010 20:43:07
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ICPMS#3 - Summary Report

Sample ID: 1202032623
 Sample Date/Time: Thursday, February 25, 2010 20:46:08
 Sample Type:
 Sample Description: LANL 6020 MSD
 Number of Replicates: 3
 Batch ID: 948769|2|prb
 Method File: c:\elandata\Method\6020.mth
 Dataset File: C:\elandata\Dataset\100225\1202032623.118

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	71.663	ug/L	3.102	6926	0.045
Be	9	22.642	ug/L	4.894	1137	0.007
B	11	44.162	ug/L	4.632	2733	0.017
Na	23	1825.231	ug/L	4.542	951341	6.111
Mg	24	5845.467	ug/L	9.341	2363334	15.238
Al	27	38532.748	ug/L	5.331	20132518	129.717
P	31	872.147	ug/L	2.802	33204	0.206
K	39	6474.159	ug/L	5.190	4791866	30.624
Ca	43	7431.646	ug/L	1.315	13647	0.088
> Sc	45		ug/L		155251	155251.139
Ti	47	863.101	ug/L	1.022	95684	0.616
V	51	81.978	ug/L	2.659	84910	0.557
Cr	52	51.806	ug/L	1.224	58718	0.368
Cr	53		ug/L		11152	-0.000
Mn	55	818.536	ug/L	0.475	1237778	7.972
Fe	57	50823.237	ug/L	1.109	1423702	9.166
Co	59	34.406	ug/L	1.991	36198	0.233
Ni	60	42.635	ug/L	3.311	9546	0.061
Cu	63		ug/L		20942	0.134
Cu	65	37.728	ug/L	3.002	11067	0.071
Zn	66	226.563	ug/L	3.655	41646	0.550
Zn	67		ug/L		8765	0.088
Zn	68		ug/L		35489	0.467
> Ge	74		ug/L		75586	75585.696
As	75	42.602	ug/L	2.603	10193	0.134
Se	77		ug/L		640	-0.006
Se	82	7.308	ug/L	4.992	190	0.002
Kr	83		ug/L		39	0.000
Sr	88	82.348	ug/L	1.147	249232	3.598
Y	89		ug/L		257471	3.720
Zr	90	136.950	ug/L	0.850	228001	3.292
Mo	98	28.068	ug/L	1.637	23462	0.338
Ag	107	22.964	ug/L	1.682	37015	0.534
Cd	111	5.623	ug/L	3.759	2228	0.032
Cd	114		ug/L		4451	0.064
> In	115		ug/L		69233	69232.545
Sn	120	18.220	ug/L	2.546	30402	0.438
Sb	121	49.153	ug/L	2.371	57105	0.824
Sb	123		ug/L		43298	0.625
Ba	135		ug/L		82562	0.550
Ba	137	236.151	ug/L	0.630	146228	0.974
Ho	165		ug/L		27395	0.183
> Lu	175		ug/L		150086	150086.215
Tl	205	44.744	ug/L	1.477	301778	2.007
Pb	208	129.282	ug/L	1.674	1011401	6.738
Th	232	50.990	ug/L	2.392	448977	2.989
U	238	34.730	ug/L	2.057	330852	2.202

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		91.8			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		94.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		96.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		101.3			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEE	Fe	57	Sample is out of limits (over linear range)

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1202032621

Sample Date/Time: Thursday, February 25, 2010 20:51:53

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948769|10|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\1202032621.119

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	9.515	ug/L	3.188	939	0.006
Be	9	0.604	ug/L	8.076	33	0.000
B	11	2.514	ug/L	26.250	274	0.001
Na	23	201.022	ug/L	8.527	109420	0.673
Mg	24	956.621	ug/L	4.813	394386	2.494
Al	27	6346.484	ug/L	4.514	3375817	21.365
P	31	24.373	ug/L	5.978	2163	0.006
K	39	1023.225	ug/L	8.149	804761	4.840
Ca	43	1335.850	ug/L	4.096	2518	0.016
Sc	45		ug/L		157934	157934.376
Ti	47	159.154	ug/L	1.358	17986	0.114
V	51	10.804	ug/L	1.772	9915	0.073
Cr	52	4.171	ug/L	1.532	6265	0.030
Cr	53		ug/L		6522	-0.031
Mn	55	175.227	ug/L	0.659	269608	1.707
Fe	57	9570.222	ug/L	1.921	273068	1.726
Co	59	2.793	ug/L	3.919	3000	0.019
Ni	60	4.477	ug/L	4.021	1039	0.006
Cu	63		ug/L		2133	0.013
Cu	65	3.769	ug/L	0.547	1177	0.007
Zn	66	31.421	ug/L	2.469	6070	0.076
Zn	67		ug/L		2627	0.006
Zn	68		ug/L		4860	0.060
Ge	74		ug/L		77857	77857.134
As	75	1.156	ug/L	8.370	319	0.004
Se	77		ug/L		600	-0.006
Se	82	0.503	ug/L	80.269	21	0.000
Kr	83		ug/L		16	-0.000
Sr	88	11.221	ug/L	0.713	34681	0.490
Y	89		ug/L		53354	0.758
Zr	90	16.334	ug/L	7.229	27761	0.393
Mo	98	0.956	ug/L	4.927	874	0.012
Ag	107	0.064	ug/L	5.292	114	0.001
Cd	111	0.158	ug/L	13.932	65	0.001
Cd	114		ug/L		41	0.000
In	115		ug/L		70361	70361.422
Sn	120	0.457	ug/L	2.175	854	0.011
Sb	121	0.113	ug/L	10.988	203	0.002
Sb	123		ug/L		161	0.001
Ba	135		ug/L		16203	0.110
Ba	137	46.765	ug/L	1.919	28427	0.193
Ho	165		ug/L		5291	0.036
Lu	175		ug/L		147245	147244.545
Tl	205	0.099	ug/L	9.051	1235	0.004
Pb	208	7.213	ug/L	1.834	55468	0.376
Th	232	5.139	ug/L	2.976	44693	0.301
U	238	0.652	ug/L	2.241	6368	0.041

Sample ID: 1202032621

Report Date/Time: Thursday, February 25, 2010 20:54:38

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		93.4			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		97.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.4			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte
Ti 47 Upper, S, EEETi

MassOut of Limits Message
47Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032621

Report Date/Time: Thursday, February 25, 2010 20:54:38

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ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 20:57:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.120

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	42.546	ug/L	2.512	4426	0.026
Be	9	51.772	ug/L	6.322	2794	0.017
B	11	91.364	ug/L	0.821	5944	0.035
Na	23	4688.830	ug/L	6.090	2624243	15.699
Mg	24	4238.260	ug/L	4.437	1844597	11.048
Al	27	5192.576	ug/L	1.875	2920269	17.480
P	31	4874.422	ug/L	1.555	193518	1.151
K	39	5604.310	ug/L	10.841	4466993	26.510
Ca	43	4943.412	ug/L	2.320	9773	0.058
> Sc	45		ug/L		166995	166994.501
Ti	47	48.541	ug/L	1.400	5830	0.035
V	51	50.688	ug/L	2.798	55788	0.345
Cr	52	50.543	ug/L	1.811	61661	0.359
Cr	53		ug/L		14429	0.015
Mn	55	49.815	ug/L	0.600	81127	0.485
Fe	57	4906.697	ug/L	0.491	148344	0.885
Co	59	49.359	ug/L	0.480	55860	0.334
Ni	60	50.744	ug/L	1.580	12219	0.073
Cu	63		ug/L		30240	0.180
Cu	65	50.344	ug/L	1.699	15869	0.095
Zn	66	52.448	ug/L	2.325	10836	0.127
Zn	67		ug/L		3827	0.018
Zn	68		ug/L		8457	0.098
> Ge	74		ug/L		84021	84021.278
As	75	47.214	ug/L	1.401	12556	0.149
Se	77		ug/L		1929	0.009
Se	82	47.911	ug/L	3.160	1336	0.016
Kr	83		ug/L		15	-0.000
Sr	88	52.241	ug/L	0.867	169006	2.282
Y	89		ug/L		11	0.000
Zr	90	50.959	ug/L	1.749	90711	1.225
Mo	98	49.434	ug/L	1.388	44092	0.595
Ag	107	50.318	ug/L	0.786	86632	1.171
Cd	111	51.833	ug/L	0.554	21922	0.296
Cd	114		ug/L		52549	0.710
> In	115		ug/L		73965	73965.378
Sn	120	49.269	ug/L	1.673	87686	1.185
Sb	121	47.800	ug/L	4.838	59378	0.801
Sb	123		ug/L		45587	0.615
Ba	135		ug/L		18128	0.121
Ba	137	51.392	ug/L	1.172	31660	0.212
Ho	165		ug/L		9	0.000
> Lu	175		ug/L		149273	149272.986
Tl	205	48.008	ug/L	1.293	321967	2.153
Pb	208	50.186	ug/L	1.336	390555	2.616
Th	232	49.919	ug/L	1.830	437301	2.926
U	238	52.097	ug/L	2.183	493392	3.304

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 21:00:22

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	85.092				
Be	9	103.544				
B	11	91.364				
Na	23	93.777				
Mg	24	84.765				
Al	27	102.823				
P	31	97.488				
K	39	112.086				
Ca	43	98.868				
> Sc	45		98.7			
Ti	47	97.082				
V	51	101.376				
Cr	52	101.086				
Cr	53					
Mn	55	99.631				
Fe	57	98.134				
Co	59	98.718				
Ni	60	101.488				
Cu	63					
Cu	65	100.687				
Zn	66	104.896				
Zn	67					
Zn	68					
> Ge	74		105.0			
As	75	94.429				
Se	77					
Se	82	95.823				
Kr	83					
Sr	88	104.483				
Y	89					
Zr	90	101.917				
Mo	98	98.868				
Ag	107	100.636				
Cd	111	103.666				
Cd	114					
> In	115		102.6			
Sn	120	98.539				
Sb	121	95.600				
Sb	123					
Ba	135					
Ba	137	102.784				
Ho	165					
> Lu	175		100.8			
Tl	205	96.015				
Pb	208	100.373				
Th	232	99.838				
U	238	104.195				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	Mg	24CCV is out of limits (+/- 10%)
QC Std 6	K	39CCV is out of limits (+/- 10%)

QC Action

Sample ID: QC Std 6
 Report Date/Time: Thursday, February 25, 2010 21:00:22
 Page 3

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 21:03:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.121

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.005	ug/L	350.746	5	0.000
Be	9	-0.007	ug/L	154.682	2	-0.000
B	11	2.367	ug/L	31.642	291	0.001
Na	23	-0.123	ug/L	3268.784	3334	-0.000
Mg	24	0.727	ug/L	353.394	667	0.002
Al	27	0.551	ug/L	312.542	1000	0.002
P	31	-5.787	ug/L	54.240	1136	-0.001
K	39	-12.664	ug/L	71.551	34710	-0.060
Ca	43	1.660	ug/L	89.504	31	0.000
> Sc	45		ug/L		172894	172894.000
Ti	47	0.016	ug/L	354.255	47	0.000
V	51	1.071	ug/L	20.814	-586	0.007
Cr	52	0.373	ug/L	11.748	2192	0.003
Cr	53		ug/L		8586	-0.022
Mn	55	0.006	ug/L	15.099	124	0.000
Fe	57	-0.988	ug/L	13.815	555	-0.000
Co	59	0.003	ug/L	115.651	15	0.000
Ni	60	-0.010	ug/L	147.112	20	-0.000
Cu	63		ug/L		130	-0.000
Cu	65	-0.010	ug/L	21.628	59	-0.000
Zn	66	-0.093	ug/L	25.642	130	-0.000
Zn	67		ug/L		2029	-0.004
Zn	68		ug/L		208	-0.000
> Ge	74		ug/L		84180	84180.141
As	75	-0.214	ug/L	58.443	-19	-0.001
Se	77		ug/L		885	-0.004
Se	82	0.573	ug/L	30.562	25	0.000
Kr	83		ug/L		17	-0.000
Sr	88	-0.004	ug/L	26.744	184	-0.000
Y	89		ug/L		8	0.000
Zr	90	0.411	ug/L	8.057	861	0.010
Mo	98	0.151	ug/L	25.270	201	0.002
Ag	107	0.006	ug/L	9.494	21	0.000
Cd	111	0.009	ug/L	124.706	6	0.000
Cd	114		ug/L		10	-0.000
> In	115		ug/L		74021	74021.188
Sn	120	0.041	ug/L	12.977	159	0.001
Sb	121	0.747	ug/L	10.136	1000	0.013
Sb	123		ug/L		791	0.010
Ba	135		ug/L		16	0.000
Ba	137	0.004	ug/L	116.390	22	0.000
Ho	165		ug/L		3	-0.000
> Lu	175		ug/L		148318	148317.901
Tl	205	0.070	ug/L	37.777	1050	0.003
Pb	208	0.011	ug/L	18.053	201	0.001
Th	232	0.185	ug/L	9.669	1933	0.011
U	238	0.013	ug/L	22.939	402	0.001

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 21:06:08

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 21:06:08

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QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45	102.2			
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74	105.2			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	102.7			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	100.2			
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 245979002

Sample Date/Time: Thursday, February 25, 2010 21:09:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979002.122

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	99.269	ug/L	0.409	9190	0.062
Be	9	18.366	ug/L	5.534	883	0.006
B	11	23.012	ug/L	6.272	1419	0.009
Na	23	283.588	ug/L	21.066	143736	0.949
Mg	24	15460.460	ug/L	5.077	5988831	40.302
Al	27	141265.528	ug/L	1.292	70711985	475.557
P	31	347.007	ug/L	1.422	13364	0.082
K	39	12849.347	ug/L	3.012	9072734	60.781
Ca	43	23177.074	ug/L	1.277	40715	0.274
> Sc	45		ug/L		148697	148696.582
Ti	47	729.108	ug/L	1.101	77433	0.520
V	51	187.623	ug/L	0.546	188146	1.276
Cr	52	91.835	ug/L	1.824	98551	0.653
Cr	53		ug/L		15731	0.034
Mn	55	490.356	ug/L	1.788	710404	4.776
Fe	57	100922.000	ug/L	0.526	2707225	18.202
Co	59	16.147	ug/L	0.826	16279	0.109
Ni	60	50.841	ug/L	1.243	10903	0.073
Cu	63		ug/L		287590	1.933
Cu	65	530.230	ug/L	0.054	148324	0.997
Zn	66	232.201	ug/L	2.876	38951	0.563
Zn	67		ug/L		8567	0.097
Zn	68		ug/L		35298	0.509
> Ge	74		ug/L		68977	68976.959
As	75	26.156	ug/L	0.679	5725	0.083
Se	77		ug/L		604	-0.005
Se	82	-4.428	ug/L	17.899	-93	-0.001
Kr	83		ug/L		136	0.002
Sr	88	169.730	ug/L	1.087	476114	7.416
Y	89		ug/L		81505	1.270
Zr	90	121.403	ug/L	1.149	187392	2.918
Mo	98	2.628	ug/L	1.365	2089	0.032
Ag	107	1.222	ug/L	0.949	1833	0.028
Cd	111	1.481	ug/L	9.435	546	0.008
Cd	114		ug/L		779	0.012
> In	115		ug/L		64191	64190.591
Sn	120	1.385	ug/L	3.050	2212	0.033
Sb	121	2.644	ug/L	1.158	2909	0.044
Sb	123		ug/L		2185	0.033
Ba	135		ug/L		192517	1.537
Ba	137	658.081	ug/L	1.452	340151	2.715
Ho	165		ug/L		9644	0.077
> Lu	175		ug/L		125311	125311.220
Tl	205	1.116	ug/L	0.593	6764	0.050
Pb	208	523.128	ug/L	1.597	3415861	27.265
Th	232	45.022	ug/L	0.756	331015	2.639
U	238	2194.648	ug/L	1.338	17434721	139.163

Sample ID: 245979002

Report Date/Time: Thursday, February 25, 2010 21:11:51

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		87.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		86.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		89.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		84.6			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper, S, EEEAl		27	Sample is out of limits (over linear range)
Ti 47 Upper, S, EEETi		47	Sample is out of limits (over linear range)
V 51 Upper, S, EEE V		51	Sample is out of limits (over linear range)
Fe 57 Upper, S, EEEFe		57	Sample is out of limits (over linear range)

Sample ID: 245979002

Report Date/Time: Thursday, February 25, 2010 21:11:51

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QC Action

QC Action Line: Continue

Sample ID: 245979002

Report Date/Time: Thursday, February 25, 2010 21:11:51

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ICPMS#3 - Summary Report

Sample ID: 245979003

Sample Date/Time: Thursday, February 25, 2010 21:14:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979003.123

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	20.328	ug/L	6.699	1963	0.013
Be	9	19.434	ug/L	3.507	974	0.006
B	11	6.065	ug/L	8.080	479	0.002
Na	23	713.433	ug/L	4.053	373148	2.389
Mg	24	2213.454	ug/L	4.127	894150	5.770
Al	27	18717.638	ug/L	4.283	9763693	63.011
P	31	180.487	ug/L	1.430	7834	0.043
K	39	2863.679	ug/L	4.291	2138742	13.546
Ca	43	4174.380	ug/L	3.139	7666	0.049
> Sc	45		ug/L		154966	154966.371
Ti	47	628.882	ug/L	1.695	69602	0.449
V	51	26.759	ug/L	3.257	26556	0.182
Cr	52	23.706	ug/L	1.043	27661	0.168
Cr	53		ug/L		7344	-0.024
Mn	55	990.359	ug/L	1.457	1494796	9.645
Fe	57	32235.081	ug/L	1.397	901473	5.814
Co	59	78.160	ug/L	1.918	82061	0.530
Ni	60	19.314	ug/L	3.476	4328	0.028
Cu	63		ug/L		393021	2.536
Cu	65	715.835	ug/L	1.858	208626	1.346
Zn	66	213.309	ug/L	1.734	39436	0.517
Zn	67		ug/L		8181	0.080
Zn	68		ug/L		32445	0.424
> Ge	74		ug/L		75962	75962.250
As	75	6.945	ug/L	7.130	1700	0.022
Se	77		ug/L		477	-0.008
Se	82	0.139	ug/L	127.173	11	0.000
Kr	83		ug/L		42	0.000
Sr	88	32.033	ug/L	0.526	98223	1.400
Y	89		ug/L		204239	2.916
Zr	90	76.284	ug/L	1.923	128527	1.834
Mo	98	4.156	ug/L	1.849	3568	0.050
Ag	107	0.978	ug/L	2.014	1602	0.023
Cd	111	1.309	ug/L	4.036	526	0.007
Cd	114		ug/L		716	0.010
> In	115		ug/L		70046	70045.898
Sn	120	5.822	ug/L	2.235	9882	0.140
Sb	121	9.978	ug/L	2.403	11788	0.167
Sb	123		ug/L		8969	0.127
Ba	135		ug/L		87935	0.576
Ba	137	246.841	ug/L	0.161	155399	1.018
Ho	165		ug/L		19531	0.128
> Lu	175		ug/L		152588	152588.498
Tl	205	0.173	ug/L	1.782	1782	0.008
Pb	208	825.607	ug/L	1.390	6566584	43.030
Th	232	21.620	ug/L	1.544	193754	1.267
U	238	689.421	ug/L	2.579	6672110	43.716

Sample ID: 245979003

Report Date/Time: Thursday, February 25, 2010 21:17:35

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		91.6			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		94.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		103.0			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte
Ti 47 Upper, S, EETi

MassOut of Limits Message
47Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245979003

Report Date/Time: Thursday, February 25, 2010 21:17:35

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ICPMS#3 - Summary Report

Sample ID: 245979004

Sample Date/Time: Thursday, February 25, 2010 21:20:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979004.124

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	21.918	ug/L	3.059	2098	0.014
Be	9	2.985	ug/L	13.626	150	0.001
B	11	7.536	ug/L	11.139	560	0.003
Na	23	284.551	ug/L	9.433	149110	0.953
Mg	24	3691.560	ug/L	11.164	1474668	9.623
Al	27	30810.735	ug/L	4.254	15913596	103.721
P	31	237.544	ug/L	4.189	9830	0.056
K	39	5958.426	ug/L	4.079	4365471	28.185
Ca	43	4139.709	ug/L	0.505	7531	0.049
> Sc	45		ug/L		153558	153557.633
Ti	47	820.623	ug/L	0.196	89979	0.586
V	51	58.134	ug/L	1.674	59076	0.395
Cr	52	24.362	ug/L	1.418	28127	0.173
Cr	53		ug/L		7344	-0.024
Mn	55	766.489	ug/L	1.002	1146199	7.465
Fe	57	26181.645	ug/L	1.390	725430	4.722
Co	59	15.280	ug/L	2.016	15909	0.104
Ni	60	17.964	ug/L	0.778	3991	0.026
Cu	63		ug/L		32276	0.210
Cu	65	58.546	ug/L	1.436	16957	0.110
Zn	66	94.982	ug/L	4.049	17288	0.230
Zn	67		ug/L		4542	0.033
Zn	68		ug/L		14623	0.193
> Ge	74		ug/L		74532	74532.188
As	75	6.578	ug/L	4.907	1581	0.021
Se	77		ug/L		455	-0.008
Se	82	-0.015	ug/L	2308.179	7	-0.000
Kr	83		ug/L		32	0.000
Sr	88	57.460	ug/L	0.982	169786	2.510
Y	89		ug/L		84938	1.257
Zr	90	52.974	ug/L	1.031	86145	1.273
Mo	98	1.192	ug/L	4.292	1031	0.014
Ag	107	0.231	ug/L	2.476	373	0.005
Cd	111	0.917	ug/L	10.877	356	0.005
Cd	114		ug/L		531	0.008
> In	115		ug/L		67556	67556.138
Sn	120	1.001	ug/L	1.437	1704	0.024
Sb	121	0.620	ug/L	5.864	770	0.010
Sb	123		ug/L		565	0.008
Ba	135		ug/L		87686	0.616
Ba	137	261.503	ug/L	0.798	153640	1.079
Ho	165		ug/L		9243	0.065
> Lu	175		ug/L		142387	142386.526
Tl	205	0.383	ug/L	1.253	3008	0.017
Pb	208	213.060	ug/L	0.620	1581421	11.104
Th	232	23.761	ug/L	0.802	198678	1.393
U	238	42.882	ug/L	0.400	387411	2.719

Sample ID: 245979004

Report Date/Time: Thursday, February 25, 2010 21:23:20

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		90.8			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		93.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		96.1			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte

Ti 47 Upper, S, EEETi

MassOut of Limits Message

47Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245979004

Report Date/Time: Thursday, February 25, 2010 21:23:20

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ICPMS#3 - Summary Report

Sample ID: 245979005

Sample Date/Time: Thursday, February 25, 2010 21:26:21

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979005.125

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	27.138	ug/L	2.189	2614	0.017
Be	9	2.349	ug/L	11.514	119	0.001
B	11	4.941	ug/L	10.024	411	0.002
Na	23	750.187	ug/L	4.453	390945	2.512
Mg	24	3349.685	ug/L	5.607	1348465	8.732
Al	27	31106.928	ug/L	7.965	16161768	104.719
P	31	160.765	ug/L	3.965	7092	0.038
K	39	3923.801	ug/L	6.161	2906930	18.561
Ca	43	4044.845	ug/L	6.004	7403	0.048
Sc	45		ug/L		154569	154569.084
Ti	47	587.202	ug/L	2.419	64845	0.419
V	51	32.684	ug/L	2.772	32718	0.222
Cr	52	21.005	ug/L	1.936	24619	0.149
Cr	53		ug/L		6930	-0.027
Mn	55	669.313	ug/L	0.832	1007771	6.519
Fe	57	31963.675	ug/L	0.914	891458	5.765
Co	59	25.745	ug/L	3.415	26955	0.174
Ni	60	20.160	ug/L	3.954	4504	0.029
Cu	63		ug/L		17910	0.115
Cu	65	32.683	ug/L	1.377	9554	0.061
Zn	66	86.525	ug/L	3.260	15598	0.210
Zn	67		ug/L		4157	0.029
Zn	68		ug/L		13294	0.177
Ge	74		ug/L		73735	73735.334
As	75	8.238	ug/L	3.865	1952	0.026
Se	77		ug/L		478	-0.008
Se	82	0.238	ug/L	160.347	13	0.000
Kr	83		ug/L		40	0.000
Sr	88	38.625	ug/L	2.335	114721	1.688
Y	89		ug/L		245873	3.623
Zr	90	68.565	ug/L	5.482	112051	1.648
Mo	98	3.101	ug/L	3.174	2597	0.037
Ag	107	0.294	ug/L	9.985	472	0.007
Cd	111	0.528	ug/L	7.637	207	0.003
Cd	114		ug/L		53	0.001
In	115		ug/L		67903	67902.581
Sn	120	4.020	ug/L	2.626	6638	0.097
Sb	121	0.761	ug/L	5.646	934	0.013
Sb	123		ug/L		708	0.010
Ba	135		ug/L		73451	0.491
Ba	137	208.922	ug/L	4.168	128892	0.862
Ho	165		ug/L		26562	0.178
Lu	175		ug/L		149686	149685.929
Tl	205	0.220	ug/L	5.978	2063	0.010
Pb	208	203.541	ug/L	3.882	1586210	10.608
Th	232	25.094	ug/L	3.260	220341	1.471
U	238	38.262	ug/L	3.859	363016	2.426

Sample ID: 245979005

Report Date/Time: Thursday, February 25, 2010 21:29:05

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
|	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45			91.4		
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74			92.1		
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115			94.2		
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175			101.1		
|	Tl	205					
|	Pb	208					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 245979006

Sample Date/Time: Thursday, February 25, 2010 21:32:06

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979006.126

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	19.138	ug/L	5.190	1814	0.012
Be	9	30.853	ug/L	7.542	1516	0.010
B	11	6.250	ug/L	11.421	481	0.002
Na	23	340.841	ug/L	6.300	176418	1.141
Mg	24	3931.693	ug/L	2.837	1559123	10.249
Al	27	14103.974	ug/L	4.689	7224181	47.480
P	31	1076.414	ug/L	2.773	39854	0.254
K	39	2474.789	ug/L	6.460	1817856	11.706
Ca	43	7763.731	ug/L	3.319	13956	0.092
> Sc	45		ug/L		152045	152045.302
Ti	47	508.556	ug/L	0.963	55234	0.363
V	51	41.422	ug/L	3.301	41220	0.282
Cr	52	39.990	ug/L	3.627	44745	0.284
Cr	53		ug/L		9678	-0.008
Mn	55	495.369	ug/L	2.334	733805	4.824
Fe	57	20531.195	ug/L	1.213	563475	3.703
Co	59	11.138	ug/L	1.849	11482	0.075
Ni	60	30.421	ug/L	2.322	6677	0.044
Cu	63		ug/L		11551292	75.993
Cu	65	21222.066	ug/L	2.116	6066488	39.909
Zn	66	165.636	ug/L	3.911	31597	0.402
Zn	67		ug/L		6894	0.060
Zn	68		ug/L		26548	0.336
> Ge	74		ug/L		78348	78348.499
As	75	7.867	ug/L	1.802	1980	0.025
Se	77		ug/L		488	-0.008
Se	82	0.323	ug/L	70.706	16	0.000
Kr	83		ug/L		26	0.000
Sr	88	31.373	ug/L	0.828	94880	1.371
Y	89		ug/L		87872	1.272
Zr	90	31.832	ug/L	4.868	52963	0.765
Mo	98	1.661	ug/L	2.675	1444	0.020
Ag	107	7.886	ug/L	1.818	12687	0.184
Cd	111	2.100	ug/L	4.248	832	0.012
Cd	114		ug/L		1690	0.024
> In	115		ug/L		69090	69090.305
Sn	120	46.120	ug/L	1.812	76686	1.109
Sb	121	19.054	ug/L	1.321	22139	0.319
Sb	123		ug/L		16796	0.242
Ba	135		ug/L		99224	0.668
Ba	137	286.224	ug/L	0.901	175290	1.181
Ho	165		ug/L		9301	0.063
> Lu	175		ug/L		148454	148453.982
Tl	205	0.076	ug/L	3.770	1091	0.003
Pb	208	2695.110	ug/L	0.447	20852337	140.466
Th	232	13.605	ug/L	0.451	118737	0.798
U	238	1554.844	ug/L	1.703	14632971	98.593

Sample ID: 245979006

Report Date/Time: Thursday, February 25, 2010 21:34:51

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			89.9		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			97.9		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			95.9		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			100.2		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)
	Cu	65	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 245979007

Sample Date/Time: Thursday, February 25, 2010 21:37:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979007.127

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	21.761	ug/L	5.705	2190	0.014
Be	9	2.052	ug/L	16.303	109	0.001
B	11	4.064	ug/L	10.153	376	0.002
Na	23	645.023	ug/L	9.055	351973	2.160
Mg	24	3248.746	ug/L	8.255	1366507	8.469
Al	27	28194.869	ug/L	7.317	15318664	94.915
P	31	130.352	ug/L	1.335	6255	0.031
K	39	3602.946	ug/L	0.727	2795255	17.043
Ca	43	3915.813	ug/L	0.682	7495	0.046
Sc	45		ug/L		161544	161544.339
Ti	47	528.188	ug/L	0.304	60940	0.377
V	51	37.491	ug/L	1.345	39464	0.255
Cr	52	20.895	ug/L	2.150	25617	0.148
Cr	53		ug/L		7484	-0.026
Mn	55	509.050	ug/L	0.511	800965	4.958
Fe	57	22905.885	ug/L	0.749	667851	4.131
Co	59	18.716	ug/L	2.350	20489	0.127
Ni	60	19.080	ug/L	3.500	4455	0.027
Cu	63		ug/L		8032	0.049
Cu	65	13.985	ug/L	6.198	4302	0.026
Zn	66	59.644	ug/L	2.237	11196	0.145
Zn	67		ug/L		3384	0.017
Zn	68		ug/L		9279	0.119
Ge	74		ug/L		76474	76474.355
As	75	10.611	ug/L	0.723	2595	0.033
Se	77		ug/L		522	-0.007
Se	82	0.271	ug/L	21.763	15	0.000
Kr	83		ug/L		40	0.000
Sr	88	35.098	ug/L	1.723	107865	1.533
Y	89		ug/L		277302	3.948
Zr	90	79.054	ug/L	3.395	133677	1.900
Mo	98	1.871	ug/L	4.649	1645	0.023
Ag	107	0.303	ug/L	4.379	505	0.007
Cd	111	0.570	ug/L	10.375	231	0.003
Cd	114		ug/L		57	0.001
In	115		ug/L		70241	70241.381
Sn	120	1.742	ug/L	0.846	3022	0.042
Sb	121	0.398	ug/L	2.068	539	0.007
Sb	123		ug/L		440	0.005
Ba	135		ug/L		50393	0.331
Ba	137	142.116	ug/L	1.145	89192	0.586
Ho	165		ug/L		30214	0.199
Lu	175		ug/L		152078	152077.891
Tl	205	0.244	ug/L	2.634	2263	0.011
Pb	208	18.661	ug/L	1.383	148051	0.973
Th	232	27.948	ug/L	0.463	249508	1.638
U	238	3.099	ug/L	1.277	30172	0.196

Sample ID: 245979007

Report Date/Time: Thursday, February 25, 2010 21:40:37

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 245979007

Report Date/Time: Thursday, February 25, 2010 21:40:37

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			95.5		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			95.5		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			97.4		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			102.7		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 21:43:36

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.128

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	39.092	ug/L	2.739	3980	0.024
Be	9	51.921	ug/L	5.237	2742	0.017
B	11	83.823	ug/L	5.856	5345	0.032
Na	23	4443.672	ug/L	16.081	2434531	14.878
Mg	24	4089.608	ug/L	1.120	1742516	10.661
Al	27	5470.114	ug/L	7.228	3008659	18.415
P	31	4915.622	ug/L	2.461	190964	1.161
K	39	5290.656	ug/L	1.614	4131969	25.026
Ca	43	4888.074	ug/L	1.533	9458	0.058
Sc	45		ug/L		163417	163416.711
Ti	47	49.057	ug/L	2.168	5766	0.035
V	51	51.772	ug/L	1.224	55793	0.352
Cr	52	50.971	ug/L	2.486	60835	0.362
Cr	53		ug/L		13959	0.014
Mn	55	49.778	ug/L	1.786	79339	0.485
Fe	57	4846.434	ug/L	1.580	143381	0.874
Co	59	48.688	ug/L	1.294	53917	0.330
Ni	60	49.917	ug/L	0.956	11764	0.072
Cu	63		ug/L		29867	0.182
Cu	65	50.853	ug/L	1.791	15686	0.096
Zn	66	51.445	ug/L	2.603	10586	0.125
Zn	67		ug/L		3871	0.019
Zn	68		ug/L		8276	0.096
Ge	74		ug/L		83652	83652.065
As	75	47.650	ug/L	2.192	12620	0.150
Se	77		ug/L		1840	0.008
Se	82	47.254	ug/L	4.805	1312	0.016
Kr	83		ug/L		15	-0.000
Sr	88	52.152	ug/L	0.713	165694	2.279
Y	89		ug/L		51	0.001
Zr	90	51.297	ug/L	2.143	89669	1.233
Mo	98	50.586	ug/L	0.966	44309	0.609
Ag	107	50.601	ug/L	0.537	85546	1.178
Cd	111	51.901	ug/L	1.417	21554	0.297
Cd	114		ug/L		52103	0.717
In	115		ug/L		72641	72640.738
Sn	120	49.758	ug/L	0.868	86986	1.196
Sb	121	48.999	ug/L	5.587	59780	0.821
Sb	123		ug/L		45495	0.625
Ba	135		ug/L		18045	0.122
Ba	137	51.606	ug/L	1.937	31617	0.213
Ho	165		ug/L		11	0.000
Lu	175		ug/L		148458	148457.747
Tl	205	47.249	ug/L	1.714	315057	2.119
Pb	208	50.084	ug/L	2.131	387482	2.610
Th	232	50.234	ug/L	0.402	437549	2.945
U	238	52.053	ug/L	1.575	490138	3.301

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 21:46:21

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	78.185				
Be	9	103.842				
B	11	83.823				
Na	23	88.873				
Mg	24	81.792				
Al	27	108.319				
P	31	98.312				
K	39	105.813				
Ca	43	97.761				
> Sc	45		96.6			
Ti	47	98.114				
V	51	103.545				
Cr	52	101.942				
Cr	53					
Mn	55	99.555				
Fe	57	96.929				
Co	59	97.376				
Ni	60	99.833				
Cu	63					
Cu	65	101.707				
Zn	66	102.891				
Zn	67					
Zn	68					
> Ge	74		104.5			
As	75	95.299				
Se	77					
Se	82	94.509				
Kr	83					
Sr	88	104.303				
Y	89					
Zr	90	102.594				
Mo	98	101.173				
Ag	107	101.203				
Cd	111	103.803				
Cd	114					
> In	115		100.8			
Sn	120	99.516				
Sb	121	97.998				
Sb	123					
Ba	135					
Ba	137	103.212				
Ho	165					
> Lu	175		100.2			
Tl	205	94.497				
Pb	208	100.168				
Th	232	100.467				
U	238	104.107				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	7CCV is out of limits (+/- 10%)
QC Std 6	B	11	11CCV is out of limits (+/- 10%)
QC Std 6	Na	23	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	24CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 21:46:21

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QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 21:49:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.129

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.015	ug/L	108.513	6	0.000
Be	9	-0.005	ug/L	439.129	2	-0.000
B	11	2.118	ug/L	25.164	261	0.001
Na	23	-0.412	ug/L	1607.980	3001	-0.001
Mg	24	0.801	ug/L	168.421	667	0.002
Al	27	2.497	ug/L	147.252	2000	0.008
P	31	-5.061	ug/L	27.602	1104	-0.001
K	39	-3.843	ug/L	83.243	39722	-0.018
Ca	43	5.938	ug/L	104.124	38	0.000
> Sc	45		ug/L		163780	163779.967
Ti	47	0.026	ug/L	333.138	46	0.000
V	51	1.526	ug/L	22.981	-52	0.010
Cr	52	-0.120	ug/L	22.871	1503	-0.001
Cr	53		ug/L		8014	-0.023
Mn	55	0.028	ug/L	55.066	152	0.000
Fe	57	0.736	ug/L	149.094	577	0.000
Co	59	0.008	ug/L	35.318	20	0.000
Ni	60	0.009	ug/L	172.234	23	0.000
Cu	63		ug/L		485	0.002
Cu	65	0.643	ug/L	8.039	257	0.001
Zn	66	-0.034	ug/L	311.421	139	-0.000
Zn	67		ug/L		2092	-0.002
Zn	68		ug/L		211	-0.000
> Ge	74		ug/L		82458	82458.131
As	75	0.416	ug/L	59.329	145	0.001
Se	77		ug/L		805	-0.004
Se	82	0.569	ug/L	67.675	24	0.000
Kr	83		ug/L		14	-0.000
Sr	88	0.009	ug/L	57.346	217	0.000
Y	89		ug/L		11	0.000
Zr	90	0.389	ug/L	6.234	790	0.009
Mo	98	0.168	ug/L	7.237	208	0.002
Ag	107	0.008	ug/L	41.611	23	0.000
Cd	111	0.003	ug/L	295.569	3	0.000
Cd	114		ug/L		11	0.000
> In	115		ug/L		71071	71070.712
Sn	120	0.048	ug/L	4.959	164	0.001
Sb	121	0.633	ug/L	1.338	826	0.011
Sb	123		ug/L		622	0.008
Ba	135		ug/L		14	0.000
Ba	137	0.023	ug/L	85.755	32	0.000
Ho	165		ug/L		3	0.000
> Lu	175		ug/L		143020	143019.725
Tl	205	0.065	ug/L	37.107	979	0.003
Pb	208	0.030	ug/L	45.467	334	0.002
Th	232	0.127	ug/L	5.639	1375	0.007
U	238	0.027	ug/L	37.349	519	0.002

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 21:52:07

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
> |	Sc	45		96.8		
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
> |	Ge	74		103.0		
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
> |	In	115		98.6		
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
> |	Lu	175		96.6		
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 245979008

Sample Date/Time: Thursday, February 25, 2010 21:55:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979008.130

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	137.819	ug/L	2.413	13634	0.086
Be	9	7.145	ug/L	3.021	369	0.002
B	11	9.823	ug/L	8.923	718	0.004
Na	23	471.011	ug/L	10.913	253578	1.577
Mg	24	6578.690	ug/L	1.164	2727172	17.149
Al	27	41754.408	ug/L	8.762	22308272	140.562
P	31	215.592	ug/L	0.303	9353	0.051
K	39	7114.855	ug/L	0.836	5390849	33.655
Ca	43	4052.684	ug/L	3.883	7627	0.048
Sc	45		ug/L		158975	158975.129
Ti	47	657.466	ug/L	0.160	74644	0.469
V	51	55.388	ug/L	2.113	58171	0.377
Cr	52	23.771	ug/L	1.081	28444	0.169
Cr	53		ug/L		7793	-0.023
Mn	55	988.311	ug/L	1.048	1530034	9.625
Fe	57	24561.334	ug/L	3.187	704315	4.430
Co	59	17.571	ug/L	2.386	18929	0.119
Ni	60	34.504	ug/L	3.352	7913	0.050
Cu	63		ug/L		593720	3.735
Cu	65	1065.037	ug/L	1.351	318374	2.003
Zn	66	269.253	ug/L	3.601	49102	0.653
Zn	67		ug/L		9993	0.106
Zn	68		ug/L		39856	0.529
Ge	74		ug/L		75028	75028.418
As	75	7.663	ug/L	1.942	1848	0.024
Se	77		ug/L		498	-0.007
Se	82	0.256	ug/L	39.837	14	0.000
Kr	83		ug/L		41	0.000
Sr	88	42.304	ug/L	0.904	126305	1.848
Y	89		ug/L		177762	2.605
Zr	90	102.516	ug/L	0.242	168263	2.464
Mo	98	2.700	ug/L	3.206	2281	0.033
Ag	107	0.871	ug/L	4.030	1391	0.020
Cd	111	1.265	ug/L	5.677	496	0.007
Cd	114		ug/L		664	0.010
In	115		ug/L		68235	68234.560
Sn	120	3.798	ug/L	0.687	6308	0.091
Sb	121	4.050	ug/L	2.133	4702	0.068
Sb	123		ug/L		3595	0.052
Ba	135		ug/L		83031	0.575
Ba	137	244.396	ug/L	2.293	145564	1.008
Ho	165		ug/L		17078	0.118
Lu	175		ug/L		144352	144351.671
Tl	205	0.383	ug/L	3.505	3046	0.017
Pb	208	456.758	ug/L	1.059	3436844	23.806
Th	232	23.908	ug/L	1.117	202662	1.402
U	238	211.960	ug/L	1.056	1940251	13.440

Sample ID: 245979008

Report Date/Time: Thursday, February 25, 2010 21:57:54

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45	94.0			
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
[	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74	93.7			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	94.7			
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	97.5			
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
	Ti	47Sample is out of limits (over linear range)_
	Cu	65Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 245979009

Sample Date/Time: Thursday, February 25, 2010 22:00:53

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979009.131

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	15.503	ug/L	1.397	1503	0.010
Be	9	3.356	ug/L	13.657	170	0.001
B	11	5.014	ug/L	3.906	418	0.002
Na	23	195.570	ug/L	9.074	104717	0.655
Mg	24	2320.457	ug/L	4.541	939605	6.049
Al	27	24016.592	ug/L	2.222	12558177	80.850
P	31	102.151	ug/L	7.843	4981	0.024
K	39	3168.980	ug/L	3.088	2368860	14.990
Ca	43	2911.648	ug/L	1.004	5366	0.034
> Sc	45		ug/L		155345	155345.449
Ti	47	422.184	ug/L	2.167	46863	0.301
V	51	32.689	ug/L	1.190	32874	0.222
Cr	52	14.927	ug/L	2.246	18039	0.106
Cr	53		ug/L		6437	-0.030
Mn	55	310.463	ug/L	0.444	469837	3.024
Fe	57	16282.642	ug/L	0.230	456728	2.937
Co	59	9.285	ug/L	1.246	9783	0.063
Ni	60	12.893	ug/L	2.974	2903	0.019
Cu	63		ug/L		213890	1.376
Cu	65	388.471	ug/L	0.402	113544	0.731
Zn	66	89.320	ug/L	2.202	16418	0.217
Zn	67		ug/L		4216	0.028
Zn	68		ug/L		13307	0.174
> Ge	74		ug/L		75185	75185.218
As	75	5.303	ug/L	5.987	1293	0.017
Se	77		ug/L		425	-0.008
Se	82	-0.025	ug/L	1120.735	7	-0.000
Kr	83		ug/L		33	0.000
Sr	88	28.050	ug/L	0.833	83522	1.226
Y	89		ug/L		75077	1.104
Zr	90	39.701	ug/L	4.317	65038	0.954
Mo	98	1.516	ug/L	3.998	1303	0.018
Ag	107	1.566	ug/L	2.496	2487	0.036
Cd	111	0.533	ug/L	9.188	209	0.003
Cd	114		ug/L		253	0.004
> In	115		ug/L		68007	68007.067
Sn	120	3.681	ug/L	2.559	6097	0.088
Sb	121	1.663	ug/L	0.675	1964	0.028
Sb	123		ug/L		1525	0.022
Ba	135		ug/L		47360	0.335
Ba	137	142.094	ug/L	0.346	82779	0.586
Ho	165		ug/L		7795	0.055
> Lu	175		ug/L		141184	141183.951
Tl	205	0.174	ug/L	5.450	1656	0.008
Pb	208	310.794	ug/L	0.753	2286974	16.198
Th	232	13.656	ug/L	2.138	113346	0.801
U	238	173.898	ug/L	1.966	1556586	11.027

Sample ID: 245979009

Report Date/Time: Thursday, February 25, 2010 22:03:37

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
> |	Sc	45	91.9			
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
[	Zn	66				
|	Zn	67				
|	Zn	68				
> |	Ge	74	93.9			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
> |	In	115	94.3			
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
> |	Lu	175	95.3			
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
	Tl	47Sample is out of limits (over linear range)...

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 245979010

Sample Date/Time: Thursday, February 25, 2010 22:06:37

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979010.132

Concentration Results

Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li 7	13.218	ug/L	2.415	1279	0.008
Be 9	7.444	ug/L	8.789	374	0.002
B 11	1.596	ug/L	13.139	215	0.001
Na 23	717.220	ug/L	10.952	374534	2.401
Mg 24	1499.877	ug/L	6.482	607029	3.910
Al 27	13062.019	ug/L	4.795	6823027	43.972
P 31	243.710	ug/L	1.158	10151	0.058
K 39	2168.610	ug/L	2.325	1630837	10.258
Ca 43	2865.014	ug/L	2.666	5268	0.034
> Sc 45		ug/L		155011	155010.867
Ti 47	534.980	ug/L	1.018	59238	0.382
V 51	18.415	ug/L	4.849	17769	0.125
Cr 52	14.320	ug/L	2.496	17330	0.102
Cr 53		ug/L		6057	-0.033
Mn 55	791.971	ug/L	1.019	1195720	7.713
Fe 57	25153.864	ug/L	2.345	703452	4.537
Co 59	20.580	ug/L	2.184	21621	0.139
Ni 60	16.875	ug/L	2.366	3785	0.024
Cu 63		ug/L		23141	0.149
Cu 65	42.352	ug/L	1.259	12400	0.080
Zn 66	113.331	ug/L	2.688	20854	0.275
Zn 67		ug/L		4885	0.037
Zn 68		ug/L		16903	0.221
> Ge 74		ug/L		75410	75410.408
As 75	3.722	ug/L	2.668	919	0.012
Se 77		ug/L		451	-0.008
Se 82	0.479	ug/L	116.685	19	0.000
Kr 83		ug/L		33	0.000
Sr 88	22.000	ug/L	0.256	65686	0.961
Y 89		ug/L		302309	4.437
Zr 90	66.546	ug/L	4.618	109201	1.600
Mo 98	2.437	ug/L	4.253	2063	0.029
Ag 107	0.307	ug/L	6.670	496	0.007
Cd 111	0.713	ug/L	11.870	280	0.004
Cd 114		ug/L		173	0.002
> In 115		ug/L		68154	68154.492
Sn 120	5.082	ug/L	1.324	8406	0.122
Sb 121	2.435	ug/L	1.653	2851	0.041
Sb 123		ug/L		2145	0.031
Ba 135		ug/L		49053	0.327
Ba 137	139.110	ug/L	1.915	86092	0.574
Ho 165		ug/L		30456	0.203
> Lu 175		ug/L		149976	149976.195
Tl 205	0.102	ug/L	4.772	1276	0.005
Pb 208	58.254	ug/L	0.475	455509	3.036
Th 232	23.685	ug/L	0.184	208578	1.389
U 238	52.362	ug/L	0.988	498177	3.320

Sample ID: 245979010

Report Date/Time: Thursday, February 25, 2010 22:09:22

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
>	Sc	45	91.7			
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
[	Zn	66				
|	Zn	67				
|	Zn	68				
>	Ge	74	94.2			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
[	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
>	In	115	94.6			
|	Sn	120				
|	Sb	121				
|	Sb	123				
[	Ba	135				
|	Ba	137				
|	Ho	165				
>	Lu	175	101.3			
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message
Ti 47Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 245979011

Sample Date/Time: Thursday, February 25, 2010 22:12:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979011.133

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	26.082	ug/L	6.903	2443	0.016
Be	9	30.923	ug/L	4.607	1503	0.010
B	11	6.787	ug/L	4.143	506	0.003
Na	23	392.759	ug/L	3.679	200736	1.315
Mg	24	2885.070	ug/L	6.689	1130824	7.521
Al	27	31013.722	ug/L	4.897	15702820	104.405
P	31	382.847	ug/L	4.188	14787	0.090
K	39	4333.989	ug/L	5.124	3120127	20.501
Ca	43	5505.540	ug/L	0.769	9799	0.065
Sc	45		ug/L		150363	150362.518
Ti	47	607.643	ug/L	1.735	65262	0.434
V	51	37.925	ug/L	2.318	37185	0.258
Cr	52	29.494	ug/L	1.791	33030	0.210
Cr	53		ug/L		7692	-0.021
Mn	55	612.692	ug/L	1.295	897439	5.967
Fe	57	22144.335	ug/L	1.614	601100	3.994
Co	59	15.703	ug/L	1.784	16005	0.106
Ni	60	22.629	ug/L	2.834	4916	0.033
Cu	63		ug/L		2548770	16.951
Cu	65	4548.554	ug/L	0.350	1286185	8.554
Zn	66	324.830	ug/L	1.456	58571	0.788
Zn	67		ug/L		11420	0.126
Zn	68		ug/L		47567	0.639
Ge	74		ug/L		74179	74178.942
As	75	18.164	ug/L	0.447	4286	0.057
Se	77		ug/L		430	-0.008
Se	82	-0.131	ug/L	459.846	4	-0.000
Kr	83		ug/L		33	0.000
Sr	88	48.781	ug/L	1.331	144847	2.131
Y	89		ug/L		111729	1.646
Zr	90	48.733	ug/L	6.153	79559	1.171
Mo	98	2.198	ug/L	4.315	1858	0.026
Ag	107	1.782	ug/L	0.999	2825	0.041
Cd	111	1.296	ug/L	6.444	505	0.007
Cd	114		ug/L		976	0.014
In	115		ug/L		67896	67895.946
Sn	120	7.604	ug/L	1.887	12486	0.183
Sb	121	27.331	ug/L	0.817	31172	0.458
Sb	123		ug/L		23558	0.346
Ba	135		ug/L		117937	0.834
Ba	137	357.524	ug/L	0.574	208488	1.475
Ho	165		ug/L		11468	0.081
Lu	175		ug/L		141358	141357.921
Tl	205	0.256	ug/L	2.377	2180	0.011
Pb	208	5060.228	ug/L	0.110	37280597	263.734
Th	232	18.524	ug/L	0.832	153823	1.086
U	238	1022.927	ug/L	2.052	9169910	64.864

Sample ID: 245979011

Report Date/Time: Thursday, February 25, 2010 22:15:06

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			88.9		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			92.7		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			94.2		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			95.5		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
	Ti	47Sample is out of limits (over linear range)_
	Cu	65Sample is out of limits (over linear range)
	Pb	208Sample is out of limits (over linear range)

QC Action

Sample ID: 245979011
 Report Date/Time: Thursday, February 25, 2010 22:15:06
 Page 3

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 245979012

Sample Date/Time: Thursday, February 25, 2010 22:18:07

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979012.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	28.247	ug/L	4.683	2711	0.018
Be	9	3.176	ug/L	15.202	160	0.001
B	11	8.133	ug/L	8.927	598	0.003
Na	23	263.213	ug/L	8.756	138672	0.881
Mg	24	5595.147	ug/L	1.262	2247421	14.585
Al	27	50388.812	ug/L	2.117	26136238	169.629
P	31	178.181	ug/L	2.940	7706	0.042
K	39	6941.627	ug/L	2.926	5099818	32.836
Ca	43	5705.382	ug/L	2.603	10404	0.067
Sc	45		ug/L		154091	154091.005
Ti	47	942.419	ug/L	2.094	103695	0.673
V	51	75.443	ug/L	2.943	77440	0.513
Cr	52	33.322	ug/L	2.307	38043	0.237
Cr	53		ug/L		8306	-0.018
Mn	55	710.909	ug/L	2.138	1067153	6.924
Fe	57	33599.655	ug/L	0.780	934221	6.060
Co	59	14.840	ug/L	3.007	15499	0.101
Ni	60	22.483	ug/L	1.317	5007	0.032
Cu	63		ug/L		28001	0.181
Cu	65	51.685	ug/L	1.710	15031	0.097
Zn	66	74.200	ug/L	1.026	13475	0.180
Zn	67		ug/L		3921	0.025
Zn	68		ug/L		11948	0.158
Ge	74		ug/L		74120	74120.252
As	75	7.130	ug/L	2.550	1702	0.023
Se	77		ug/L		450	-0.008
Se	82	-0.462	ug/L	34.281	-4	-0.000
Kr	83		ug/L		40	0.000
Sr	88	68.442	ug/L	0.184	198924	2.990
Y	89		ug/L		97925	1.473
Zr	90	63.141	ug/L	3.520	101023	1.518
Mo	98	1.176	ug/L	4.444	1001	0.014
Ag	107	0.278	ug/L	4.123	438	0.006
Cd	111	0.610	ug/L	9.106	234	0.003
Cd	114		ug/L		237	0.003
In	115		ug/L		66465	66464.730
Sn	120	0.977	ug/L	3.438	1637	0.023
Sb	121	0.927	ug/L	3.275	1099	0.016
Sb	123		ug/L		876	0.012
Ba	135		ug/L		98430	0.712
Ba	137	303.127	ug/L	0.712	172838	1.250
Ho	165		ug/L		10542	0.076
Lu	175		ug/L		138211	138211.123
Tl	205	0.448	ug/L	1.782	3320	0.020
Pb	208	406.098	ug/L	1.007	2924903	21.165
Th	232	27.013	ug/L	0.709	219206	1.584
U	238	27.396	ug/L	0.488	240335	1.737

Sample ID: 245979012

Report Date/Time: Thursday, February 25, 2010 22:20:52

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: 245979012

Report Date/Time: Thursday, February 25, 2010 22:20:52

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		91.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		92.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		93.3			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Al	27	Sample is out of limits (over linear range)
	Ti	47	Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 245979012
 Report Date/Time: Thursday, February 25, 2010 22:20:52
 Page 3

ICPMS#3 - Summary Report

Sample ID: 245979013
 Sample Date/Time: Thursday, February 25, 2010 22:23:53
 Sample Type:
 Sample Description: LANL 6020
 Number of Replicates: 3
 Batch ID: 948769|2|prb
 Method File: c:\elandata\Method\6020.mth
 Dataset File: C:\elandata\Dataset\100225\245979013.135

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	31.902	ug/L	3.660	2999	0.020
Be	9	13.210	ug/L	10.273	645	0.004
B	11	5.577	ug/L	3.836	439	0.002
Na	23	322.282	ug/L	11.252	165969	1.079
Mg	24	6396.875	ug/L	6.492	2514665	16.675
Al	27	38921.699	ug/L	2.091	19768759	131.026
P	31	821.214	ug/L	2.057	30454	0.194
K	39	5442.212	ug/L	6.175	3922156	25.743
Ca	43	8498.993	ug/L	1.060	15166	0.100
> Sc	45		ug/L		150887	150886.968
Ti	47	817.776	ug/L	0.704	88105	0.584
V	51	70.586	ug/L	3.099	70824	0.480
Cr	52	40.703	ug/L	2.310	45157	0.289
Cr	53		ug/L		9228	-0.011
Mn	55	854.283	ug/L	0.842	1255434	8.320
Fe	57	37663.782	ug/L	1.182	1025366	6.793
Co	59	13.333	ug/L	2.054	13638	0.090
Ni	60	30.033	ug/L	2.777	6542	0.043
Cu	63		ug/L		191564	1.269
Cu	65	356.234	ug/L	1.386	101121	0.670
Zn	66	157.100	ug/L	2.514	28263	0.381
Zn	67		ug/L		6821	0.065
Zn	68		ug/L		25303	0.340
> Ge	74		ug/L		73847	73846.530
As	75	8.863	ug/L	8.505	2096	0.028
Se	77		ug/L		450	-0.008
Se	82	-0.154	ug/L	283.690	4	-0.000
Kr	83		ug/L		37	0.000
Sr	88	57.663	ug/L	0.810	167380	2.519
Y	89		ug/L		131594	1.983
Zr	90	55.867	ug/L	1.075	89252	1.343
Mo	98	1.398	ug/L	4.541	1177	0.017
Ag	107	1.343	ug/L	3.600	2083	0.031
Cd	111	1.447	ug/L	4.230	551	0.008
Cd	114		ug/L		984	0.015
> In	115		ug/L		66371	66370.605
Sn	120	3.429	ug/L	0.663	5548	0.082
Sb	121	2.157	ug/L	3.914	2467	0.036
Sb	123		ug/L		1826	0.027
Ba	135		ug/L		222286	1.589
Ba	137	675.878	ug/L	0.203	390103	2.788
Ho	165		ug/L		13973	0.100
> Lu	175		ug/L		139905	139904.924
Tl	205	0.376	ug/L	1.547	2911	0.017
Pb	208	2242.611	ug/L	1.301	16352299	116.882
Th	232	22.297	ug/L	0.631	183186	1.307
U	238	354.282	ug/L	1.034	3143220	22.465

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		92.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.1			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		94.5			
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 245979014

Sample Date/Time: Thursday, February 25, 2010 22:29:39

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979014.136

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	41.626	ug/L	2.609	3803	0.026
Be	9	71.970	ug/L	5.108	3411	0.023
B	11	17.058	ug/L	0.900	1068	0.006
Na	23	295.715	ug/L	3.368	148098	0.990
Mg	24	4962.920	ug/L	2.429	1897960	12.937
Al	27	54262.635	ug/L	2.986	26788964	182.670
P	31	575.320	ug/L	2.606	21086	0.136
K	39	4784.600	ug/L	4.055	3357013	22.632
Ca	43	12366.021	ug/L	0.874	21439	0.146
Sc	45		ug/L		146666	146666.189
Ti	47	631.539	ug/L	2.097	66150	0.451
V	51	62.789	ug/L	4.041	61064	0.427
Cr	52	58.470	ug/L	3.375	62418	0.416
Cr	53		ug/L		11096	0.004
Mn	55	664.872	ug/L	2.462	949810	6.475
Fe	57	33828.007	ug/L	1.830	895347	6.101
Co	59	11.336	ug/L	0.417	11275	0.077
Ni	60	36.872	ug/L	0.448	7805	0.053
Cu	63		ug/L		3212820	21.906
Cu	65	5883.873	ug/L	1.445	1622802	11.065
Zn	66	379.672	ug/L	2.552	67331	0.921
Zn	67		ug/L		13198	0.153
Zn	68		ug/L		56407	0.770
Ge	74		ug/L		72984	72983.739
As	75	12.143	ug/L	5.356	2832	0.038
Se	77		ug/L		439	-0.008
Se	82	-0.602	ug/L	13.502	-7	-0.000
Kr	83		ug/L		46	0.000
Sr	88	72.926	ug/L	1.478	213485	3.186
Y	89		ug/L		105024	1.569
Zr	90	59.992	ug/L	2.227	96649	1.442
Mo	98	5.342	ug/L	1.614	4367	0.064
Ag	107	3.976	ug/L	0.651	6205	0.093
Cd	111	3.190	ug/L	7.291	1222	0.018
Cd	114		ug/L		2603	0.039
In	115		ug/L		66963	66962.935
Sn	120	9.272	ug/L	2.375	14999	0.223
Sb	121	11.810	ug/L	1.276	13324	0.198
Sb	123		ug/L		10154	0.151
Ba	135		ug/L		157423	1.155
Ba	137	491.363	ug/L	2.238	276381	2.027
Ho	165		ug/L		11050	0.081
Lu	175		ug/L		136374	136374.239
Tl	205	0.312	ug/L	3.051	2443	0.014
Pb	208	1217.792	ug/L	2.303	8652783	63.470
Th	232	21.766	ug/L	1.242	174287	1.276
U	238	3455.959	ug/L	0.886	29885294	219.143

Sample ID: 245979014

Report Date/Time: Thursday, February 25, 2010 22:32:24

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
|	Sc	45	86.7			
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
|	Ge	74	91.2			
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
|	In	115	92.9			
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
|	Lu	175	92.1			
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
	Al	27Sample is out of limits (over linear range)
	Ti	47Sample is out of limits (over linear range)_
	Cu	65Sample is out of limits (over linear range)

QC Action

Sample ID: 245979014
 Report Date/Time: Thursday, February 25, 2010 22:32:24
 Page 3

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: 245979015

Sample Date/Time: Thursday, February 25, 2010 22:35:26

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948769|2|prb

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\245979015.137

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.511	ug/L	4.414	999	0.007
Be	9	1.641	ug/L	6.553	82	0.001
B	11	1.106	ug/L	33.720	183	0.000
Na	23	630.494	ug/L	4.326	324319	2.111
Mg	24	1002.058	ug/L	6.036	397115	2.612
Al	27	7701.010	ug/L	4.335	3946953	25.925
P	31	249.854	ug/L	1.732	10180	0.059
K	39	1517.630	ug/L	10.793	1129068	7.179
Ca	43	2173.747	ug/L	1.716	3927	0.026
> Sc	45		ug/L		152085	152084.632
Ti	47	497.143	ug/L	1.004	54010	0.355
V	51	12.825	ug/L	5.058	11632	0.087
Cr	52	11.482	ug/L	3.388	13940	0.082
Cr	53		ug/L		5934	-0.033
Mn	55	711.991	ug/L	1.429	1054854	6.934
Fe	57	22937.966	ug/L	1.334	629528	4.137
Co	59	18.849	ug/L	2.685	19424	0.128
Ni	60	14.150	ug/L	4.026	3115	0.020
Cu	63		ug/L		17058	0.111
Cu	65	31.249	ug/L	1.860	8989	0.059
Zn	66	108.635	ug/L	2.489	20075	0.264
Zn	67		ug/L		4749	0.035
Zn	68		ug/L		16150	0.210
> Ge	74		ug/L		75717	75716.774
As	75	2.610	ug/L	7.927	656	0.008
Se	77		ug/L		465	-0.008
Se	82	0.908	ug/L	56.069	30	0.000
Kr	83		ug/L		26	0.000
Sr	88	15.348	ug/L	1.450	46051	0.671
Y	89		ug/L		284818	4.163
Zr	90	55.237	ug/L	9.001	91103	1.328
Mo	98	2.287	ug/L	2.622	1946	0.028
Ag	107	0.262	ug/L	2.891	426	0.006
Cd	111	0.565	ug/L	7.013	223	0.003
Cd	114		ug/L		118	0.002
> In	115		ug/L		68419	68418.512
Sn	120	6.025	ug/L	2.673	9994	0.145
Sb	121	0.966	ug/L	6.591	1176	0.016
Sb	123		ug/L		920	0.013
Ba	135		ug/L		31584	0.210
Ba	137	89.759	ug/L	1.429	55574	0.370
Ho	165		ug/L		28969	0.193
> Lu	175		ug/L		150015	150014.727
Tl	205	0.033	ug/L	11.500	812	0.001
Pb	208	42.764	ug/L	0.350	334466	2.229
Th	232	21.150	ug/L	0.503	186311	1.240
U	238	32.488	ug/L	1.470	309214	2.060

Sample ID: 245979015

Report Date/Time: Thursday, February 25, 2010 22:38:12

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45			89.9		
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74			94.6		
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115			94.9		
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175			101.3		
Tl	205					
Pb	208					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 22:41:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 6.138

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
|	Li	7	37.881 ug/L	3.340	3710	0.024
|	Be	9	51.259 ug/L	4.826	2605	0.017
|	B	11	80.935 ug/L	2.963	4970	0.031
|	Na	23	4352.936 ug/L	17.619	2294166	14.574
|	Mg	24	4085.276 ug/L	7.059	1674296	10.649
|	Al	27	5253.224 ug/L	7.122	2780885	17.684
|	P	31	4856.354 ug/L	2.724	181480	1.147
|	K	39	5415.482 ug/L	4.226	4067671	25.617
|	Ca	43	4847.234 ug/L	3.328	9022	0.057
>	Sc	45	ug/L		157187	157186.614
|	Ti	47	50.023 ug/L	2.035	5654	0.036
|	V	51	51.804 ug/L	3.822	53702	0.352
|	Cr	52	49.886 ug/L	4.005	57305	0.354
|	Cr	53	ug/L		13223	0.012
|	Mn	55	48.711 ug/L	1.900	74677	0.474
|	Fe	57	4787.935 ug/L	0.669	136272	0.864
|	Co	59	48.555 ug/L	2.006	51721	0.329
|	Ni	60	48.628 ug/L	0.843	11024	0.070
|	Cu	63	ug/L		28091	0.178
|	Cu	65	50.189 ug/L	0.626	14893	0.094
|	Zn	66	51.982 ug/L	1.816	10172	0.126
|	Zn	67	ug/L		3725	0.019
|	Zn	68	ug/L		7988	0.098
>	Ge	74	ug/L		79563	79562.791
|	As	75	47.400 ug/L	1.425	11941	0.150
|	Se	77	ug/L		1725	0.008
|	Se	82	46.634 ug/L	3.069	1232	0.015
|	Kr	83	ug/L		18	-0.000
|	Sr	88	51.544 ug/L	0.724	157024	2.252
|	Y	89	ug/L		50	0.001
|	Zr	90	51.388 ug/L	1.353	86144	1.235
|	Mo	98	50.071 ug/L	1.084	42057	0.603
|	Ag	107	49.919 ug/L	1.154	80933	1.162
|	Cd	111	51.607 ug/L	1.421	20554	0.295
|	Cd	114	ug/L		49417	0.709
>	In	115	ug/L		69650	69649.660
|	Sn	120	49.359 ug/L	0.555	82731	1.187
|	Sb	121	48.333 ug/L	5.427	56530	0.810
|	Sb	123	ug/L		43511	0.623
|	Ba	135	ug/L		17055	0.121
|	Ba	137	51.655 ug/L	1.439	30049	0.213
|	Ho	165	ug/L		13	0.000
>	Lu	175	ug/L		140935	140934.837
|	Tl	205	47.529 ug/L	0.889	300942	2.131
|	Pb	208	49.999 ug/L	0.433	367352	2.606
|	Th	232	50.284 ug/L	1.604	415881	2.948
|	U	238	52.040 ug/L	0.993	465332	3.300

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 22:43:56

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 22:43:56

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	7	75.762				
Be	9	102.518				
B	11	80.935				
Na	23	87.059				
Mg	24	81.706				
Al	27	104.024				
P	31	97.127				
K	39	108.310				
Ca	43	96.945				
> Sc	45		92.9			
Ti	47	100.046				
V	51	103.608				
Cr	52	99.772				
Cr	53					
Mn	55	97.422				
Fe	57	95.759				
Co	59	97.109				
Ni	60	97.256				
Cu	63					
Cu	65	100.377				
Zn	66	103.963				
Zn	67					
Zn	68					
> Ge	74		99.4			
As	75	94.800				
Se	77					
Se	82	93.268				
Kr	83					
Sr	88	103.089				
Y	89					
Zr	90	102.776				
Mo	98	100.142				
Ag	107	99.839				
Cd	111	103.213				
Cd	114					
> In	115		96.6			
Sn	120	98.718				
Sb	121	96.666				
Sb	123					
Ba	135					
Ba	137	103.310				
Ho	165					
> Lu	175		95.2			
Tl	205	95.057				
Pb	208	99.998				
Th	232	100.567				
U	238	104.079				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Li	7CCV is out of limits (+/- 10%)
QC Std 6	B	11CCV is out of limits (+/- 10%)
QC Std 6	Na	23CCV is out of limits (+/- 10%)
QC Std 6	Mg	24CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

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QC Action

QC Action Line: Continue

ICPMS#3 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 22:46:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020.mth

Dataset File: C:\elandata\Dataset\100225\QC Std 7.139

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.009	ug/L	280.249	5	0.000
Be	9	0.061	ug/L	55.000	5	0.000
B	11	1.904	ug/L	40.378	239	0.001
Na	23	1.037	ug/L	381.651	3667	0.003
Mg	24	0.856	ug/L	163.141	667	0.002
Al	27	1.948	ug/L	146.582	1667	0.007
P	31	-2.952	ug/L	36.189	1147	-0.001
K	39	-8.737	ug/L	74.187	34709	-0.041
Ca	43	8.424	ug/L	27.528	41	0.000
> Sc	45		ug/L		158357	158357.445
Ti	47	0.075	ug/L	100.375	50	0.000
V	51	1.849	ug/L	15.024	303	0.013
Cr	52	-0.217	ug/L	13.824	1344	-0.002
Cr	53		ug/L		7519	-0.024
Mn	55	0.039	ug/L	34.901	164	0.000
Fe	57	3.007	ug/L	49.345	623	0.001
Co	59	0.014	ug/L	16.824	26	0.000
Ni	60	0.016	ug/L	109.280	24	0.000
Cu	63		ug/L		316	0.001
Cu	65	0.360	ug/L	4.510	165	0.001
Zn	66	0.029	ug/L	316.425	145	0.000
Zn	67		ug/L		2080	-0.001
Zn	68		ug/L		235	0.000
> Ge	74		ug/L		79173	79172.932
As	75	0.076	ug/L	449.227	54	0.000
Se	77		ug/L		770	-0.004
Se	82	0.410	ug/L	104.404	19	0.000
Kr	83		ug/L		15	-0.000
Sr	88	0.010	ug/L	69.108	215	0.000
Y	89		ug/L		15	0.000
Zr	90	0.411	ug/L	3.272	804	0.010
Mo	98	0.148	ug/L	2.537	186	0.002
Ag	107	0.012	ug/L	49.020	29	0.000
Cd	111	0.012	ug/L	28.780	6	0.000
Cd	114		ug/L		22	0.000
> In	115		ug/L		69077	69077.220
Sn	120	0.049	ug/L	20.776	160	0.001
Sb	121	0.608	ug/L	2.866	773	0.010
Sb	123		ug/L		609	0.008
Ba	135		ug/L		19	0.000
Ba	137	0.018	ug/L	102.083	28	0.000
Ho	165		ug/L		2	-0.000
> Lu	175		ug/L		139288	139288.166
Tl	205	0.049	ug/L	42.492	855	0.002
Pb	208	0.042	ug/L	61.795	417	0.002
Th	232	0.125	ug/L	7.242	1324	0.007
U	238	0.042	ug/L	36.477	639	0.003

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 22:49:42

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Zr	90Linear Thru Zero	0.9998
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	0.9999
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Li	7				
|	Be	9				
|	B	11				
|	Na	23				
|	Mg	24				
|	Al	27				
|	P	31				
|	K	39				
|	Ca	43				
|>	Sc	45		93.6		
|	Ti	47				
|	V	51				
|	Cr	52				
|	Cr	53				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
|	Cu	63				
|	Cu	65				
|	Zn	66				
|	Zn	67				
|	Zn	68				
|>	Ge	74		98.9		
|	As	75				
|	Se	77				
|	Se	82				
|	Kr	83				
|	Sr	88				
|	Y	89				
|	Zr	90				
|	Mo	98				
|	Ag	107				
|	Cd	111				
|	Cd	114				
|>	In	115		95.8		
|	Sn	120				
|	Sb	121				
|	Sb	123				
|	Ba	135				
|	Ba	137				
|	Ho	165				
|>	Lu	175		94.1		
|	Tl	205				
|	Pb	208				
|	Th	232				
|	U	238				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: SOIL
 Method Description: 7471A, ILM04 ANALYST JXL1
 Element: Hg

Date: 02/18/2010
 Technique: FI-MHS
 Calibration Type:
 Hg, Calc. Intercept : Linear
 Wavelength: 253.7 nm
 Sample Info Name: 021810S1.SIF Results Data Set Name: 021810S1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/18/2010
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0046	0.0046	09:45:19	No
2			0.0045	0.0045	09:45:54	No
Mean:			0.0046			
SD :			0.0001			
%RSD:			2.6075			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/18/2010
 Sample ID: S0.2

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0019	0.0065	09:47:17	No
2			0.0017	0.0063	09:47:51	No
Mean:			0.0018			
SD :			0.0001			
%RSD:			7.2627			

[Hg] Standard number 1 applied. [0.200]
 Correlation Coefficient: 1.00000 Slope: 0.00908
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/18/2010
 Sample ID: S0.5

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0052	0.0098	09:49:14	No
2			0.0054	0.0099	09:49:48	No
Mean:			0.0053			
SD :			0.0001			
%RSD:			2.3316			

[Hg] Standard number 2 applied. [0.500]
 Correlation Coefficient: 0.99797 Slope: 0.01065
 Intercept : -0.00012

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/18/2010
 Sample ID: S2.0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0209	0.0255	09:51:13	No
2			0.0210	0.0255	09:51:49	No
Mean:			0.0210			
SD :			0.0000			
%RSD:			0.1449			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99989
Intercept : -0.00009

Slope: 0.01053

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/18/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0521	0.0567	09:53:13	No
2			0.0519	0.0564	09:53:49	No
Mean:			0.0520			
SD :			0.0002			
%RSD:			0.3044			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99997 Slope: 0.01042
Intercept : -0.00003

=====

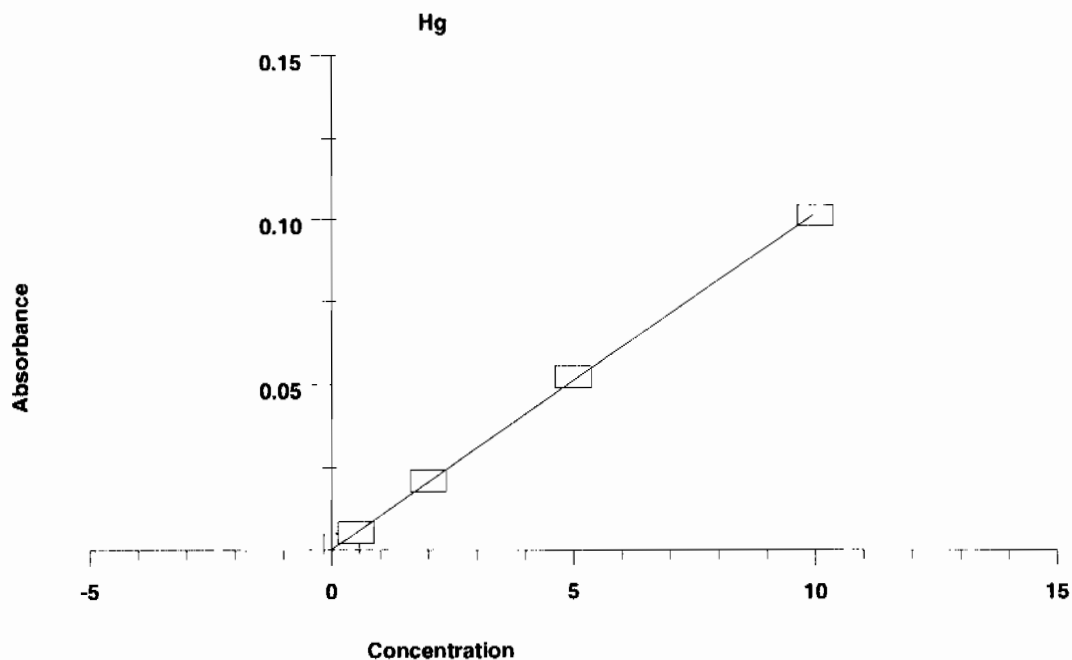
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/18/2010
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.1014	0.1060	09:55:15	No
2			0.1009	0.1054	09:55:50	No
Mean:			0.1011			
SD :			0.0004			
%RSD:			0.3679			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99989 Slope: 0.01014
Intercept : 0.00028

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0046	---	----	----	----
S0.2	0.0018	0.200	0.152	0.0001	7.3
S0.5	0.0053	0.500	0.494	0.0001	2.3
S2.0	0.0210	2.000	2.039	0.0000	0.1
S5.0	0.0520	5.000	5.098	0.0002	0.3
S10	0.1011	10.000	9.944	0.0004	0.4
Correlation Coefficient: 0.99989		Slope:	0.01014	Intercept:	0.0003



=====
 Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 02/18/2010
 Sample ID: ICV

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	5.154	5.154	0.0525	0.0571	09:57:18	No
2	5.108	5.108	0.0521	0.0566	09:57:53	No
Mean:	5.131	5.131	0.0523			
SD :	0.0323	0.0323	0.0003			
%RSD:	0.6	0.6	0.6260			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 02/18/2010
 Sample ID: ICB

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.120	-0.120	-0.0009	0.0036	09:59:15	No
2	-0.138	-0.138	-0.0011	0.0034	09:59:50	No
Mean:	-0.129	-0.129	-0.0010			
SD :	0.0127	0.0127	0.0001			
%RSD:	9.9	9.9	12.5442			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 02/18/2010
 Sample ID: CRDL

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.225	0.225	0.0026	0.0071	10:01:12	No
2	0.211	0.211	0.0024	0.0070	10:01:47	No
Mean:	0.218	0.218	0.0025			
SD :	0.0095	0.0095	0.0001			
%RSD:	4.3	4.3	3.8605			

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 02/18/2010

Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.040	5.040	0.0514	0.0559	10:03:12	No
2	5.078	5.078	0.0518	0.0563	10:03:46	No
Mean:	5.059	5.059	0.0516			
SD :	0.0274	0.0274	0.0003			
%RSD:	0.5	0.5	0.5390			

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 02/18/2010

Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0001	0.0044	10:05:14	No
2	-0.052	-0.052	-0.0003	0.0043	10:05:49	No
Mean:	-0.046	-0.046	-0.0002			
SD :	0.0083	0.0083	0.0001			
%RSD:	18.0	18.0	43.9084			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/18/2010

Sample ID: 1202037115|i||950565|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.073	-0.073	-0.0005	0.0041	10:07:15	No
2	-0.088	-0.088	-0.0006	0.0039	10:07:50	No
Mean:	-0.080	-0.080	-0.0005			
SD :	0.0102	0.0102	0.0001			
%RSD:	12.7	12.7	19.1745			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/18/2010

Sample ID: 1202037116|i|10|LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.092	4.092	0.0418	0.0463	10:09:15	No
2	3.952	3.952	0.0404	0.0449	10:09:50	No
Mean:	4.022	4.022	0.0411			
SD :	0.0991	0.0991	0.0010			
%RSD:	2.5	2.5	2.4475			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/18/2010

Sample ID: 245969001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.246	0.246	0.0028	0.0073	10:11:18	No
2	0.244	0.244	0.0027	0.0073	10:11:53	No
Mean:	0.245	0.245	0.0028			
SD :	0.0019	0.0019	0.0000			
%RSD:	0.8	0.8	0.7089			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/18/2010

Sample ID: 1202037117|i|||DUP

%RSD: 1.2 1.2 1.1178

=====
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 02/18/2010
 Sample ID: 245969004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.121	0.121	0.0015	0.0061	10:25:06	No
2	0.086	0.086	0.0011	0.0057	10:25:41	No
Mean:	0.103	0.103	0.0013			
SD :	0.0247	0.0247	0.0003			
%RSD:	23.9	23.9	18.9148			

=====
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	5.046	5.046	0.0515	0.0560	10:27:06	No
2	5.089	5.089	0.0519	0.0565	10:27:40	No
Mean:	5.068	5.068	0.0517			
SD :	0.0301	0.0301	0.0003			
%RSD:	0.6	0.6	0.5903			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.064	-0.064	-0.0004	0.0042	10:29:09	No
2	-0.067	-0.067	-0.0004	0.0042	10:29:44	No
Mean:	-0.065	-0.065	-0.0004			
SD :	0.0021	0.0021	0.0000			
%RSD:	3.3	3.3	5.6045			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/18/2010
 Sample ID: 245969005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.140	0.140	0.0017	0.0063	10:31:09	No
2	0.120	0.120	0.0015	0.0061	10:31:44	No
Mean:	0.130	0.130	0.0016			
SD :	0.0141	0.0141	0.0001			
%RSD:	10.8	10.8	8.9311			

=====
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/18/2010
 Sample ID: 245969006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0012	0.0058	10:33:07	No
2	0.085	0.085	0.0011	0.0057	10:33:42	No
Mean:	0.090	0.090	0.0012			
SD :	0.0078	0.0078	0.0001			
%RSD:	8.6	8.6	6.6265			

=====
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/18/2010
 Sample ID: 245969007|i|||

%RSD: 3.1 3.1 2.4888

=====
 Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 02/18/2010
 Sample ID: 245969013|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.245	0.245	0.0028	0.0073	10:47:09	No
2	0.224	0.224	0.0025	0.0071	10:47:44	No
Mean:	0.234	0.234	0.0027			
SD :	0.0147	0.0147	0.0001			
%RSD:	6.3	6.3	5.6188			

=====
 Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 02/18/2010
 Sample ID: 245969014|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.144	0.144	0.0017	0.0063	10:49:12	No
2	0.132	0.132	0.0016	0.0062	10:49:47	No
Mean:	0.138	0.138	0.0017			
SD :	0.0087	0.0087	0.0001			
%RSD:	6.3	6.3	5.2634			

=====
 Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.163	5.163	0.0526	0.0572	10:51:15	No
2	5.285	5.285	0.0539	0.0584	10:51:50	No
Mean:	5.224	5.224	0.0533			
SD :	0.0865	0.0865	0.0009			
%RSD:	1.7	1.7	1.6467			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.077	-0.077	-0.0005	0.0041	10:53:18	No
2	-0.083	-0.083	-0.0006	0.0040	10:53:53	No
Mean:	-0.080	-0.080	-0.0005			
SD :	0.0044	0.0044	0.0000			
%RSD:	5.4	5.4	8.2472			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 02/18/2010
 Sample ID: 245969015|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.223	0.223	0.0025	0.0071	10:55:17	No
2	0.204	0.204	0.0023	0.0069	10:55:51	No
Mean:	0.213	0.213	0.0024			
SD :	0.0132	0.0132	0.0001			
%RSD:	6.2	6.2	5.4733			

=====
 Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 02/18/2010
 Sample ID: 1202039079|i||951467|MB

%RSD: 1.1 1.1 1.0627

=====
 Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 02/18/2010
 Sample ID: 1202039087|i|5||SDILT

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.127	-0.127	-0.0010	0.0035	11:08:50	No
2	-0.131	-0.131	-0.0011	0.0035	11:09:24	No
Mean:	-0.129	-0.129	-0.0010			
SD :	0.0029	0.0029	0.0000			
%RSD:	2.2	2.2	2.8265			

=====
 Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 02/18/2010
 Sample ID: 246285002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.103	0.103	0.0013	0.0059	11:10:48	No
2	0.090	0.090	0.0012	0.0058	11:11:23	No
Mean:	0.097	0.097	0.0013			
SD :	0.0086	0.0086	0.0001			
%RSD:	8.9	8.9	6.9719			

=====
 Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 02/18/2010
 Sample ID: 246285003|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.328	0.328	0.0036	0.0082	11:12:47	No
2	0.310	0.310	0.0034	0.0080	11:13:23	No
Mean:	0.319	0.319	0.0035			
SD :	0.0125	0.0125	0.0001			
%RSD:	3.9	3.9	3.6171			

=====
 Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.195	5.195	0.0530	0.0575	11:14:47	No
2	5.107	5.107	0.0521	0.0566	11:15:22	No
Mean:	5.151	5.151	0.0525			
SD :	0.0627	0.0627	0.0006			
%RSD:	1.2	1.2	1.2114			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.105	-0.105	-0.0008	0.0038	11:16:50	No
2	-0.107	-0.107	-0.0008	0.0037	11:17:25	No
Mean:	-0.106	-0.106	-0.0008			
SD :	0.0020	0.0020	0.0000			
%RSD:	1.9	1.9	2.5083			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 02/18/2010
 Sample ID: 246285004|i|||

%RSD: 2.1 2.1 1.9191

=====
 Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 02/18/2010
 Sample ID: 246285010|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.122	0.122	0.0015	0.0061	11:30:55	No
2	0.119	0.119	0.0015	0.0060	11:31:30	No
Mean:	0.121	0.121	0.0015			
SD :	0.0026	0.0026	0.0000			
%RSD:	2.2	2.2	1.7555			

=====
 Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 02/18/2010
 Sample ID: 246285011|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.024	-0.024	0.0000	0.0046	11:32:50	No
2	-0.033	-0.033	-0.0001	0.0045	11:33:24	No
Mean:	-0.028	-0.028	0.0000			
SD :	0.0065	0.0065	0.0001			
%RSD:	22.9	22.9	658.9645			

=====
 Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 02/18/2010
 Sample ID: 246291001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.580	0.580	0.0062	0.0107	11:34:44	No
2	0.579	0.579	0.0061	0.0107	11:35:19	No
Mean:	0.579	0.579	0.0062			
SD :	0.0007	0.0007	0.0000			
%RSD:	0.1	0.1	0.1126			

=====
 Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 02/18/2010
 Sample ID: 246291002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.075	-0.075	-0.0005	0.0041	11:36:41	No
2	-0.092	-0.092	-0.0007	0.0039	11:37:16	No
Mean:	-0.084	-0.084	-0.0006			
SD :	0.0120	0.0120	0.0001			
%RSD:	14.3	14.3	21.3135			

=====
 Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.997	4.997	0.0510	0.0555	11:38:40	No
2	5.018	5.018	0.0512	0.0557	11:39:15	No
Mean:	5.007	5.007	0.0511			
SD :	0.0152	0.0152	0.0002			
%RSD:	0.3	0.3	0.3010			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.154	-0.154	-0.0013	0.0033	11:40:43	No
2	-0.153	-0.153	-0.0013	0.0033	11:41:18	No
Mean:	-0.154	-0.154	-0.0013			
SD :	0.0011	0.0011	0.0000			
%RSD:	0.7	0.7	0.8705			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 02/18/2010
 Sample ID: 246291003|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	1.117	1.117	0.0116	0.0162	11:42:43	No
2	1.113	1.113	0.0116	0.0161	11:43:18	No
Mean:	1.115	1.115	0.0116			
SD :	0.0031	0.0031	0.0000			
%RSD:	0.3	0.3	0.2711			

=====
 Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 02/18/2010
 Sample ID: 246291004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.954	0.954	0.0099	0.0145	11:44:40	No
2	0.930	0.930	0.0097	0.0143	11:45:15	No
Mean:	0.942	0.942	0.0098			
SD :	0.0168	0.0168	0.0002			
%RSD:	1.8	1.8	1.7363			

=====
 Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 02/18/2010
 Sample ID: 246291005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.019	0.019	0.0005	0.0050	11:46:37	No
2	0.013	0.013	0.0004	0.0050	11:47:12	No
Mean:	0.016	0.016	0.0004			
SD :	0.0038	0.0038	0.0000			
%RSD:	24.1	24.1	8.8365			

=====
 Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 02/18/2010
 Sample ID: 246291006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.015	-0.015	0.0001	0.0047	11:48:34	No
2	-0.026	-0.026	0.0000	0.0046	11:49:09	No
Mean:	-0.020	-0.020	0.0001			
SD :	0.0078	0.0078	0.0001			
%RSD:	38.5	38.5	110.3645			

=====
 Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 02/18/2010
 Sample ID: 246291007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0002	0.0043	11:50:33	No
2	-0.052	-0.052	-0.0003	0.0043	11:51:08	No
Mean:	-0.050	-0.050	-0.0002			
SD :	0.0027	0.0027	0.0000			

%RSD: 5.5 5.5 11.9973

=====
 Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 02/18/2010
 Sample ID: 246291008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.378	0.378	0.0041	0.0087	11:52:32	No
2	0.374	0.374	0.0041	0.0086	11:53:06	No
Mean:	0.376	0.376	0.0041			
SD :	0.0033	0.0033	0.0000			
%RSD:	0.9	0.9	0.8199			

=====
 Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 02/18/2010
 Sample ID: 246291009|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	1.880	1.880	0.0193	0.0239	11:54:30	No
2	1.884	1.884	0.0194	0.0239	11:55:05	No
Mean:	1.882	1.882	0.0194			
SD :	0.0028	0.0028	0.0000			
%RSD:	0.1	0.1	0.1449			

=====
 Element: Hg Seq. No.: 67 AS Loc.: 59 Date: 02/18/2010
 Sample ID: 1202039184|i||951512|MB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.178	-0.178	-0.0015	0.0030	11:56:29	No
2	-0.189	-0.189	-0.0016	0.0029	11:57:04	No
Mean:	-0.183	-0.183	-0.0016			
SD :	0.0082	0.0082	0.0001			
%RSD:	4.5	4.5	5.2496			

=====
 Element: Hg Seq. No.: 68 AS Loc.: 60 Date: 02/18/2010
 Sample ID: 1202039185|i|10|LCS

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.043	4.043	0.0413	0.0458	11:58:29	No
2	4.136	4.136	0.0422	0.0468	11:59:04	No
Mean:	4.090	4.090	0.0418			
SD :	0.0663	0.0663	0.0007			
%RSD:	1.6	1.6	1.6101			

=====
 Element: Hg Seq. No.: 69 AS Loc.: 61 Date: 02/18/2010
 Sample ID: 245960001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.131	0.131	0.0016	0.0062	12:00:31	No
2	0.129	0.129	0.0016	0.0061	12:01:06	No
Mean:	0.130	0.130	0.0016			
SD :	0.0018	0.0018	0.0000			
%RSD:	1.4	1.4	1.1554			

=====
 Element: Hg Seq. No.: 70 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl	SampleConc	StdConc	Blncorr	Peak	Time	Peak
------	------------	---------	---------	------	------	------

#	µg/L	µg/L	Signal	Height		Stored
1	5.033	5.033	0.0513	0.0559	12:02:32	No
2	4.998	4.998	0.0510	0.0555	12:03:07	No
Mean:	5.015	5.015	0.0511			
SD :	0.0249	0.0249	0.0003			
%RSD:	0.5	0.5	0.4945			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.012	-0.012	0.0002	0.0047	12:04:35	No
2	-0.004	-0.004	0.0002	0.0048	12:05:09	No
Mean:	-0.008	-0.008	0.0002			
SD :	0.0053	0.0053	0.0001			
%RSD:	65.8	65.8	27.7211			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 02/18/2010
 Sample ID: 245960002|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.081	0.081	0.0011	0.0057	12:06:35	No
2	0.068	0.068	0.0010	0.0055	12:07:10	No
Mean:	0.074	0.074	0.0010			
SD :	0.0085	0.0085	0.0001			
%RSD:	11.4	11.4	8.3596			

=====
 Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 02/18/2010
 Sample ID: 245960003|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.196	0.196	0.0023	0.0068	12:08:32	No
2	0.194	0.194	0.0022	0.0068	12:09:06	No
Mean:	0.195	0.195	0.0023			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.5	0.5	0.3972			

=====
 Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 02/18/2010
 Sample ID: 245960004|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.164	0.164	0.0019	0.0065	12:10:26	No
2	0.162	0.162	0.0019	0.0065	12:11:01	No
Mean:	0.163	0.163	0.0019			
SD :	0.0010	0.0010	0.0000			
%RSD:	0.6	0.6	0.5000			

=====
 Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 02/18/2010
 Sample ID: 245960005|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.189	0.189	0.0022	0.0068	12:12:22	No
2	0.173	0.173	0.0020	0.0066	12:12:57	No
Mean:	0.181	0.181	0.0021			
SD :	0.0112	0.0112	0.0001			

#	µg/L	µg/L	Signal	Height		Stored
1	0.170	0.170	0.0020	0.0066	12:24:01	No
2	0.165	0.165	0.0020	0.0065	12:24:36	No
Mean:	0.168	0.168	0.0020			
SD :	0.0032	0.0032	0.0000			
%RSD:	1.9	1.9	1.6534			

=====

Element: Hg Seq. No.: 82 AS Loc.: 7 Date: 02/18/2010

Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.047	5.047	0.0515	0.0560	12:26:01	No
2	5.085	5.085	0.0519	0.0564	12:26:36	No
Mean:	5.066	5.066	0.0517			
SD :	0.0274	0.0274	0.0003			
%RSD:	0.5	0.5	0.5371			

QC value within specified limits.

=====

Element: Hg Seq. No.: 83 AS Loc.: 8 Date: 02/18/2010

Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.010	-0.010	0.0002	0.0047	12:28:04	No
2	-0.005	-0.005	0.0002	0.0048	12:28:39	No
Mean:	-0.008	-0.008	0.0002			
SD :	0.0034	0.0034	0.0000			
%RSD:	43.5	43.5	17.5315			

QC value within specified limits.

=====

Element: Hg Seq. No.: 84 AS Loc.: 72 Date: 02/18/2010

Sample ID: 246470001|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	9.300	9.300	0.0946	0.0992	12:30:05	No
2	9.140	9.140	0.0930	0.0975	12:30:40	No
Mean:	9.220	9.220	0.0938			
SD :	0.1128	0.1128	0.0011			
%RSD:	1.2	1.2	1.2200			

=====

Element: Hg Seq. No.: 85 AS Loc.: 73 Date: 02/18/2010

Sample ID: 1202039186|i|||DUP

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	9.013	9.013	0.0917	0.0962	12:32:04	No
2	9.029	9.029	0.0918	0.0964	12:32:39	No
Mean:	9.021	9.021	0.0918			
SD :	0.0110	0.0110	0.0001			
%RSD:	0.1	0.1	0.1221			

=====

Element: Hg Seq. No.: 86 AS Loc.: 74 Date: 02/18/2010

Sample ID: 1202039187|i|||MS

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	12.91	12.91	0.1312	0.1358	12:34:03	No
2	12.95	12.95	0.1316	0.1362	12:34:37	No

Sample absorbance is greater than that of the highest standard.

Sample absorbance is greater than that of the highest standard.

2 14.03 14.03 0.1426 0.1471 12:44:30 No
 Sample absorbance is greater than that of the highest standard.
 Mean: 14.03 14.03 0.1426
 SD : 0.0063 0.0063 0.0001
 %RSD:
 Sample absorbance is greater than that of the highest standard.

=====

Element: Hg Seq. No.: 92 AS Loc.: 80 Date: 02/18/2010
 Sample ID: 246470005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	160.5	160.5	1.6280	1	1.6326 12:45:50	No
Sample absorbance is greater than that of the highest standard.						
2	148.3	148.3	1.5041	1	1.5087 12:46:24	No
Sample absorbance is greater than that of the highest standard.						
Mean:	154.4	154.4	1.5661			
SD :	8.640	8.640	0.0876			
%RSD:	5.6	5.6	5.5956			
Sample absorbance is greater than that of the highest standard.						

=====

Element: Hg Seq. No.: 93 AS Loc.: 81 Date: 02/18/2010
 Sample ID: 246470006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.699	0.699	0.0074	-	0.0119 12:47:45	No
2	1.028	1.028	0.0107		0.0153 12:48:20	No
Mean:	0.864	0.864	0.0090			
SD :	0.2332	0.2332	0.0024			
%RSD:	27.0	27.0	26.1783			

=====

Element: Hg Seq. No.: 94 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.963	4.963	0.0506		0.0552 12:49:44	No
2	5.078	5.078	0.0518		0.0563 12:50:19	No
Mean:	5.020	5.020	0.0512			
SD :	0.0809	0.0809	0.0008			
%RSD:	1.6	1.6	1.6030			
QC value within specified limits.						

=====

Element: Hg Seq. No.: 95 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0003		0.0049 12:51:47	No
2	0.006	0.006	0.0003		0.0049 12:52:21	No
Mean:	0.004	0.004	0.0003			
SD :	0.0038	0.0038	0.0000			
%RSD:	98.6	98.6	12.0691			
QC value within specified limits.						

=====

Element: Hg Seq. No.: 96 AS Loc.: 82 Date: 02/18/2010
 Sample ID: 246470007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.659	0.659	0.0070		0.0115 12:53:45	No

2	0.662	0.662	0.0070	0.0116	12:54:20	No
Mean:	0.661	0.661	0.0070			
SD :	0.0024	0.0024	0.0000			
%RSD:	0.4	0.4	0.3540			

=====

Element: Hg Seq. No.: 97 AS Loc.: 83 Date: 02/18/2010
Sample ID: 246470008|i|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	132.4	132.4	1.3427	1.3473	12:55:41	No
Sample absorbance is greater than that of the highest standard.						
2	129.8	129.8	1.3168	1.3214	12:56:15	No
Sample absorbance is greater than that of the highest standard.						
Mean:	131.1	131.1	1.3298			
SD :	1.806	1.806	0.0183			
%RSD:	1.4	1.4	1.3772			
Sample absorbance is greater than that of the highest standard.						

=====

Element: Hg Seq. No.: 98 AS Loc.: 84 Date: 02/18/2010
Sample ID: 1202039198|i|951518|MB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.258	-0.258	-0.0023	0.0022	12:57:37	No
2	-0.212	-0.212	-0.0019	0.0027	12:58:12	No
Mean:	-0.235	-0.235	-0.0021			
SD :	0.0325	0.0325	0.0003			
%RSD:	13.8	13.8	15.6227			

=====

Element: Hg Seq. No.: 99 AS Loc.: 7 Date: 02/18/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	4.855	4.855	0.0495	0.0541	13:07:12	No
2	5.001	5.001	0.0510	0.0556	13:07:48	No
Mean:	4.928	4.928	0.0503			
SD :	0.1032	0.1032	0.0010			
%RSD:	2.1	2.1	2.0829			
QC value within specified limits.						

=====

Element: Hg Seq. No.: 100 AS Loc.: 8 Date: 02/18/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.060	-0.060	-0.0003	0.0042	13:09:15	No
2	-0.064	-0.064	-0.0004	0.0042	13:09:50	No
Mean:	-0.062	-0.062	-0.0004			
SD :	0.0033	0.0033	0.0000			
%RSD:	5.3	5.3	9.4330			
QC value within specified limits.						

=====

Element: Hg Seq. No.: 101 AS Loc.: 77 Date: 02/18/2010
Sample ID: 246470002|i|50|

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	1.359	1.359	0.0141	0.0186	13:11:17	No
2	1.328	1.328	0.0137	0.0183	13:11:52	No
Mean:	1.343	1.343	0.0139			

SD : 0.0218 0.0218 0.0002
 %RSD: 1.6 1.6 1.5872

=====
 Element: Hg Seq. No.: 102 AS Loc.: 79 Date: 02/18/2010
 Sample ID: 246470004|i|10||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	1.372	1.372	0.0142	0.0188	13:13:15	No
2	1.328	1.328	0.0137	0.0183	13:13:50	No
Mean:	1.350	1.350	0.0140			
SD :	0.0315	0.0315	0.0003			
%RSD:	2.3	2.3	2.2847			

=====
 Element: Hg Seq. No.: 103 AS Loc.: 80 Date: 02/18/2010
 Sample ID: 246470005|i|200||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	13.93	13.93	0.1416	0.1461	13:15:10	No
Sample absorbance is greater than that of the highest standard.						
2	13.63	13.63	0.1385	0.1431	13:15:45	No
Sample absorbance is greater than that of the highest standard.						
Mean:	13.78	13.78	0.1401			
SD :	0.2113	0.2113	0.0021			
%RSD:	1.5	1.5	1.5300			
Sample absorbance is greater than that of the highest standard.						

=====
 Element: Hg Seq. No.: 104 AS Loc.: 81 Date: 02/18/2010
 Sample ID: 246470006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	1.213	1.213	0.0126	0.0171	13:17:06	No
2	1.173	1.173	0.0122	0.0167	13:17:41	No
Mean:	1.193	1.193	0.0124			
SD :	0.0279	0.0279	0.0003			
%RSD:	2.3	2.3	2.2899			

=====
 Element: Hg Seq. No.: 105 AS Loc.: 83 Date: 02/18/2010
 Sample ID: 246470008|i|200||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.161	2.161	0.0222	0.0268	13:19:01	No
2	2.078	2.078	0.0214	0.0259	13:19:37	No
Mean:	2.119	2.119	0.0218			
SD :	0.0586	0.0586	0.0006			
%RSD:	2.8	2.8	2.7291			

=====
 Element: Hg Seq. No.: 106 AS Loc.: 84 Date: 02/18/2010
 Sample ID: 1202039198|i||951518|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.190	-0.190	-0.0017	0.0029	13:20:58	No
2	-0.186	-0.186	-0.0016	0.0029	13:21:33	No
Mean:	-0.188	-0.188	-0.0016			
SD :	0.0028	0.0028	0.0000			
%RSD:	1.5	1.5	1.7488			

Element: Hg Seq. No.: 107 AS Loc.: 85 Date: 02/18/2010
 Sample ID: 1202039199|i|10||LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	3.945	3.945	0.0403	0.0449	13:22:55	No
2	3.805	3.805	0.0389	0.0434	13:23:30	No
Mean:	3.875	3.875	0.0396			
SD :	0.0991	0.0991	0.0010			
%RSD:	2.6	2.6	2.5383			

Element: Hg Seq. No.: 108 AS Loc.: 86 Date: 02/18/2010
 Sample ID: 245979001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.254	0.254	0.0029	0.0074	13:24:53	No
2	0.263	0.263	0.0029	0.0075	13:25:27	No
Mean:	0.259	0.259	0.0029			
SD :	0.0062	0.0062	0.0001			
%RSD:	2.4	2.4	2.1631			

Element: Hg Seq. No.: 109 AS Loc.: 87 Date: 02/18/2010
 Sample ID: 1202039200|i|||DUP

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.361	0.361	0.0039	0.0085	13:26:50	No
2	0.359	0.359	0.0039	0.0085	13:27:25	No
Mean:	0.360	0.360	0.0039			
SD :	0.0014	0.0014	0.0000			
%RSD:	0.4	0.4	0.3697			

Element: Hg Seq. No.: 110 AS Loc.: 88 Date: 02/18/2010
 Sample ID: 1202039201|i|||MS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.614	2.614	0.0268	0.0313	13:28:49	No
2	2.549	2.549	0.0261	0.0307	13:29:24	No
Mean:	2.581	2.581	0.0265			
SD :	0.0456	0.0456	0.0005			
%RSD:	1.8	1.8	1.7476			

Element: Hg Seq. No.: 111 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	4.837	4.837	0.0493	0.0539	13:30:49	No
2	4.919	4.919	0.0502	0.0547	13:31:24	No
Mean:	4.878	4.878	0.0497			
SD :	0.0586	0.0586	0.0006			
%RSD:	1.2	1.2	1.1946			

QC value within specified limits.

Element: Hg Seq. No.: 112 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.084	-0.084	-0.0006	0.0040	13:32:52	No

```

2      -0.081   -0.081   -0.0005   0.0040   13:33:28   No
Mean:   -0.082   -0.082   -0.0006
SD :    0.0023   0.0023   0.0000
%RSD:    2.8     2.8     4.2405
QC value within specified limits.

```

```

=====
Element: Hg      Seq. No.: 113      AS Loc.: 89      Date: 02/18/2010
Sample ID: 1202039207|i|||MSD

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      2.588      2.588      0.0265    0.0311    13:34:54   No
2      2.636      2.636      0.0270    0.0316    13:35:28   No
Mean:   2.612      2.612      0.0268
SD :    0.0337      0.0337      0.0003
%RSD:    1.3        1.3        1.2787

```

```

=====
Element: Hg      Seq. No.: 114      AS Loc.: 90      Date: 02/18/2010
Sample ID: 1202039206|i|5||SDILT

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      -0.181      -0.181     -0.0016    0.0030    13:36:52   No
2      -0.194      -0.194     -0.0017    0.0029    13:37:27   No
Mean:   -0.187      -0.187     -0.0016
SD :    0.0087      0.0087      0.0001
%RSD:    4.7        4.7        5.4633

```

```

=====
Element: Hg      Seq. No.: 115      AS Loc.: 91      Date: 02/18/2010
Sample ID: 245979002|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      0.175      0.175      0.0021    0.0066    13:38:53   No
2      0.163      0.163      0.0019    0.0065    13:39:27   No
Mean:   0.169      0.169      0.0020
SD :    0.0091      0.0091      0.0001
%RSD:    5.4        5.4        4.6298

```

```

=====
Element: Hg      Seq. No.: 116      AS Loc.: 92      Date: 02/18/2010
Sample ID: 245979003|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      -0.163      -0.163     -0.0014    0.0032    13:40:50   No
2      -0.207      -0.207     -0.0018    0.0027    13:41:24   No
Mean:   -0.185      -0.185     -0.0016
SD :    0.0313      0.0313      0.0003
%RSD:   16.9       16.9      19.8151

```

```

=====
Element: Hg      Seq. No.: 117      AS Loc.: 93      Date: 02/18/2010
Sample ID: 245979004|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      -0.191      -0.191     -0.0017    0.0029    13:42:43   No
2      -0.198      -0.198     -0.0017    0.0028    13:43:18   No
Mean:   -0.194      -0.194     -0.0017
SD :    0.0050      0.0050      0.0001
%RSD:    2.6        2.6        2.9823

```

Element: Hg Seq. No.: 118 AS Loc.: 94 Date: 02/18/2010
 Sample ID: 245979005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.056	-0.056	-0.0003	0.0043	13:44:38	No
2	-0.058	-0.058	-0.0003	0.0043	13:45:13	No
Mean:	-0.057	-0.057	-0.0003			
SD :	0.0012	0.0012	0.0000			
%RSD:	2.2	2.2	4.2318			

Element: Hg Seq. No.: 119 AS Loc.: 95 Date: 02/18/2010
 Sample ID: 245979006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.153	-0.153	-0.0013	0.0033	13:46:33	No
2	-0.166	-0.166	-0.0014	0.0032	13:47:08	No
Mean:	-0.159	-0.159	-0.0013			
SD :	0.0092	0.0092	0.0001			
%RSD:	5.8	5.8	6.9882			

Element: Hg Seq. No.: 120 AS Loc.: 96 Date: 02/18/2010
 Sample ID: 245979007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.049	-0.049	-0.0002	0.0043	13:48:28	No
2	-0.051	-0.051	-0.0002	0.0043	13:49:03	No
Mean:	-0.050	-0.050	-0.0002			
SD :	0.0010	0.0010	0.0000			
%RSD:	2.1	2.1	4.5799			

Element: Hg Seq. No.: 121 AS Loc.: 97 Date: 02/18/2010
 Sample ID: 245979008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.235	-0.235	-0.0021	0.0025	13:50:24	No
2	-0.230	-0.230	-0.0021	0.0025	13:50:59	No
Mean:	-0.233	-0.233	-0.0021			
SD :	0.0034	0.0034	0.0000			
%RSD:	1.5	1.5	1.6542			

Element: Hg Seq. No.: 122 AS Loc.: 98 Date: 02/18/2010
 Sample ID: 245979009|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.119	-0.119	-0.0009	0.0036	13:52:20	No
2	-0.123	-0.123	-0.0010	0.0036	13:52:55	No
Mean:	-0.121	-0.121	-0.0010			
SD :	0.0027	0.0027	0.0000			
%RSD:	2.2	2.2	2.8459			

Element: Hg Seq. No.: 123 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.340	2.340	0.0240	0.0286	13:54:19	No
2	2.314	2.314	0.0237	0.0283	13:54:55	No

Mean: 2.327 2.327 0.0239
 SD : 0.0187 0.0187 0.0002
 %RSD: 0.8 0.8 0.7933
 QC failed, value less than lower limit for Hg.
 Current analysis method being continued.

=====

Element: Hg Seq. No.: 124 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.244	-0.244	-0.0022	0.0024	13:56:23	No
2	-0.237	-0.237	-0.0021	0.0024	13:56:57	No
Mean:	-0.241	-0.241	-0.0022			
SD :	0.0044	0.0044	0.0000			
%RSD:	1.8	1.8	2.0728			

=====

Element: Hg Seq. No.: 125 AS Loc.: 7 Date: 02/18/2010
 Sample ID: Sample007

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.253	5.253	0.0535	0.0581	14:00:37	No
2	5.259	5.259	0.0536	0.0582	14:01:12	No
Mean:	5.256	5.256	0.0536			
SD :	0.0047	0.0047	0.0000			
%RSD:						

=====
Element: Hg Seq. No.: 126 AS Loc.: 7 Date: 02/18/2010
Sample ID: CCV
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	5.315	5.315	0.0542	0.0587	14:05:21	No
2	5.331	5.331	0.0543	0.0589	14:05:57	No
Mean:	5.323	5.323	0.0543			
SD :	0.0113	0.0113	0.0001			
%RSD:	0.2	0.2	0.2119			

QC value within specified limits.

=====
Element: Hg Seq. No.: 127 AS Loc.: 8 Date: 02/18/2010
Sample ID: CCB
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.090	-0.090	-0.0006	0.0039	14:07:24	No
2	-0.098	-0.098	-0.0007	0.0038	14:08:00	No
Mean:	-0.094	-0.094	-0.0007			
SD :	0.0052	0.0052	0.0001			
%RSD:	5.6	5.6	7.8415			

QC value within specified limits.

=====
Element: Hg Seq. No.: 128 AS Loc.: 80 Date: 02/18/2010
Sample ID: 246470005|i|400|951512|
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	6.212	6.212	0.0633	0.0678	14:09:24	No
2	6.240	6.240	0.0636	0.0681	14:09:59	No
Mean:	6.226	6.226	0.0634			
SD :	0.0200	0.0200	0.0002			
%RSD:	0.3	0.3	0.3204			

=====
Element: Hg Seq. No.: 129 AS Loc.: 89 Date: 02/18/2010
Sample ID: 1202039207|i||951518|MSD
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	2.609	2.609	0.0267	0.0313	14:11:22	No
2	2.628	2.628	0.0269	0.0315	14:11:57	No
Mean:	2.619	2.619	0.0268			
SD :	0.0134	0.0134	0.0001			
%RSD:	0.5	0.5	0.5075			

=====
Element: Hg Seq. No.: 130 AS Loc.: 90 Date: 02/18/2010
Sample ID: 1202039206|i|5||SDILT
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.085	-0.085	-0.0006	0.0040	14:13:22	No
2	-0.084	-0.084	-0.0006	0.0040	14:13:57	No
Mean:	-0.085	-0.085	-0.0006			
SD :	0.0010	0.0010	0.0000			
%RSD:	1.1	1.1	1.6625			

=====
Element: Hg Seq. No.: 131 AS Loc.: 91 Date: 02/18/2010
Sample ID: 245979002|i|||
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.170	0.170	0.0020	0.0066	14:15:22	No

2	0.151	0.151	0.0018	0.0064	14:15:57	No
Mean:	0.160	0.160	0.0019			
SD :	0.0131	0.0131	0.0001			
%RSD:	8.2	8.2	6.9997			

=====

Element: Hg Seq. No.: 132 AS Loc.: 92 Date: 02/18/2010
 Sample ID: 245979003|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.031	0.031	0.0006	0.0052	14:17:20	No
2	0.022	0.022	0.0005	0.0051	14:17:54	No
Mean:	0.027	0.027	0.0006			
SD :	0.0063	0.0063	0.0001			
%RSD:	23.4	23.4	11.6164			

=====

Element: Hg Seq. No.: 133 AS Loc.: 93 Date: 02/18/2010
 Sample ID: 245979004|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.017	0.017	0.0004	0.0050	14:19:13	No
2	-0.003	-0.003	0.0002	0.0048	14:19:48	No
Mean:	0.007	0.007	0.0003			
SD :	0.0140	0.0140	0.0001			
%RSD:	202.1	202.1	40.9006			

=====

Element: Hg Seq. No.: 134 AS Loc.: 94 Date: 02/18/2010
 Sample ID: 245979005|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.238	0.238	0.0027	0.0073	14:21:09	No
2	0.242	0.242	0.0027	0.0073	14:21:44	No
Mean:	0.240	0.240	0.0027			
SD :	0.0026	0.0026	0.0000			
%RSD:	1.1	1.1	0.9715			

=====

Element: Hg Seq. No.: 135 AS Loc.: 95 Date: 02/18/2010
 Sample ID: 245979006|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.064	0.064	0.0009	0.0055	14:23:04	No
2	0.045	0.045	0.0007	0.0053	14:23:39	No
Mean:	0.055	0.055	0.0008			
SD :	0.0130	0.0130	0.0001			
%RSD:	23.8	23.8	15.8757			

=====

Element: Hg Seq. No.: 136 AS Loc.: 96 Date: 02/18/2010
 Sample ID: 245979007|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.212	0.212	0.0024	0.0070	14:24:59	No
2	0.202	0.202	0.0023	0.0069	14:25:34	No
Mean:	0.207	0.207	0.0024			
SD :	0.0074	0.0074	0.0001			
%RSD:	3.6	3.6	3.1601			

=====

Element: Hg Seq. No.: 137 AS Loc.: 97 Date: 02/18/2010

Sample ID: 245979008|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0002	0.0044	14:26:55	No
2	-0.066	-0.066	-0.0004	0.0042	14:27:30	No
Mean:	-0.054	-0.054	-0.0003			
SD :	0.0172	0.0172	0.0002			
%RSD:	31.6	31.6	63.5355			

=====
 Element: Hg Seq. No.: 138 AS Loc.: 7 Date: 02/18/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	5.087	5.087	0.0519	0.0564	14:28:54	No
2	5.101	5.101	0.0520	0.0566	14:29:29	No
Mean:	5.094	5.094	0.0519			
SD :	0.0098	0.0098	0.0001			
%RSD:	0.2	0.2	0.1911			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 139 AS Loc.: 8 Date: 02/18/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.094	-0.094	-0.0007	0.0039	14:30:56	No
2	-0.088	-0.088	-0.0006	0.0039	14:31:32	No
Mean:	-0.091	-0.091	-0.0006			
SD :	0.0043	0.0043	0.0000			
%RSD:	4.7	4.7	6.7349			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 140 AS Loc.: 98 Date: 02/18/2010
 Sample ID: 245979009|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.118	0.118	0.0015	0.0060	14:32:57	No
2	0.081	0.081	0.0011	0.0057	14:33:32	No
Mean:	0.099	0.099	0.0013			
SD :	0.0257	0.0257	0.0003			
%RSD:	25.9	25.9	20.2774			

=====
 Element: Hg Seq. No.: 141 AS Loc.: 99 Date: 02/18/2010
 Sample ID: 245979010|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	0.036	0.036	0.0006	0.0052	14:34:54	No
2	0.039	0.039	0.0007	0.0052	14:35:28	No
Mean:	0.038	0.038	0.0007			
SD :	0.0024	0.0024	0.0000			
%RSD:	6.3	6.3	3.6823			

=====
 Element: Hg Seq. No.: 142 AS Loc.: 100 Date: 02/18/2010
 Sample ID: 245979011|i|||

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.080	-0.080	-0.0005	0.0040	14:36:50	No


```

2      -0.092   -0.092   -0.0007   0.0039   14:37:25   No
Mean:   -0.086   -0.086   -0.0006
SD :    0.0087   0.0087   0.0001
%RSD:    10.1    10.1    14.8098

```

```

=====
Element: Hg      Seq. No.: 143      AS Loc.: 101      Date: 02/18/2010
Sample ID: 245979012|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      -0.121    -0.121    -0.0010    0.0036    14:38:48   No
2      -0.130    -0.130    -0.0010    0.0035    14:39:23   No
Mean:   -0.125    -0.125    -0.0010
SD :    0.0058    0.0058    0.0001
%RSD:    4.7      4.7      5.9459

```

```

=====
Element: Hg      Seq. No.: 144      AS Loc.: 102      Date: 02/18/2010
Sample ID: 245979013|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      0.173     0.173     0.0020    0.0066    14:40:46   No
2      0.151     0.151     0.0018    0.0064    14:41:21   No
Mean:   0.162     0.162     0.0019
SD :    0.0154    0.0154    0.0002
%RSD:    9.5      9.5      8.1041

```

```

=====
Element: Hg      Seq. No.: 145      AS Loc.: 103      Date: 02/18/2010
Sample ID: 245979014|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      -0.075    -0.075    -0.0005    0.0041    14:42:45   No
2      -0.078    -0.078    -0.0005    0.0040    14:43:20   No
Mean:   -0.077    -0.077    -0.0005
SD :    0.0021    0.0021    0.0000
%RSD:    2.8      2.8      4.3162

```

```

=====
Element: Hg      Seq. No.: 146      AS Loc.: 104      Date: 02/18/2010
Sample ID: 245979015|i|||

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      0.037     0.037     0.0007    0.0052    14:44:45   No
2      0.029     0.029     0.0006    0.0051    14:45:20   No
Mean:   0.033     0.033     0.0006
SD :    0.0057    0.0057    0.0001
%RSD:   17.3     17.3     9.4840

```

```

=====
Element: Hg      Seq. No.: 147      AS Loc.: 7        Date: 02/18/2010
Sample ID: CCV

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time      Peak
#      ug/L      ug/L      Signal    Height    Height    Stored
1      4.935     4.935     0.0503    0.0549    14:46:45   No
2      5.008     5.008     0.0511    0.0556    14:47:20   No
Mean:   4.971     4.971     0.0507
SD :    0.0515    0.0515    0.0005
%RSD:    1.0      1.0      1.0306
QC value within specified limits.

```

Element: Hg Seq. No.: 148 AS Loc.: 8 Date: 02/18/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Height	Time	Peak Stored
1	-0.119	-0.119	-0.0009	0.0036	14:48:48	No
2	-0.103	-0.103	-0.0008	0.0038	14:49:23	No
Mean:	-0.111	-0.111	-0.0008			
SD :	0.0110	0.0110	0.0001			
%RSD:	9.9	9.9	13.1689			

QC value within specified limits.

Miscellaneous

Prep LogBook

Analyst: FGA Verified by: _____

Batch: 948763

Lab SOP: GL-MA-E-009 REV# 19

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202032610		SW846 3050B	10-FEB-2010 13:30	0.574 g	50 mL	87.10801	.525	g
LCS	1202032615		SW846 3050B	10-FEB-2010 13:30	0.525 g	50 mL	95.2381	.25	mL
SAMPLE	245979001		SW846 3050B	10-FEB-2010 13:30	0.554 g	50 mL	90.25271	.25	mL
DUP	1202032611	245979001	SW846 3050B	10-FEB-2010 13:30	0.534 g	50 mL	93.63296	.25	mL
SDILT	1202032612	245979001	SW846 3050B	10-FEB-2010 13:30	0.554 g	50 mL	90.25271	.25	mL
MS	1202032613	245979001	SW846 3050B	10-FEB-2010 13:30	0.537 g	50 mL	93.10987	.25	mL
MSD	1202032614	245979001	SW846 3050B	10-FEB-2010 13:30	0.527 g	50 mL	94.87666	.25	mL
SAMPLE	245979002		SW846 3050B	10-FEB-2010 13:30	0.542 g	50 mL	92.25092	.25	mL
SAMPLE	245979003		SW846 3050B	10-FEB-2010 13:30	0.541 g	50 mL	92.42144	.25	mL
SAMPLE	245979004		SW846 3050B	10-FEB-2010 13:30	0.567 g	50 mL	88.18342	.25	mL
SAMPLE	245979005		SW846 3050B	10-FEB-2010 13:30	0.519 g	50 mL	96.33911	.25	mL
SAMPLE	245979006		SW846 3050B	10-FEB-2010 13:30	0.509 g	50 mL	98.23183	.25	mL
SAMPLE	245979007		SW846 3050B	10-FEB-2010 13:30	0.534 g	50 mL	93.63296	.25	mL
SAMPLE	245979008		SW846 3050B	10-FEB-2010 13:30	0.545 g	50 mL	91.74312	.25	mL
SAMPLE	245979009		SW846 3050B	10-FEB-2010 13:30	0.522 g	50 mL	95.78544	.25	mL
SAMPLE	245979010		SW846 3050B	10-FEB-2010 13:30	0.526 g	50 mL	95.05703	.25	mL
SAMPLE	245979011		SW846 3050B	10-FEB-2010 13:30	0.556 g	50 mL	89.92806	.25	mL
SAMPLE	245979012		SW846 3050B	10-FEB-2010 13:30	0.509 g	50 mL	98.23183	.25	mL
SAMPLE	245979013		SW846 3050B	10-FEB-2010 13:30	0.516 g	50 mL	96.89922	.25	mL
SAMPLE	245979014		SW846 3050B	10-FEB-2010 13:30	0.517 g	50 mL	96.7118	.25	mL
SAMPLE	245979015		SW846 3050B	10-FEB-2010 13:30	0.54 g	50 mL	92.59259	.25	mL

Comments Brown,clumpy soil.

Reagent/Solvent Lot ID	Amount	Description
1265209	10 mL	HYDROCHLORIC ACID
1264396	1.25 mL	Nitric Acid CONC.

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GEL Laboratories LLC

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Prep LogBook

Analyst: FGA Verified by: _____

Batch: 948768

Lab SOP: GL-MA-E-009 REV# 19

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Type	Sample Id	Lot. Id	Spike Amount	Spike Units
MB	1202032619		SW846 3050B	10-FEB-2010 13:30	LCS	1202032624	U062540-MS	.52	g
LCS	1202032624		SW846 3050B	10-FEB-2010 13:30	MS	1202032622	U091015-A	.5	mL
SAMPLE	245979001		SW846 3050B	10-FEB-2010 13:30	MS	1202032622	U091015-B	.5	mL
DUP	1202032620	245979001	SW846 3050B	10-FEB-2010 13:30	MSD	1202032623	U091015-A	.5	mL
SDILT	1202032621	245979001	SW846 3050B	10-FEB-2010 13:30	MSD	1202032623	U091015-B	.5	mL
MS	1202032622	245979001	SW846 3050B	10-FEB-2010 13:30					
MSD	1202032623	245979001	SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979002		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979003		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979004		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979005		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979006		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979007		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979008		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979009		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979010		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979011		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979012		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979013		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979014		SW846 3050B	10-FEB-2010 13:30					
SAMPLE	245979015		SW846 3050B	10-FEB-2010 13:30					

Reagent/Solvent Lot ID: 1203655-02
 Amount: 1.5 mL
 Description: Hydrogen Peroxide 30%
 1264396 Nitric Acid CONC.

Comments: Brown, clumpy, soil.

Prep LogBook

Analyst: TXB3 Verified by: _____

Batch: 951517

Lab SOP: GL-MA-E-010 REV# 23

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202039198		SW846 7471A Prep	17-FEB-2010 19:30	0.503 g	30 mL	59.64215		g
LCS	1202039199		SW846 7471A Prep	17-FEB-2010 19:30	0.2 g	30 mL	150		SOIL
SAMPLE	245979001		SW846 7471A Prep	17-FEB-2010 19:30	0.502 g	30 mL	59.76096		SOIL
DUP	1202039200	245979001	SW846 7471A Prep	17-FEB-2010 19:30	0.574 g	30 mL	52.26481		SOIL
MS	1202039201	245979001	SW846 7471A Prep	17-FEB-2010 19:30	0.564 g	30 mL	53.19149		SOIL
MSD	1202039207	245979001	SW846 7471A Prep	17-FEB-2010 19:30	0.572 g	30 mL	52.44755		SOIL
SDILT	1202039206	245979001	SW846 7471A Prep	17-FEB-2010 19:30	0.502 g	30 mL	59.76096		SOIL
SAMPLE	245979002		SW846 7471A Prep	17-FEB-2010 19:30	0.503 g	30 mL	59.64215		SOIL
SAMPLE	245979003		SW846 7471A Prep	17-FEB-2010 19:30	0.515 g	30 mL	58.25243		SOIL
SAMPLE	245979004		SW846 7471A Prep	17-FEB-2010 19:30	0.599 g	30 mL	50.08347		SOIL
SAMPLE	245979005		SW846 7471A Prep	17-FEB-2010 19:30	0.513 g	30 mL	58.47953		SOIL
SAMPLE	245979006		SW846 7471A Prep	17-FEB-2010 19:30	0.585 g	30 mL	51.28205		SOIL
SAMPLE	245979007		SW846 7471A Prep	17-FEB-2010 19:30	0.515 g	30 mL	58.25243		SOIL
SAMPLE	245979008		SW846 7471A Prep	17-FEB-2010 19:30	0.5 g	30 mL	60		SOIL
SAMPLE	245979009		SW846 7471A Prep	17-FEB-2010 19:30	0.6 g	30 mL	50		SOIL
SAMPLE	245979010		SW846 7471A Prep	17-FEB-2010 19:30	0.561 g	30 mL	53.47594		SOIL
SAMPLE	245979011		SW846 7471A Prep	17-FEB-2010 19:30	0.565 g	30 mL	53.09735		SOIL
SAMPLE	245979012		SW846 7471A Prep	17-FEB-2010 19:30	0.58 g	30 mL	51.72414		SOIL
SAMPLE	245979013		SW846 7471A Prep	17-FEB-2010 19:30	0.569 g	30 mL	52.72408		SOIL
SAMPLE	245979014		SW846 7471A Prep	17-FEB-2010 19:30	0.577 g	30 mL	51.99307		SOIL
SAMPLE	245979015		SW846 7471A Prep	17-FEB-2010 19:30	0.55 g	30 mL	54.54545		SOIL

Comments Sample 245979001 is a dry light brown soil.
Digestion Start Date: 17-FEB-10 19:30
Digestion End Date: 17-FEB-10 20:00

Reagent/Solvent Lot ID	Amount	Description
1264796-A	1.125 mL	Hydrochloric Acid Conc.
1257474-1	.375 mL	NITRIC ACID
1264984-C	7.5 mL	5% KMnO4 solution
1255532-C	2 mL	Hg reducing agent
WHG100217-07	30 uL	Mercury Working Standard 1st Source CAL S 0.2/CRA
WHG100217-08	75 uL	Mercury Working Standard 1st Source CAL S 0.5
WHG100217-11	1.5 mL	Mercury Working 1st Source CAL S 10.0
WHG100217-09	300 uL	Mercury Working 1st Source CAL S 2.0
WHG100217-10	750 uL	Mercury Working 1st Source CAL S 5.0/CCV
WHG100217-12	750 uL	Mercury Working 2nd Source S 5.0/ICV

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GEL Laboratories LLC

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DATA EXCEPTION REPORT

Mo. Day Yr.
21-FEB-10

Division:
Industrial

Quality Criteria:
Specifications

Type:
Process

Instrument Type:
ICP

Test / Method:
SW846 3050B/6010B

Matrix Type:
Solid

Client Code:
LANL

Batch ID:
948764

Sample Numbers:
See Below

Potentially affected work order(s)(SDG): 245979(10-1514)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for DUP

Failed Recovery for MSD/PSD

**Specification and Requirements
Exception Description:**

1. Failed Recovery for MS/PS:

QC 1202032613MS

2. Failed RPD for DUP:

QC 1202032611DUP

3. Failed Recovery for MSD/PSD:

QC 1202032614MSD

DER Disposition:

1. The matrix spike recovery failed outside of the control limits for calcium, potassium and magnesium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

2. The sample and sample duplicate % RPD failed outside the control limits for calcium due to possible sample non-homogeneity and/or matrix interference. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

3. The matrix spike duplicate recovery failed outside of the control limits for calcium and magnesium due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Jerry Wigfall

21-FEB-10

Data Validator/Group Leader:

Louise Smith

23-FEB-10

DATA EXCEPTION REPORT

Mo. Day Yr. 26-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: ICP/MS	Test / Method: SW846 3050B/6020	Matrix Type: Solid	Client Code: LANL
Batch ID: 948769	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245979(10-1514)			
Application Issues: Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Failed RPD for DUP Failed Recovery for MSD/PSD			
Specification and Requirements Exception Description: 1. Failed Recovery for MS/PS: QC 1202032622MS 2. Failed RPD for DUP: QC 1202032620DUP 3. Failed RPD for MS/MSD, or PS/PSD: QC 1202032623MSD 4. Failed Recovery for MSD/PSD: QC 1202032623MSD		DER Disposition: The matrix spike failed outside of the control limits for Se. The matrix spike duplicate failed outside of the control limits for Se and U. The matrix spike duplicate % RPD failed outside of the control limits for U. The sample and sample duplicate % RPD failed outside the control limits for Be and U. These failures were due to possible matrix interferences and/or sample non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.	

Originator's Name:

Paul Boyd 26-FEB-10

Data Validator/Group Leader:

Samantha Jacobs 27-FEB-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI031809A **Opened:** 18-MAR-09 **Catalog Number :** 540
Name: METALSOILSRM **Received:** 18-MAR-09 **Lot Number :** D061-540
Type: Source Material **Expires:** 10-OCT-10
Employee: Jamie Johnson
Supplier: ERA
Description: Metals LCS Soil SRM
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10600 mg/kg	Antimony	126 mg/kg
Arsenic	225 mg/kg	Barium	565 mg/kg
Beryllium	162 mg/kg	Boron	107 mg/kg
Cadmium	69.1 mg/kg	Calcium	10000 mg/kg
Chromium	124 mg/kg	Cobalt	115 mg/kg
Copper	66.7 mg/kg	Iron	17600 mg/kg
Lead	223 mg/kg	Magnesium	4260 mg/kg
Manganese	368 mg/kg	Mercury	5.15 mg/kg
Molybdenum	107 mg/kg	Nickel	172 mg/kg
Potassium	4090 mg/kg	Selenium	147 mg/kg
Silver	35.2 mg/kg	Sodium	538 mg/kg
Strontium	117 mg/kg	Thallium	173 mg/kg
Tin	164 mg/kg	Titanium	381 mg/kg
Vanadium	93.9 mg/kg	Zinc	349 mg/kg

Standard Logbook

Serial ID: UI062540-I **Opened:** 12-JUN-09 **Amount :** 80 g
Name: ICP SOIL SRM **Received:** 12-JUN-09 **Lot Number :** D062-540
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICP/Hg
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	173 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.7 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Magnesium	4000 mg/kg
Manganese	558 mg/kg	Mercury	8.46 mg/kg
Molybdenum	48.6 mg/kg	Nickel	134 mg/kg
Phosphorous	736 mg/kg	Potassium	4300 mg/kg
Selenium	286 mg/kg	Silica	2591 mg/kg
Silicon	1211 mg/kg	Silver	30.1 mg/kg
Sodium	1020 mg/kg	Strontium	227 mg/kg
Sulfur	385 mg/kg	Thallium	121 mg/kg
Tin	104 mg/kg	Titanium	462 mg/kg
Vanadium	115 mg/kg	Zinc	594 mg/kg

Serial ID: UI062540-MS **Opened:** 12-JUN-09 **Lot Number :** D062-540
Name: ICPMS SOIL SRM **Received:** 12-JUN-09
Type: Source Material **Expires:** 31-JAN-12
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: UI090422-40 Opened: 04-MAY-09 Amount : 500 mL
 Name: TRACE ICP ICSA SOLN A Received: 22-APR-09 Catalog Number : 160005-01-03
 Type: Source Material Expires: 04-MAY-10 Lot Number : 1013357
 Employee: Helen Camello Solvent : 5%HNO3
 Supplier: o2si
 Description: TRACE ICP ICSA SOLN A mg/L +/- 0.5% IN 5% HNO3
 Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 Opened: 10-JUN-09 Catalog Number : 060074-06-01
 Name: ICPMS Tungsten - 10mg/L Received: 10-JUN-09 Lot Number : 1016338
 Type: Source Material Expires: 10-JUN-10 Solvent : 2% HNO3
 Employee: Paul Boyd
 Supplier: O2SI
 Description: ICPMS Tungsten standard SPIKE - 10mg/L
 Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI090701-09 Opened: 01-JUL-09 Amount : 250 mL
 Name: ICP-MS CRDL Master #1 Received: 01-JUL-09 Catalog Number : 160044-09-02
 Type: Source Material Expires: 01-JUL-10 Lot Number : 1016477
 Employee: Paul Boyd Solvent : +/- 0.5% IN 2% HNO3
 Supplier: O2SI
 Description: ICPMS CRDL Master Soln #1
 Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 Opened: 01-JUL-09 Amount : 250 mL
 Name: ICP-MS CRDL Master #2 Received: 01-JUL-09 Catalog Number : 160044-08-02
 Type: Source Material Expires: 01-JUL-10 Lot Number : 1016476
 Employee: Paul Boyd Solvent : +/- 0.5% IN 2% HNO3
 Supplier: 02SI
 Description: ICPMS CRDL Soln #2
 Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 Opened: 01-JUL-09 Amount : 500 mL
 Name: TRACE ICP Stock PQL Str Received: 30-JUN-09 Catalog Number : 160543-01-03
 Type: Source Material Expires: 01-JUL-10 Lot Number : 1016475
 Employee: Helen Camello Solvent : +/-0.5%in2%HNO3+TrHF
 Supplier: 02si
 Description: TRACE ICP Stock PQL Standard
 Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: Q2SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H2O(NH4)2SiF6
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H2O(NH4)2SiF6
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091015-A **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for soil products.
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	20 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	10 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI091015-B **Opened:** 15-OCT-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 15-OCT-09 **Lot Number :** 1017142
Type: Source Material **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: 02si
Description: ICP-MS Spike for Soil Products
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silicon	200 mg/L	Silver	5 mg/L
Tin	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: Q2SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: Q2SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100120-01 **Opened:** 20-JAN-10 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI100120-06 **Opened:** 20-JAN-10 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: UI100210-48 **Opened:** 11-FEB-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 10-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018807
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100211-40 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100211-41 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100217-49.2 **Opened:** 19-FEB-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 17-FEB-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 20-FEB-10 **Lot Number :** 1018879
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UI100217-49.3 **Opened:** 20-FEB-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 17-FEB-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 15-AUG-10 **Lot Number :** 1018879
Employee: Louise Smith **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UI100219-11 **Opened:** 19-FEB-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 19-FEB-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: O2SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI100219-60 **Opened:** 19-FEB-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI100219-61 **Opened:** 19-FEB-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMS CalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMS CalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100217-01 **Opened:** 17-FEB-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 17-FEB-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 18-FEB-10 **Solvent :** 1mL HNO3 + Type1 H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100217-02 **Opened:** 17-FEB-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 18-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG100217-07 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100217-08 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working Standard 1st Source CAL S 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100217-09 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100217-10 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL S 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG100217-11 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL S10.0 **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL S 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100217-12 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 2nd Source S 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100217-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100217-14 **Opened:** 17-FEB-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 17-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 24-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury soil working intermediate standard for MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100219-42 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100219-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100219-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100219-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100219-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100219-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100219-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100219-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100219-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100219-43 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: W1100219-44 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL and 1 %HNO3-1270010
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100219-45 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100219-46 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL AND 1%HNO3-1270010
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100219-47 **Opened:** 19-FEB-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-FEB-10 **Solvent :** 3%HCL &1%HNO3-1270010
Employee: Helen Camello
Supplier: 02sj
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WI100220-42 **Opened:** 20-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-10 **Pipet Id :** 3581809
Type: Working **Expires:** 21-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Louise Smith
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100220-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100220-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100220-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100220-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100220-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100220-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100220-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100220-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100220-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100220-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100220-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100220-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100220-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100220-43 **Opened:** 20-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-10 **Pipet Id :** 3581809
Type: Working **Expires:** 21-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Louise Smith
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Serial ID: WI100220-44 **Opened:** 20-FEB-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-10 **Pipet Id :** 3581809
Type: Working **Expires:** 21-FEB-10 **Solvent :** 3%HCL and 1 %HNO3-1270010
Employee: Louise Smith
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Serial ID: WI100220-45 **Opened:** 20-FEB-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-10 **Pipet Id :** 3581809
Type: Working **Expires:** 21-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1270010
Employee: Louise Smith
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100220-46 **Opened:** 20-FEB-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-10 **Pipet Id :** 3581809
Type: Working **Expires:** 21-FEB-10 **Solvent :** 3%HCL AND 1%HNO3-1270010
Employee: Louise Smith
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100220-47 **Opened:** 20-FEB-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-10 **Pipet Id :** 3581809
Type: Working **Expires:** 21-FEB-10 **Solvent :** 3%HCL &1%HNO3-1270010
Employee: Louise Smith
Supplier: 02si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100224-04B **Opened:** 24-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-FEB-10 **Balance Id :** 40245216
Type: Working **Expires:** 25-FEB-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100225-04 **Opened:** 25-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100225-04A **Opened:** 25-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100224-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100224-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100225-05 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100225-06

Opened: 25-FEB-10

Balance Id : 40245216

Name: ICPMS CRDL

Received: 25-FEB-10

Pipet Id : 3820544

Type: Working

Expires: 26-FEB-10

Solvent : 2%HNO3/1%HCl - 1272768

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS CRDL

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100225-07 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 25-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100225-08 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 25-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL

Standard Logbook

Description: ICPMS ICSAB

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100225-70 Opened: 25-FEB-10 Balance Id : 40245216
 Name: ICPMS LINEAR RANGE ST Received: 25-FEB-10 Pipet Id : 1758088
 Type: Working Expires: 26-FEB-10 Solvent : 2%HNO3/1%HCl - 1272768
 Employee: Paul Boyd
 Supplier: 02SI
 Description: ICPMS LINEAR RANGE STANDARD

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100219-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100219-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: 100202 **Opened:** 02-FEB-10 **Lot Number :** 200930201
Name: I-HCL **Received:** 02-FEB-10
Type: Reagent/Solvent **Expires:** 02-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1100721TCLP **Opened:** 16-APR-09 **Lot Number :** H02026 L
Name: I-HNO3 **Received:** 02-APR-09
Type: Reagent/Solvent **Expires:** 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A **Opened:** 20-JUL-09 **Lot Number :** 41226920
Name: B-KMnO4(VWR)-MER **Received:** 20-JUL-09
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin **Verified:** 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1203655-02 **Opened:** 15-OCT-09 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 15-OCT-09
Type: Reagent/Solvent **Expires:** 15-OCT-10
Employee: Francena Armstrong
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Standard Logbook

Serial ID: 1257474-1 **Opened:** 20-JAN-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 20-JAN-10 **Lot Number :** H20053
Type: Reagent/Solvent **Expires:** 20-JAN-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1264396 **Opened:** 03-FEB-10 **Lot Number :** H51025 L
Name: I-HNO3 **Received:** 02-FEB-10
Type: Reagent/Solvent **Expires:** 03-FEB-11
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1264796-A **Opened:** 04-FEB-10 **Lot Number :** 200930201
Name: B-HCl-MER **Received:** 04-FEB-10
Type: Reagent/Solvent **Expires:** 04-FEB-11
Employee: Tara Griffin
Supplier: Aristar
Description: Hydrochloric Acid Conc.
Comments: None

Serial ID: 1264984-C **Opened:** 04-FEB-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 04-FEB-10
Type: Reagent/Solvent **Expires:** 20-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1265209 **Opened:** 04-FEB-10 **Lot Number :** J02039
Name: I-HCL **Received:** 04-FEB-10 **Preservative Id :** 5 none
Type: Reagent/Solvent **Expires:** 04-FEB-11
Employee: Bryan Davis
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

Serial ID: 1270010 **Opened:** 15-FEB-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 05-FEB-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 21-FEB-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1272768 **Opened:** 22-FEB-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 22-FEB-10
Type: Reagent/Solvent **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1514-1**

Sample Analysis

Sample ID	Client ID
245981001	RE15-10-8083
1202032557	Method Blank (MB) ICP
1202032558	Laboratory Control Sample (LCS)
1202032561	246000001(RE15-10-8124L) Serial Dilution (SD)
1202032559	246000001(RE15-10-8124D) Sample Duplicate (DUP)
1202032560	246000001(RE15-10-8124S) Matrix Spike (MS)
1202032562	Method Blank (MB) ICP-MS
1202032563	Laboratory Control Sample (LCS)
1202032566	246000001(RE15-10-8124L) Serial Dilution (SD)
1202032564	246000001(RE15-10-8124D) Sample Duplicate (DUP)
1202032565	246000001(RE15-10-8124S) Matrix Spike (MS)
1202033203	Method Blank (MB) CVAA
1202033204	Laboratory Control Sample (LCS)
1202033207	246056001(RE15-10-8233L) Serial Dilution (SD)
1202033205	246056001(RE15-10-8233D) Sample Duplicate (DUP)
1202033206	246056001(RE15-10-8233S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch: 948737, 948740 and 949020

Prep Batch : 948730, 948739 and 949018

Standard Operating Procedures: GL-MA-E-013 REV# 20, GL-MA-E-006 REV# 9, GL-MA-E-014 REV# 21 and GL-MA-E-010 REV# 23

Analytical Method: SW846 3005/6010B, SW846 3005/6020 and SW846 7470A

Prep Method : SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis-ICP was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/- 7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements

All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement

All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements

All continuing calibration blanks (CCB) bracketing this batch met the acceptance criteria.

Continuing Calibration Verification (CCV) Requirements

All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information**Method Blank (MB) Statement**

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement

The following samples were selected as the quality control (QC) samples for this SDG: 246000001 (RE15-10-8124) and 246056001 (RE15-10-8233).

Matrix Spike (MS) Recovery Statement

The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes with the exception of thallium, as indicated by the "N" qualifier.

Duplicate Relative Percent Difference (RPD) Statement

The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement

The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information**Holding Time Specifications**

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Dilutions

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information

The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following DER was generated for this SDG: 797043. A copy is included in the Miscellaneous Data section of this package.

Additional Comments

Additional comments were not required for this SDG.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Kristen Parson Date: 3/1/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1514-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 245981001

BASIS: As Received

DATE COLLECTED 27-JAN-10

CLIENT ID: RE15-10-8083

LEVEL: Low

DATE RECEIVED 02-FEB-10

MATRIX: WATER

%SOLIDS: 0

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	200	ug/L	U	68	200	200	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	02/25/10 04:51	100224-2	948740
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	02/25/10 15:34	100225-3	948740
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	02/25/10 04:51	100224-2	948740
7440-70-2	Calcium	200	ug/L	U	50	200	200	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	02/11/10 20:03	021110B-1	948737
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	02/11/10 20:03	021110B-1	948737
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	02/25/10 15:34	100225-3	948740
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	02/11/10 20:03	021110B-1	948737
7439-96-5	Manganese	1	ug/L	J	1	5	5	1	MS	BAJ	02/25/10 15:34	100225-3	948740
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL	02/05/10 10:05	020510W1-6	949020
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-09-7	Potassium	194	ug/L		50	150	150	1	P	HSC	02/11/10 20:03	021110B-1	948737
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-23-5	Sodium	103	ug/L	J	100	300	300	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	02/28/10 14:36	100228-5	948740
7440-61-1	Uranium	0.640	ug/L		0.05	0.2	0.2	1	MS	BAJ	02/25/10 16:27	100225-4	948740
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	02/11/10 20:03	021110B-1	948737
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	02/11/10 20:03	021110B-1	948737

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
948737	948730	SW846 3005A	50	mL	50	mL	02/10/10	FGA
948740	948739	SW846 3005A	50	mL	50	mL	02/10/10	FGA
949020	949018	SW846 7470A Prep	20	mL	20	mL	02/04/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	4.96	ug/L	5	ug/L	99.1	90.0 - 110.0	AV	05-FEB-10 09:17	020510W1-6
	Aluminum	4950	ug/L	5000	ug/L	99.1	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Arsenic	450	ug/L	500	ug/L	89.9	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Barium	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Calcium	4880	ug/L	5000	ug/L	97.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Chromium	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Cobalt	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Copper	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Iron	4990	ug/L	5000	ug/L	99.8	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Magnesium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Nickel	485	ug/L	500	ug/L	97	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Potassium	2410	ug/L	2500	ug/L	96.3	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Selenium	2440	ug/L	2500	ug/L	97.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Silver	253	ug/L	250	ug/L	101.2	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Sodium	2390	ug/L	2500	ug/L	95.6	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Vanadium	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Zinc	492	ug/L	500	ug/L	98.5	90.0 - 110.0	P	11-FEB-10 14:26	021110B-1
	Antimony	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	25-FEB-10 01:03	100224-2
	Cadmium	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	25-FEB-10 01:03	100224-2
	Beryllium	51.3	ug/L	50	ug/L	102.7	90.0 - 110.0	MS	25-FEB-10 14:19	100225-3
	Lead	53.3	ug/L	50	ug/L	106.6	90.0 - 110.0	MS	25-FEB-10 14:19	100225-3
	Manganese	54.5	ug/L	50	ug/L	109.1	90.0 - 110.0	MS	25-FEB-10 14:19	100225-3
	Uranium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	25-FEB-10 16:01	100225-4
	Thallium	53.2	ug/L	50	ug/L	106.4	90.0 - 110.0	MS	28-FEB-10 11:42	100228-5
CCV01										
	Mercury	4.99	ug/L	5	ug/L	99.9	80.0 - 120.0	AV	05-FEB-10 09:22	020510W1-6
	Aluminum	4910	ug/L	5000	ug/L	98.3	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Arsenic	495	ug/L	500	ug/L	99	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Barium	484	ug/L	500	ug/L	96.8	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1
	Calcium	4830	ug/L	5000	ug/L	96.7	90.0 - 110.0	P	11-FEB-10 14:49	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Cobalt	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Copper	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Iron	4900	ug/L	5000	ug/L	98	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Magnesium	5010	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Nickel	485	ug/L	500	ug/L	97.1	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Potassium	5000	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Selenium	486	ug/L	500	ug/L	97.1	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Silver	485	ug/L	500	ug/L	97	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Sodium	9810	ug/L	10000	ug/L	98.1	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Vanadium	486	ug/L	500	ug/L	97.3	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Zinc	485	ug/L	500	ug/L	96.9	90.0 – 110.0	P	11-FEB-10 14:49	021110B-1
	Antimony	51.3	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	25-FEB-10 01:33	100224-2
	Cadmium	50.8	ug/L	50	ug/L	101.5	90.0 – 110.0	MS	25-FEB-10 01:33	100224-2
	Beryllium	53.6	ug/L	50	ug/L	107.1	90.0 – 110.0	MS	25-FEB-10 14:32	100225-3
	Lead	54.1	ug/L	50	ug/L	108.2	90.0 – 110.0	MS	25-FEB-10 14:32	100225-3
	Manganese	54.4	ug/L	50	ug/L	108.9	90.0 – 110.0	MS	25-FEB-10 14:32	100225-3
	Uranium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	25-FEB-10 16:10	100225-4
	Thallium	54	ug/L	50	ug/L	108	90.0 – 110.0	MS	28-FEB-10 11:57	100228-5
CCV02	Mercury	4.93	ug/L	5	ug/L	98.5	80.0 – 120.0	AV	05-FEB-10 09:45	020510W1-6
	Aluminum	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Arsenic	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Barium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Calcium	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Chromium	513	ug/L	500	ug/L	102.6	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Cobalt	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Copper	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Iron	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Magnesium	5300	ug/L	5000	ug/L	106.1	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Nickel	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Potassium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Selenium	517	ug/L	500	ug/L	103.5	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Silver	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Sodium	10500	ug/L	10000	ug/L	105	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Vanadium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Zinc	512	ug/L	500	ug/L	102.3	90.0 – 110.0	P	11-FEB-10 15:15	021110B-1
	Antimony	54	ug/L	50	ug/L	108.1	90.0 – 110.0	MS	25-FEB-10 01:52	100224-2
	Cadmium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	25-FEB-10 01:52	100224-2
	Beryllium	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	25-FEB-10 14:56	100225-3
	Lead	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	25-FEB-10 14:56	100225-3
	Manganese	55.1	ug/L	50	ug/L	110.2	90.0 – 110.0	MS	25-FEB-10 14:56	100225-3
	Uranium	49.1	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	25-FEB-10 16:24	100225-4
	Thallium	53	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	28-FEB-10 12:20	100228-5
CCV03										
	Mercury	5.05	ug/L	5	ug/L	101	80.0 – 120.0	AV	05-FEB-10 10:08	020510W1-6
	Aluminum	4750	ug/L	5000	ug/L	94.9	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Arsenic	466	ug/L	500	ug/L	93.2	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Barium	468	ug/L	500	ug/L	93.6	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Calcium	4780	ug/L	5000	ug/L	95.6	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Chromium	467	ug/L	500	ug/L	93.4	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Cobalt	470	ug/L	500	ug/L	94	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Copper	466	ug/L	500	ug/L	93.2	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Iron	4750	ug/L	5000	ug/L	95.1	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Magnesium	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Nickel	467	ug/L	500	ug/L	93.5	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Potassium	4810	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Selenium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Silver	474	ug/L	500	ug/L	94.7	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1
	Sodium	9790	ug/L	10000	ug/L	98	90.0 – 110.0	P	11-FEB-10 15:57	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3.ICPMS5.OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Vanadium	471	ug/L	500	ug/L	94.1	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Zinc	466	ug/L	500	ug/L	93.2	90.0 - 110.0	P	11-FEB-10 15:57	021110B-1
	Antimony	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	25-FEB-10 03:06	100224-2
	Cadmium	49.9	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	25-FEB-10 03:06	100224-2
	Beryllium	54.2	ug/L	50	ug/L	108.4	90.0 - 110.0	MS	25-FEB-10 15:23	100225-3
	Lead	54.4	ug/L	50	ug/L	108.8	90.0 - 110.0	MS	25-FEB-10 15:23	100225-3
	Manganese	54.4	ug/L	50	ug/L	108.8	90.0 - 110.0	MS	25-FEB-10 15:23	100225-3
	Uranium	50.3	ug/L	50	ug/L	100.6	90.0 - 110.0	MS	25-FEB-10 16:36	100225-4
	Thallium	53.7	ug/L	50	ug/L	107.3	90.0 - 110.0	MS	28-FEB-10 12:42	100228-5
CCV04										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 - 120.0	AV	05-FEB-10 10:32	020510W1-6
	Aluminum	4880	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Arsenic	462	ug/L	500	ug/L	92.4	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Barium	460	ug/L	500	ug/L	92.1	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Calcium	4900	ug/L	5000	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Chromium	459	ug/L	500	ug/L	91.9	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Cobalt	462	ug/L	500	ug/L	92.3	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Copper	455	ug/L	500	ug/L	91.1	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Iron	4820	ug/L	5000	ug/L	96.5	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Magnesium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Nickel	461	ug/L	500	ug/L	92.1	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Potassium	4800	ug/L	5000	ug/L	95.9	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Selenium	461	ug/L	500	ug/L	92.2	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Silver	465	ug/L	500	ug/L	93	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Sodium	9690	ug/L	10000	ug/L	96.9	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Vanadium	462	ug/L	500	ug/L	92.4	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Zinc	458	ug/L	500	ug/L	91.6	90.0 - 110.0	P	11-FEB-10 16:37	021110B-1
	Antimony	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	25-FEB-10 04:01	100224-2
	Cadmium	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	25-FEB-10 04:01	100224-2
	Beryllium	51.7	ug/L	50	ug/L	103.5	90.0 - 110.0	MS	25-FEB-10 15:50	100225-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV05	Lead	52.3	ug/L	50	ug/L	104.7	90.0 - 110.0	MS	25-FEB-10 15:50	100225-3
	Manganese	53.6	ug/L	50	ug/L	107.1	90.0 - 110.0	MS	25-FEB-10 15:50	100225-3
	Thallium	52.3	ug/L	50	ug/L	104.7	90.0 - 110.0	MS	28-FEB-10 13:06	100228-5
	Aluminum	4730	ug/L	5000	ug/L	94.5	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Arsenic	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Barium	487	ug/L	500	ug/L	97.4	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Calcium	4750	ug/L	5000	ug/L	95	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Chromium	486	ug/L	500	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Cobalt	490	ug/L	500	ug/L	98	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Copper	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Iron	4780	ug/L	5000	ug/L	95.5	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Magnesium	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Nickel	490	ug/L	500	ug/L	98.1	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Potassium	4750	ug/L	5000	ug/L	94.9	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Selenium	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Silver	480	ug/L	500	ug/L	95.9	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Sodium	9460	ug/L	10000	ug/L	94.6	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Vanadium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Zinc	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 16:58	021110B-1
	Antimony	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	25-FEB-10 04:57	100224-2
CCV06	Cadmium	50.2	ug/L	50	ug/L	100.4	90.0 - 110.0	MS	25-FEB-10 04:57	100224-2
	Thallium	53.3	ug/L	50	ug/L	106.5	90.0 - 110.0	MS	28-FEB-10 13:29	100228-5
	Aluminum	4740	ug/L	5000	ug/L	94.8	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Arsenic	466	ug/L	500	ug/L	93.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Barium	469	ug/L	500	ug/L	93.9	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Calcium	4770	ug/L	5000	ug/L	95.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Chromium	468	ug/L	500	ug/L	93.7	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Cobalt	472	ug/L	500	ug/L	94.4	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Copper	467	ug/L	500	ug/L	93.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Iron	4780	ug/L	5000	ug/L	95.6	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Magnesium	4870	ug/L	5000	ug/L	97.4	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Nickel	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Potassium	4740	ug/L	5000	ug/L	94.7	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Selenium	476	ug/L	500	ug/L	95.2	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Silver	466	ug/L	500	ug/L	93.3	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Sodium	9440	ug/L	10000	ug/L	94.4	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Vanadium	473	ug/L	500	ug/L	94.5	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Zinc	469	ug/L	500	ug/L	93.9	90.0 - 110.0	P	11-FEB-10 17:27	021110B-1
	Antimony	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	25-FEB-10 05:34	100224-2
	Cadmium	49.4	ug/L	50	ug/L	98.7	90.0 - 110.0	MS	25-FEB-10 05:34	100224-2
	Thallium	53.9	ug/L	50	ug/L	107.8	90.0 - 110.0	MS	28-FEB-10 13:51	100228-5
CCV07	Aluminum	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Arsenic	479	ug/L	500	ug/L	95.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Barium	484	ug/L	500	ug/L	96.9	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Calcium	4810	ug/L	5000	ug/L	96.2	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Chromium	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Cobalt	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Copper	480	ug/L	500	ug/L	96	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Iron	4840	ug/L	5000	ug/L	96.8	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Magnesium	4900	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Nickel	486	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Potassium	4790	ug/L	5000	ug/L	95.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Selenium	488	ug/L	500	ug/L	97.6	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Silver	479	ug/L	500	ug/L	95.8	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Sodium	9540	ug/L	10000	ug/L	95.4	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Vanadium	487	ug/L	500	ug/L	97.3	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1
	Zinc	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	11-FEB-10 18:03	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV08	Thallium	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	28-FEB-10 14:10	100228-5
	Aluminum	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Arsenic	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Barium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Calcium	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Chromium	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Magnesium	5150	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Nickel	501	ug/L	500	ug/L	100.3	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Potassium	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Selenium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Sodium	10000	ug/L	10000	ug/L	100.4	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Vanadium	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11-FEB-10 18:32	021110B-1
	Thallium	51.8	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	28-FEB-10 14:39	100228-5
CCV09	Aluminum	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Arsenic	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Barium	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Calcium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Chromium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Cobalt	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Iron	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1
	Nickel	495	ug/L	500	ug/L	98.9	90.0 – 110.0	P	11-FEB-10 19:12	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Potassium	5020	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Selenium	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Silver	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Sodium	10100	ug/L	10000	ug/L	101	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Vanadium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Zinc	490	ug/L	500	ug/L	98	90.0 - 110.0	P	11-FEB-10 19:12	021110B-1
	Thallium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	28-FEB-10 14:58	100228-5
CCV10										
	Aluminum	4880	ug/L	5000	ug/L	97.7	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Arsenic	476	ug/L	500	ug/L	95.3	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Barium	482	ug/L	500	ug/L	96.4	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Calcium	4850	ug/L	5000	ug/L	97.1	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Chromium	481	ug/L	500	ug/L	96.3	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Cobalt	483	ug/L	500	ug/L	96.7	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Copper	483	ug/L	500	ug/L	96.6	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Iron	4900	ug/L	5000	ug/L	98	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Magnesium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Nickel	482	ug/L	500	ug/L	96.5	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Potassium	4890	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Selenium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Silver	490	ug/L	500	ug/L	98	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Sodium	9820	ug/L	10000	ug/L	98.2	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Vanadium	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
	Zinc	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	11-FEB-10 19:41	021110B-1
CCV11										
	Aluminum	4820	ug/L	5000	ug/L	96.4	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Arsenic	470	ug/L	500	ug/L	94	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Barium	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Calcium	4770	ug/L	5000	ug/L	95.3	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1
	Chromium	471	ug/L	500	ug/L	94.2	90.0 - 110.0	P	11-FEB-10 20:06	021110B-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Copper	472	ug/L	500	ug/L	94.3	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Iron	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Magnesium	4910	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Nickel	472	ug/L	500	ug/L	94.5	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Potassium	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Selenium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Silver	479	ug/L	500	ug/L	95.9	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Sodium	9710	ug/L	10000	ug/L	97.1	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Vanadium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1
	Zinc	470	ug/L	500	ug/L	93.9	90.0 – 110.0	P	11-FEB-10 20:06	021110B-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS5,OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.191	ug/L	.2	ug/L	95.5	70.0 – 130.0	AV	05-FEB-10 09:20	020510W1-6
	Antimony	3.37	ug/L	3	ug/L	112.3	70.0 – 130.0	MS	25-FEB-10 01:15	100224-2
	Cadmium	1.11	ug/L	1	ug/L	111.1	70.0 – 130.0	MS	25-FEB-10 01:15	100224-2
	Lead	2.55	ug/L	2	ug/L	127.6	70.0 – 130.0	MS	25-FEB-10 14:24	100225-3
	Beryllium	.557	ug/L	.5	ug/L	111.4	70.0 – 130.0	MS	25-FEB-10 14:24	100225-3
	Manganese	6.28	ug/L	5	ug/L	125.5	70.0 – 130.0	MS	25-FEB-10 14:24	100225-3
	Uranium	.244	ug/L	.2	ug/L	122	70.0 – 130.0	MS	25-FEB-10 16:05	100225-4
	Thallium	1.27	ug/L	1	ug/L	126.6	70.0 – 130.0	MS	28-FEB-10 11:48	100228-5
PQL01										
	Zinc	9.38	ug/L	10	ug/L	93.8	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Copper	9.86	ug/L	10	ug/L	98.6	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Cobalt	4.65	ug/L	5	ug/L	93.1	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Chromium	4.99	ug/L	5	ug/L	99.9	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Barium	4.75	ug/L	5	ug/L	95	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Arsenic	28.6	ug/L	30	ug/L	95.5	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Sodium	294	ug/L	300	ug/L	98	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Silver	5.04	ug/L	5	ug/L	100.7	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Potassium	185	ug/L	150	ug/L	123.1	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Calcium	200	ug/L	200	ug/L	100	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Aluminum	201	ug/L	200	ug/L	100.5	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Iron	119	ug/L	100	ug/L	118.9	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Nickel	4.56	ug/L	5	ug/L	91.2	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Magnesium	304	ug/L	300	ug/L	101.5	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Vanadium	5.04	ug/L	5	ug/L	100.9	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1
	Selenium	28.7	ug/L	30	ug/L	95.7	70.0 – 130.0	P	11-FEB-10 14:33	021110B-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 09:18	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 14:30	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 14:30	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 14:30	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 14:30	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 14:30	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 14:30	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 14:30	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 01:09	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 01:09	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 14:22	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 14:22	100225-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 14:22	100225-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	25-FEB-10 16:03	100225-4
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 11:45	100228-5
CCB01	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 09:24	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 14:53	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 14:53	021110B-1
	Chromium	1.23	+/-5	J	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1

Metals

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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ng/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Iron	39.3	+/-100	J	30.0	100	LIQ	P	11-FEB-10 14:53	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 14:53	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Potassium	77.71	+/-150	J	50.0	150	LIQ	P	11-FEB-10 14:53	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 14:53	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 14:53	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 01:40	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 01:40	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 14:34	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 14:34	100225-3
	Manganesec	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 14:34	100225-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	25-FEB-10 16:12	100225-4
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 12:01	100228-5
CCB02	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 09:47	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 15:19	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 15:19	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 15:19	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 15:19	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Potassium	56.33	+/-150	J	50.0	150	LIQ	P	11-FEB-10 15:19	021110B-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 15:19	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 15:19	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 01:58	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 01:58	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 14:59	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 14:59	100225-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 14:59	100225-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	25-FEB-10 16:25	100225-4
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 12:23	100228-5
CCB03	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 10:10	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 16:01	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 16:01	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 16:01	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 16:01	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 16:01	021110B-1
	Selenium	-5.29	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Sodium	186.28	+/-300	J	100	300	LIQ	P	11-FEB-10 16:01	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 16:01	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 03:12	100224-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB04	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 03:12	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 15:26	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 15:26	100225-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 15:26	100225-3
	Uranium	0.05	+/-2	U	0.05	0.2	LIQ	MS	25-FEB-10 16:37	100225-4
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 12:45	100228-5
	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	05-FEB-10 10:34	020510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 16:41	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 16:41	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 16:41	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 16:41	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 16:41	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Sodium	121.62	+/-300	J	100	300	LIQ	P	11-FEB-10 16:41	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 16:41	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 04:07	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 04:07	100224-2
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	25-FEB-10 15:52	100225-3
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	25-FEB-10 15:52	100225-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	25-FEB-10 15:52	100225-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 13:09	100228-5

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB05										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 17:02	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 17:02	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 17:02	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 17:02	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 17:02	021110B-1
	Selenium	-6.0	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 17:02	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 17:02	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 05:03	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 05:03	100224-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 13:32	100228-5
CCB06										
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 17:31	021110B-1
	Arsenic	-8.04	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 17:31	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 17:31	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 17:31	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 17:31	021110B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 17:31	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 17:31	021110B-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	25-FEB-10 05:40	100224-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	25-FEB-10 05:40	100224-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 13:54	100228-5
CCB07	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 18:07	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 18:07	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 18:07	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 18:07	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 18:07	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 18:07	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 18:07	021110B-1
	Thallium	0.304	+/-1	J	0.3	1.0	LIQ	MS	28-FEB-10 14:13	100228-5
CCB08	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 18:36	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 18:36	021110B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 18:36	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 18:36	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 18:36	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 18:36	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 18:36	021110B-1
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	28-FEB-10 14:42	100228-5
CCB09	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 19:16	021110B-1
	Arsenic	-6.17	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 19:16	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 19:16	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 19:16	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 19:16	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 19:16	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 19:16	021110B-1
	Thallium	0.778	+/-1	J	0.3	1.0	LIQ	MS	28-FEB-10 15:01	100228-5

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB10	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 19:45	021110B-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 19:45	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 19:45	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 19:45	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 19:45	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 19:45	021110B-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 19:45	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 19:45	021110B-1
CCB11	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	11-FEB-10 20:10	021110B-1
	Arsenic	-6.48	+/-30	J	5.0	30.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	11-FEB-10 20:10	021110B-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	11-FEB-10 20:10	021110B-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	11-FEB-10 20:10	021110B-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	11-FEB-10 20:10	021110B-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Sodium	100	+/-300	U	100	300	LIQ	P	11-FEB-10 20:10	021110B-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	11-FEB-10 20:10	021110B-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	11-FEB-10 20:10	021110B-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1514-1

Contract: LANL01004

Matrix: WATER

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202032557	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Barium	1	ug/L	+/-5	U	P	1	5
	Chromium	1	ug/L	+/-5	U	P	1	5
	Iron	30	ug/L	+/-100	U	P	30	100
	Copper	3	ug/L	+/-10	U	P	3	10
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Calcium	50	ug/L	+/-200	U	P	50	200
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Silver	1	ug/L	+/-5	U	P	1	5
	Selenium	5	ug/L	+/-30	U	P	5	30
	Potassium	50	ug/L	+/-150	U	P	50	150
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
1202032562	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.11	ug/L	+/-1	U	MS	0.11	1
	Lead	0.5	ug/L	+/-2	U	MS	0.5	2
	Manganese	1	ug/L	+/-5	U	MS	1	5
	Antimony	1	ug/L	+/-3	U	MS	1	3
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
1202033203	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

METALS
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Interference Check Sample

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA1

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	492000	ug/L	500000	ug/L	98.5	80.0 – 120.0	11-FEB-10 14:37	021110B-1
	Arsenic	-47.9	ug/L					11-FEB-10 14:37	021110B-1
	Barium	7.7	ug/L					11-FEB-10 14:37	021110B-1
	Calcium	469000	ug/L	500000	ug/L	93.9	80.0 – 120.0	11-FEB-10 14:37	021110B-1
	Chromium	-0.331	ug/L					11-FEB-10 14:37	021110B-1
	Cobalt	1.88	ug/L					11-FEB-10 14:37	021110B-1
	Copper	-2.75	ug/L					11-FEB-10 14:37	021110B-1
	Iron	180000	ug/L	200000	ug/L	90.2	80.0 – 120.0	11-FEB-10 14:37	021110B-1
	Magnesium	469000	ug/L	500000	ug/L	93.8	80.0 – 120.0	11-FEB-10 14:37	021110B-1
	Nickel	-5.64	ug/L					11-FEB-10 14:37	021110B-1
	Potassium	-12.0	ug/L					11-FEB-10 14:37	021110B-1
	Selenium	-29.8	ug/L					11-FEB-10 14:37	021110B-1
	Silver	-8.02	ug/L					11-FEB-10 14:37	021110B-1
	Sodium	25.0	ug/L					11-FEB-10 14:37	021110B-1
	Vanadium	0.707	ug/L					11-FEB-10 14:37	021110B-1
	Zinc	-9.27	ug/L					11-FEB-10 14:37	021110B-1
ICSAB01									
	Aluminum	493000	ug/L	500000	ug/L	98.5	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Arsenic	460	ug/L	500	ug/L	92	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Barium	479	ug/L	500	ug/L	95.8	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Calcium	467000	ug/L	500000	ug/L	93.5	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Chromium	467	ug/L	500	ug/L	93.3	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Cobalt	417	ug/L	500	ug/L	83.3	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Copper	516	ug/L	500	ug/L	103	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Iron	181000	ug/L	200000	ug/L	90.5	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Magnesium	472000	ug/L	500000	ug/L	94.3	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Nickel	412	ug/L	500	ug/L	82.4	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Potassium	4870	ug/L	5000	ug/L	97.4	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Selenium	2240	ug/L	2500	ug/L	89.5	80.0 – 120.0	11-FEB-10 14:40	021110B-1

METALS
-4-
Interference Check Sample

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	244	ug/L	250	ug/L	97.7	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Sodium	4900	ug/L	5000	ug/L	98.1	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Vanadium	496	ug/L	500	ug/L	99.1	80.0 – 120.0	11-FEB-10 14:40	021110B-1
	Zinc	442	ug/L	500	ug/L	88.4	80.0 – 120.0	11-FEB-10 14:40	021110B-1

METALS

-4-

Interference Check Sample

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Antimony	0.383	ug/L					25-FEB-10 01:21	100224-2
	Cadmium	0.506	ug/L					25-FEB-10 01:21	100224-2
ICSAB01	Antimony	21.2	ug/L	20	ug/L	106	80.0 - 120.0	25-FEB-10 01:27	100224-2
	Cadmium	19.9	ug/L	20.44	ug/L	97.4	80.0 - 120.0	25-FEB-10 01:27	100224-2

METALS

-4-

Interference Check Sample

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.089	ug/L					25-FEB-10 14:27	100225-3
	Lead	0.239	ug/L					25-FEB-10 14:27	100225-3
	Manganese	6.37	ug/L					25-FEB-10 14:27	100225-3
ICSAB01	Beryllium	19.8	ug/L	20	ug/L	98.9	80.0 - 120.0	25-FEB-10 14:29	100225-3
	Lcad	22.0	ug/L	20.19	ug/L	109	80.0 - 120.0	25-FEB-10 14:29	100225-3
	Manganese	28.5	ug/L	25.8	ug/L	110	80.0 - 120.0	25-FEB-10 14:29	100225-3

METALS
-4-
Interference Check Sample

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Uranium	-0.001	ug/L					25-FEB-10 16:07	100225-4
ICSAB01	Uranium	23.4	ug/L	20	ug/L	117	80.0 - 120.0	25-FEB-10 16:08	100225-4

METALS

-4-

Interference Check Sample

SDG No: 10-1514-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Thallium	0.013	ug/L					28-FEB-10 11:51	100228-5
ICSAB01	Thallium	22.7	ug/L	20	ug/L	114	80.0 - 120.0	28-FEB-10 11:54	100228-5

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1514-1 Client ID RE15-10-8124S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246000001 Spike ID: 1202032560

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	4880		68	U	5000	97.2		P
Arsenic	ug/L	75-125	488		5	U	500	97.5		P
Barium	ug/L	75-125	489		1	U	500	97.7		P
Calcium	ug/L	75-125	4830		59.5	J	5000	95.3		P
Chromium	ug/L	75-125	487		1.31	J	500	97.2		P
Cobalt	ug/L	75-125	479		1	U	500	95.8		P
Copper	ug/L	75-125	490		3	U	500	97.9		P
Iron	ug/L	75-125	4890		34.7	J	5000	97.1		P
Magnesium	ug/L	75-125	4910		85	U	5000	97.7		P
Nickel	ug/L	75-125	489		1.5	U	500	97.9		P
Potassium	ug/L	75-125	5000		181		5000	96.3		P
Selenium	ug/L	75-125	470		5	U	500	94.1		P
Silver	ug/L	75-125	483		1	U	500	96.5		P
Sodium	ug/L	75-125	5010		200	J	5000	96.3		P
Vanadium	ug/L	75-125	493		1	U	500	98.5		P
Zinc	ug/L	75-125	475		3.3	U	500	94.6		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1514-1 Client ID RE15-10-8124S

Contract: LANL01004 Level: Low

Matrix: WATER % Solids:

Sample ID: 246000001 Spike ID: 1202032565

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Antimony	ug/L	75-125	196		1	U	200	98		MS
Beryllium	ug/L	75-125	47.7		0.1	U	50	95.3		MS
Cadmium	ug/L	75-125	10.3		0.11	U	10	102		MS
Lead	ug/L	75-125	42.2		0.5	U	40	105		MS
Manganese	ug/L	75-125	48.9		1	U	50	96.6		MS
Thallium	ug/L	75-125	75		0.3	U	100	74.9	N	MS
Uranium	ug/L	75-125	49.5		0.05	U	50	98.9		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1514-1 **Client ID** RE15-10-8233S**Contract:** LANL01004 **Level:** Low**Matrix:** WATER **% Solids:****Sample ID:** 246056001 **Spike ID:** 1202033206

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/L	75-125	1.5		0.066	U	2	75		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8124D

Sample ID: 246000001

Duplicate ID: 1202032559

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68 U		68 U				P
Arsenic	ug/L		5 U		5 U				P
Barium	ug/L		1 U		1 U				P
Calcium	ug/L	+/-200	59.5 J		52.6 J		12.4		P
Chromium	ug/L		1.31 J		1 U		200		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L		34.7 J		30 U		200		P
Magnesium	ug/L		85 U		85 U				P
Nickel	ug/L		1.5 U		1.5 U				P
Potassium	ug/L	+/-150	181		193		6.09		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-300	200 J		180 J		10.5		P
Vanadium	ug/L		1 U		1 U				P
Zinc	ug/L		3.3 U		3.3 U				P

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8124D

Sample ID: 246000001

Duplicate ID: 1202032564

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		1 U		1 U				MS
Beryllium	ug/L		0.1 U		0.1 U				MS
Cadmium	ug/L		0.11 U		0.11 U				MS
Lead	ug/L		0.5 U		0.5 U				MS
Manganese	ug/L		1 U		1 U				MS
Thallium	ug/L		0.3 U		0.3 U				MS
Uranium	ug/L		0.05 U		0.05 U				MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1514-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8233D

Sample ID: 246056001

Duplicate ID: 1202033205

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.066 U		0.066 U				AV

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1514-1

Contract: LANL01004

Aqueous LCS Source:OS2I

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202032558								
	Copper	ug/L	500	486		97.1	80-120	P
	Iron	ug/L	5000	4930		98.6	80-120	P
	Magnesium	ug/L	5000	4960		99.3	80-120	P
	Nickel	ug/L	500	487		97.4	80-120	P
	Potassium	ug/L	5000	4890		97.9	80-120	P
	Selenium	ug/L	500	481		96.3	80-120	P
	Silver	ug/L	500	481		96.2	80-120	P
	Sodium	ug/L	5000	4940		98.8	80-120	P
	Vanadium	ug/L	500	489		97.8	80-120	P
	Zinc	ug/L	500	474		94.8	80-120	P
	Aluminum	ug/L	5000	4910		98.1	80-120	P
	Arsenic	ug/L	500	487		97.4	80-120	P
	Barium	ug/L	500	486		97.2	80-120	P
	Calcium	ug/L	5000	4880		97.6	80-120	P
	Chromium	ug/L	500	484		96.7	80-120	P
	Cobalt	ug/L	500	475		95.1	80-120	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1514-1

Contract: LANL01004

Aqueous LCS Source:O2si

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202032563								
	Antimony	ug/L	50	52.3		105	80-120	MS
	Beryllium	ug/L	50	49.6		99.3	80-120	MS
	Cadmium	ug/L	50	48.6		97.1	80-120	MS
	Lead	ug/L	50	52.8		106	80-120	MS
	Manganese	ug/L	50	50.1		100	80-120	MS
	Thallium	ug/L	50	52.3		105	80-120	MS
	Uranium	ug/L	50	50.6		101	80-120	MS

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1514-1

Contract: LANL01004

Aqueous LCS Source:GEL

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202033204	Mercury	ug/L	2	2.01		100	80-120	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1514-1 Client ID RE15-10-8124L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 246000001 Serial Dilution ID: 1202032561

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	5	U	25	U				P
Barium	1	U	5	U				P
Calcium	59.5	J	250	U	100			P
Chromium	1.31	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	34.7	J	150	U	100			P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	181		267	J	47.5			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	200	J	500	U	100			P
Vanadium	1	U	5	U				P
Zinc	3.3	U	16.5	U				P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1514-1 **Client ID** RE15-10-8124L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 246000001 **Serial Dilution ID:** 1202032566

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Antimony	1	U	5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.11	U	.55	U				MS
Lead	.5	U	2.5	U				MS
Manganese	1	U	5	U				MS
Thallium	.3	U	8.35					MS
Uranium	.05	U	.25	U				MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1514-1 **Client ID** RE15-10-8233L**Contract:** LANL01004**Matrix:** LIQUID **Level:** Low**Sample ID:** 246056001 **Serial Dilution ID:** 1202033207

Analyte	<u>Initial Value</u> ng/L	<u>C</u>	<u>Serial Value</u> ng/L	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Mercury	.066	U	.33	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1514-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	948730						
1202032557	MB for batch 948730	MB	W	10-FEB-10	50mL	50mL	
1202032558	LCS for batch 948730	LCS	W	10-FEB-10	50mL	50mL	
1202032560	RE15-10-8124S	MS	W	10-FEB-10	50mL	50mL	
1202032559	RE15-10-8124D	DUP	W	10-FEB-10	50mL	50mL	
245981001	RE15-10-8083	SAMPLE	W	10-FEB-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1514-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	948739						
1202032562	MB for batch 948739	MB	W	10-FEB-10	50mL	50mL	
1202032563	LCS for batch 948739	LCS	W	10-FEB-10	50mL	50mL	
1202032565	RE15-10-8124S	MS	W	10-FEB-10	50mL	50mL	
1202032564	RE15-10-8124D	DUP	W	10-FEB-10	50mL	50mL	
245981001	RE15-10-8083	SAMPLE	W	10-FEB-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1514-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number	949018						
1202033203	MB for batch 949018	MB	W	04-FEB-10	20mL	20mL	
1202033204	LCS for batch 949018	LCS	W	04-FEB-10	20mL	20mL	
1202033206	RE15-10-8233S	MS	W	04-FEB-10	20mL	20mL	
1202033205	RE15-10-8233D	DUP	W	04-FEB-10	20mL	20mL	
245981001	RE15-10-8083	SAMPLE	W	04-FEB-10	20mL	20mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1514-1

Method: MS

Data File: 100224-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Ti	U	V	Zn
S0.0	1	00:45		X				X																		
S10	1	00:51		X				X																		
S100	1	00:57		X				X																		
ICV01	1	01:03		X				X																		
ICB01	1	01:09		X				X																		
CRDL01	1	01:15		X				X																		
ICSA01	1	01:21		X				X																		
ICSAB01	1	01:27		X				X																		
CCV01	1	01:33		X				X																		
CCB01	1	01:40		X				X																		
LR01	1	01:46		X				X																		
CCV02	1	01:52		X				X																		
CCB02	1	01:58		X				X																		
ZZZZZZ	1	02:04																								
ZZZZZZ	1	02:10																								
ZZZZZZ	1	02:16																								
ZZZZZZ	1	02:23																								
ZZZZZZ	1	02:29																								
ZZZZZZ	1	02:35																								
ZZZZZZ	1	02:41																								
ZZZZZZ	1	02:47																								
ZZZZZZ	1	02:54																								
ZZZZZZ	1	03:00																								
CCV03	1	03:06		X				X																		
CCB03	1	03:12		X				X																		
ZZZZZZ	1	03:18																								
ZZZZZZ	1	03:24																								
ZZZZZZ	1	03:31																								
ZZZZZZ	1	03:37																								
ZZZZZZ	1	03:43																								
ZZZZZZ	1	03:49																								
ZZZZZZ	5	03:55																								
CCV04	1	04:01		X				X																		
CCB04	1	04:07		X				X																		
1202032562	1	04:14		X				X																		
1202032563	1	04:20		X				X																		
ZZZZZZ	1	04:26																								
ZZZZZZ	1	04:32																								
ZZZZZZ	1	04:38																								
ZZZZZZ	1	04:45																								

[illegible]

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1514-1

Method MS

Data File: 100225-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Ti	U	V	Zn
S0.0	1	14:12					X							X	X											
S10	1	14:14					X							X	X											
S100	1	14:17					X							X	X											
ICV01	1	14:19					X							X	X											
ICB01	1	14:22					X							X	X											
CRDL01	1	14:24					X							X	X											
ICSA01	1	14:27					X							X	X											
ICSA01	1	14:29					X							X	X											
CCV01	1	14:32					X							X	X											
CCB01	1	14:34					X							X	X											
ZZZZZZ	1	14:37																								
ZZZZZZ	1	14:40																								
ZZZZZZ	1	14:42																								
ZZZZZZ	1	14:46																								
ZZZZZZ	1	14:49																								
ZZZZZZ	1	14:51																								
ZZZZZZ	5	14:54																								
CCV02	1	14:56					X							X	X											
CCB02	1	14:59					X							X	X											
ZZZZZZ	1	15:02																								
ZZZZZZ	1	15:04																								
ZZZZZZ	1	15:07																								
ZZZZZZ	1	15:10																								
1202032562	1	15:13					X							X	X											
1202032563	1	15:15					X							X	X											
ZZZZZZ	1	15:18																								
ZZZZZZ	1	15:21																								
CCV03	1	15:23					X							X	X											
CCB03	1	15:26					X							X	X											
ZZZZZZ	1	15:28																								
ZZZZZZ	1	15:31																								
245981001	1	15:34					X							X	X											
ZZZZZZ	1	15:37																								
1202032564	1	15:39					X							X	X											
1202032565	1	15:42					X							X	X											
1202032566	5	15:44					X							X	X											
ZZZZZZ	5	15:47																								
CCV04	1	15:50					X							X	X											
CCB04	1	15:52					X							X	X											

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 25-FEB-10

End Date: 25-FEB-10

Client Sdg: 10-1514-1

Method MS

Data File: 100225-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	15:57																						X		
S10	1	15:58																						X		
S100	1	16:00																						X		
ICV01	1	16:01																						X		
ICB01	1	16:03																						X		
CRDL01	1	16:05																						X		
ICSA01	1	16:07																						X		
ICSAB01	1	16:08																						X		
CCV01	1	16:10																						X		
CCB01	1	16:12																						X		
1202032562	1	16:13																						X		
1202032563	1	16:15																						X		
ZZZZZZ	1	16:17																								
ZZZZZZ	1	16:18																								
ZZZZZZ	1	16:20																								
ZZZZZZ	1	16:22																								
CCV02	1	16:24																						X		
CCB02	1	16:25																						X		
245981001	1	16:27																						X		
ZZZZZZ	1	16:29																								
1202032564	1	16:30																						X		
1202032565	1	16:32																						X		
1202032566	5	16:34																						X		
CCV03	1	16:36																						X		
CCB03	1	16:37																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 28-FEB-10

End Date: 28-FEB-10

Client Sdg: 10-1514-1

Method: MS

Data File: 100228-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	11:32																					X			
S10	1	11:35																					X			
S100	1	11:38																					X			
ICV01	1	11:42																					X			
ICB01	1	11:45																					X			
CRDL01	1	11:48																					X			
ICSA01	1	11:51																					X			
ICSAB01	1	11:54																					X			
CCV01	1	11:57																					X			
CCB01	1	12:01																					X			
ZZZZZZ	1	12:04																								
ZZZZZZ	1	12:07																								
ZZZZZZ	1	12:10																								
ZZZZZZ	1	12:13																								
ZZZZZZ	1	12:16																								
CCV02	1	12:20																					X			
CCB02	1	12:23																					X			
ZZZZZZ	1	12:26																								
ZZZZZZ	1	12:29																								
ZZZZZZ	1	12:32																								
ZZZZZZ	1	12:36																								
ZZZZZZ	5	12:39																								
CCV03	1	12:42																					X			
CCB03	1	12:45																					X			
ZZZZZZ	1	12:50																								
ZZZZZZ	1	12:53																								
ZZZZZZ	1	12:57																								
ZZZZZZ	1	13:00																								
ZZZZZZ	1	13:03																								
CCV04	1	13:06																					X			
CCB04	1	13:09																					X			
ZZZZZZ	1	13:13																								
ZZZZZZ	1	13:16																								
ZZZZZZ	1	13:19																								
ZZZZZZ	5	13:22																								
ZZZZZZ	1	13:25																								
CCV05	1	13:29																					X			
CCB05	1	13:32																					X			
ZZZZZZ	1	13:35																								
ZZZZZZ	1	13:38																								

Samp No.	D/F	Run Time
ZZZZZZ	1	13:41
ZZZZZZ	1	13:45
ZZZZZZ	1	13:48
CCV06	1	13:51
CCB06	1	13:54
ZZZZZZ	1	13:57
ZZZZZZ	1	14:01
ZZZZZZ	1	14:04
ZZZZZZ	5	14:07
CCV07	1	14:10
CCB07	1	14:13
I202032562	1	14:17
I202032563	1	14:20
ZZZZZZ	1	14:23
ZZZZZZ	1	14:26
ZZZZZZ	1	14:30
ZZZZZZ	1	14:33
245981001	1	14:36
CCV08	1	14:39
CCB08	1	14:42
ZZZZZZ	1	14:46
I202032564	1	14:49
I202032565	1	14:52
I202032566	5	14:55
CCV09	1	14:58
CCB09	1	15:01

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 05-FEB-10

End Date: 05-FEB-10

Client Sdg: 10-1514-1

Method AV

Data File: 020510W1-6

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	09:05															X									
S0.2	1	09:07															X									
S0.5	1	09:09															X									
S2.0	1	09:11															X									
S5.0	1	09:13															X									
S10.0	1	09:15															X									
ICV01	1	09:17															X									
ICB01	1	09:18															X									
CRDL01	1	09:20															X									
CCV01	1	09:22															X									
CCB01	1	09:24															X									
ZZZZZZ	1	09:26																								
ZZZZZZ	1	09:28																								
ZZZZZZ	1	09:30																								
ZZZZZZ	1	09:32																								
ZZZZZZ	1	09:34																								
ZZZZZZ	1	09:36																								
ZZZZZZ	1	09:38																								
ZZZZZZ	1	09:40																								
ZZZZZZ	5	09:42																								
1202033203	1	09:43															X									
CCV02	1	09:45															X									
CCB02	1	09:47															X									
1202033204	1	09:49															X									
ZZZZZZ	1	09:51																								
ZZZZZZ	1	09:53																								
ZZZZZZ	1	09:55																								
ZZZZZZ	1	09:57																								
ZZZZZZ	1	09:59																								
ZZZZZZ	1	10:01																								
ZZZZZZ	1	10:03																								
245981001	1	10:05															X									
ZZZZZZ	1	10:07																								
CCV03	1	10:08															X									
CCB03	1	10:10															X									
ZZZZZZ	1	10:12																								
ZZZZZZ	1	10:14																								
1202033205	1	10:16															X									
1202033206	1	10:18															X									
1202033207	5	10:20															X									

Samp No.	D/F	Run Time
ZZZZZZ	1	10:22
ZZZZ7Z	1	10:24
ZZZZZZ	1	10:26
ZZZZZZ	1	10:28
ZZZZZZ	1	10:30
CCV04	1	10:32
CCB04	1	10:34

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA1

Start Date: 11-FEB-10

End Date: 11-FEB-10

Client Sdg: 10-1514-1

Method P

Data File: 021110B-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
S0.0	1	14:10	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	14:14			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	14:17	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	14:20	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	14:24	X						X				X		X							X				
ICV01	1	14:26	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
JCB01	1	14:30	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	14:33	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	14:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	14:40	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	14:43	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	14:46	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	14:49	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	14:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	15:08	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR04	1	15:12	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	15:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	15:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	15:23																								
ZZZZZZ	1	15:26																								
ZZZZZZ	1	15:30																								
ZZZZZZ	1	15:34																								
ZZZZZZ	1	15:38																								
ZZZZZZ	5	15:42																								
ZZZZZZ	1	15:45																								
ZZZZZZ	1	15:49																								
ZZZZZZ	1	15:53																								
CCV03	1	15:57	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	16:01	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	16:04																								
ZZZZZZ	1	16:08																								
ZZZZZZ	1	16:12																								
ZZZZZZ	1	16:16																								
ZZZZZZ	1	16:20																								
ZZZZZZ	1	16:24																								
ZZZZZZ	1	16:28																								
ZZZZZZ	1	16:31																								
ZZZZZZ	1	16:34																								
CCV04	1	16:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	16:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																		
CCV05	1	16:58	X		X	X			X	X	X	X	X		X			X	X	X
CCB05	1	17:02	X		X	X			X	X	X	X	X		X			X	X	X
ZZZZZZ	1	17:06																		
ZZZZZZ	1	17:09																		
ZZZZZZ	1	17:13																		
ZZZZZZ	1	17:16																		
ZZZZZZ	1	17:20																		
ZZZZZZ	5	17:24																		
CCV06	1	17:27	X		X	X			X	X	X	X	X		X			X	X	X
CCB06	1	17:31	X		X	X			X	X	X	X	X		X			X	X	X
ZZZZZZ	1	17:35																		
ZZZZZZ	1	17:38																		
ZZZZZZ	1	17:42																		
ZZZZZZ	1	17:45																		
ZZZZZZ	1	17:49																		
ZZZZZZ	1	17:53																		
ZZZZZZ	1	17:56																		
ZZZZZZ	1	18:00																		
CCV07	1	18:03	X		X	X			X	X	X	X	X		X			X	X	X
CCB07	1	18:07	X		X	X			X	X	X	X	X		X			X	X	X
ZZZZZZ	1	18:11																		
ZZZZZZ	1	18:14																		
ZZZZZZ	1	18:18																		
ZZZZZZ	1	18:21																		
ZZZZZZ	1	18:25																		
ZZZZZZ	5	18:29																		
CCV08	1	18:32	X		X	X			X	X	X	X	X		X			X	X	X
CCB08	1	18:36	X		X	X			X	X	X	X	X		X			X	X	X
ZZZZZZ	1	18:40																		
ZZZZZZ	1	18:43																		
ZZZZZZ	1	18:47																		
ZZZZZZ	1	18:50																		
ZZZZZZ	1	18:54																		
ZZZZZZ	1	18:58																		
ZZZZZZ	1	19:01																		
ZZZZZZ	1	19:05																		
ZZZZZZ	1	19:08																		
CCV09	1	19:12	X		X	X			X	X	X	X	X		X			X	X	X
CCB09	1	19:16	X		X	X			X	X	X	X	X		X			X	X	X
1202032557	1	19:19	X		X	X			X	X	X	X	X		X			X	X	X

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	U	V	Zn
1202032558	1	19:23	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	19:27																								
1202032559	1	19:30	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202032560	1	19:34	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202032561	5	19:37	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV10	1	19:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB10	1	19:45	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	19:48																								
ZZZZZZ	1	19:52																								
ZZZZZZ	1	19:55																								
ZZZZZZ	1	19:59																								
245981001	1	20:03	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV11	1	20:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB11	1	20:10	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1514-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
LIQUID	Aluminum		15.0	30
	Antimony		1.0	3
	Arsenic		1.6	5
	Barium		0.6	2
	Beryllium		0.1	.5
	Cadmium		0.11	1
	Calcium		65.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.33	1
	Iron		33.0	100
	Lead		0.5	2
	Magnesium		5.2	15
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.0	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.3	1
	Uranium		0.05	.2
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1514-J

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

		<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY	<u>Analyte</u>			
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1514-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> (nm)	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
LIQUID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.0	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	50.0	200
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.752	3.0	10
	Iron	238.204	30.0	100
	Lead	220.353	3.3	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	50.0	150
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	100	300
	Thallium	190.801	5.0	20
	Uranium	409.014	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1514-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Aluminum	Antimony	Arsenic	Barium	Beryllium
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.05500	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.28800	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.04600	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1514-1

Contract: LANI.01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	11.3250	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	-1.59900	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	-21.2250	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.68400
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	1.19100	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	105.59
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	3.36300	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	-2.30400	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.61100

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1514-1**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Iron	Lead	Magnesium	Manganese	Molybdenum
Parmname	Wavelength					
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	20.5430
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	-16.3320
Arsenic	188.979	-0.05800	0.00000	0.00000	0.00000	1.97700
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.13300	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	-0.90500
Copper	324.752	-0.13900	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.03800	-2.87600	0.00000	0.00000	0.00000
Magnesium	279.077	1.07300	0.00000	0.00000	0.00000	-16.8110
Manganese	257.61	-0.13900	0.00000	0.04000	0.00000	0.00000
Molybdenum	202.031	-0.03800	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-0.01300	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.81200	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.88200	0.00000	0.28200	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.06300	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.03900	0.00000	0.00000	-4.11700	0.00000
Tin	189.927	-0.09200	0.00000	-0.19600	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.07900	0.00000	0.00000
Uranium	409.014	0.13900	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.05300	0.00000	0.00000	0.00000	-7.71400
Zinc	213.857	0.14460	0.00000	0.02030	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1514-1**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Selenium	Silicon	Silver
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	-0.99900	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	4.41600	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1514-1**

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.38100	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	2.08700	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	1.04000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	-14.8110	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	-8.68900	-1.22400
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	-1.03900
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1514-1

Contract: LANL01004

Instrument: OPTIMA1

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Vanadium	Zinc
Parmname	Wavelength		
Aluminum	396.153	0.00000	0.00000
Antimony	206.836	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000
Barium	233.527	-1.80500	0.00000
Beryllium	313.107	0.00000	0.00000
Boron	249.677	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	-0.63000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.752	0.00000	0.00000
Iron	238.204	0.00000	0.00000
Lead	220.353	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000
Selenium	196.026	0.00000	0.00000
Silicon	251.611	0.00000	0.00000
Silver	328.068	-6.59800	0.00000
Sulfur	181.975	0.00000	0.00000
Thallium	190.801	0.00000	0.00000
Tin	189.927	0.00000	0.00000
Titanium	334.94	0.00000	0.00000
Uranium	409.014	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.857	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1514-1

Contract: LANL01004

Lab Code: GEL

Instrument IDICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Uranium	1000	5000	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1514-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA1

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10
Aluminum	20	500000	ug/L	01-FEB-10
Antimony	20	10000	ug/L	01-FEB-10
Arsenic	20	10000	ug/L	01-FEB-10
Barium	20	15000	ug/L	01-FEB-10
Beryllium	20	3000	ug/L	01-FEB-10
Cadmium	20	10000	ug/L	01-FEB-10
Calcium	20	500000	ug/L	01-FEB-10
Chromium	20	25000	ug/L	01-FEB-10
Cobalt	20	10000	ug/L	01-FEB-10
Copper	20	20000	ug/L	01-FEB-10
Iron	20	500000	ug/L	01-FEB-10
Lead	20	25000	ug/L	01-FEB-10
Magnesium	20	500000	ug/L	01-FEB-10
Manganese	20	10000	ug/L	01-FEB-10
Nickel	20	10000	ug/L	01-FEB-10
Potassium	20	300000	ug/L	01-FEB-10
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10

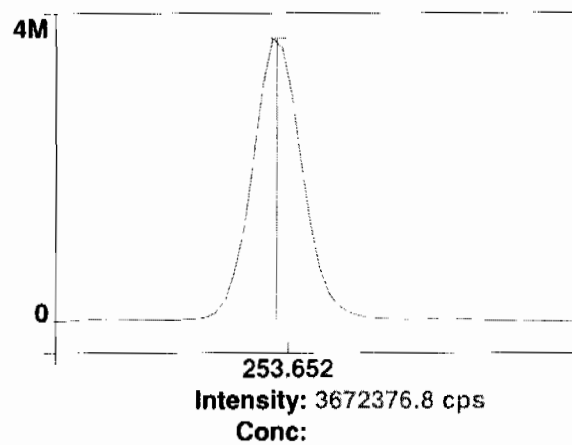
Raw Data

Method: Hg_ReAlign
Result: 022710B

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



1

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Analysis Begun

Start Time: 2/11/2010 14:10:46

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optima1\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 8

Sample ID: S0

Date Collected: 2/11/2010 14:10:48

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	54739.4	54739.4	100 %	14:11:23
1	Al 396.153Radial†	-13.9	-13.8	[0.00] µg/L	14:11:23
1	Ca 317.933Radial†	181.9	181.3	[0.00] µg/L	14:11:43
1	Fe 238.204 Radial†	15.3	15.3	[0.00] µg/L	14:11:43
1	K 766.490 Radial†	133.4	133.0	[0.00] µg/L	14:11:23
1	Mg 279.077 IEC†	7.8	7.8	[0.00] µg/L	14:11:43
1	Na 589.592 Radial†	544.1	542.5	[0.00] µg/L	14:11:23
1	Sr 421.552†	47.1	46.9	[0.00] µg/L	14:11:23
1	Sc 361.383	1911885.3	1911885.3	100.11 %	14:12:45
1	Y 371.029	1310700.1	1310700.1	100.06 %	14:12:45
1	Ag 328.068†	-547.3	-546.7	[0.00] µg/L	14:12:50
1	As 188.979†	3.5	3.5	[0.00] µg/L	14:13:11
1	B 249.677†	353.5	353.1	[0.00] µg/L	14:13:11
1	Ba 233.527†	-32.2	-32.2	[0.00] µg/L	14:13:11
1	Be 313.107†	-3446.9	-3443.2	[0.00] µg/L	14:12:50
1	Cd 226.502†	-153.7	-153.5	[0.00] µg/L	14:13:11
1	Co 228.616†	-1.3	-1.3	[0.00] µg/L	14:13:11
1	Cr 267.716†	-55.4	-55.3	[0.00] µg/L	14:12:50
1	Cu 324.752†	2504.0	2501.3	[0.00] µg/L	14:12:50
1	Mn 257.610†	-239.6	-239.4	[0.00] µg/L	14:13:11
1	Mo 202.031†	-2.8	-2.8	[0.00] µg/L	14:13:11
1	Ni 231.604†	307.9	307.6	[0.00] µg/L	14:13:11
1	P 214.914†	26.2	26.2	[0.00] µg/L	14:13:11
1	Pb 220.353†	91.7	91.6	[0.00] µg/L	14:13:11
1	S 181.975 Axial†	15.4	15.3	[0.00] µg/L	14:13:11
1	Sb 206.836†	28.4	28.4	[0.00] µg/L	14:13:11
1	Se 196.026†	16.7	16.7	[0.00] µg/L	14:13:11
1	SiO2†	1235.3	1234.0	[0.00] µg/L	14:12:50
1	Si 251.611†	309.0	308.7	[0.00] µg/L	14:13:11
1	Sn 189.927†	-0.7	-0.7	[0.00] µg/L	14:13:11
1	Ti 334.940†	89.4	89.3	[0.00] µg/L	14:12:50
1	Tl 190.801†	-23.5	-23.5	[0.00] µg/L	14:13:11
1	U 409.014†	-77.0	-76.9	[0.00] µg/L	14:12:50
1	V 292.402†	-41.9	-41.9	[0.00] µg/L	14:12:50
1	Zn 213.857†	474.5	474.0	[0.00] µg/L	14:13:11
2	Sc RADIAL	54665.4	54665.4	100 %	14:11:49
2	Al 396.153Radial†	-1.2	-1.2	[0.00] µg/L	14:11:49
2	Ca 317.933Radial†	175.4	175.1	[0.00] µg/L	14:12:09
2	Fe 238.204 Radial†	14.9	14.8	[0.00] µg/L	14:12:09
2	K 766.490 Radial†	144.1	143.8	[0.00] µg/L	14:11:49
2	Mg 279.077 IEC†	11.1	11.1	[0.00] µg/L	14:12:09
2	Na 589.592 Radial†	552.5	551.5	[0.00] µg/L	14:11:49
2	Sr 421.552†	33.2	33.1	[0.00] µg/L	14:11:49
2	Sc 361.383	1909838.0	1909838.0	100.000 %	14:13:17
2	Y 371.029	1310179.5	1310179.5	100.02 %	14:13:17
2	Ag 328.068†	-580.2	-580.2	[0.00] µg/L	14:13:23
2	As 188.979†	-0.5	-0.5	[0.00] µg/L	14:13:43

2	B 249.677†	311.8	311.8	[0.00]	µg/L	14:13:43
2	Ba 233.527†	-19.4	-19.4	[0.00]	µg/L	14:13:43
2	Be 313.107†	-3440.2	-3440.2	[0.00]	µg/L	14:13:23
2	Cd 226.502†	-136.8	-136.8	[0.00]	µg/L	14:13:43
2	Co 228.616†	-8.2	-8.2	[0.00]	µg/L	14:13:43
2	Cr 267.716†	-44.6	-44.6	[0.00]	µg/L	14:13:23
2	Cu 324.752†	2529.2	2529.2	[0.00]	µg/L	14:13:23
2	Mn 257.610†	-247.4	-247.4	[0.00]	µg/L	14:13:43
2	Mo 202.031†	-8.7	-8.7	[0.00]	µg/L	14:13:43
2	Ni 231.604†	295.5	295.5	[0.00]	µg/L	14:13:43
2	P 214.914†	27.9	27.9	[0.00]	µg/L	14:13:43
2	Pb 220.353†	98.3	98.3	[0.00]	µg/L	14:13:43
2	S 181.975 Axial†	16.8	16.8	[0.00]	µg/L	14:13:43
2	Sb 206.836†	27.6	27.6	[0.00]	µg/L	14:13:43
2	Se 196.026†	12.1	12.1	[0.00]	µg/L	14:13:43
2	SiO2†	1235.5	1235.5	[0.00]	µg/L	14:13:23
2	Si 251.611†	316.0	316.0	[0.00]	µg/L	14:13:43
2	Sn 189.927†	-2.2	-2.2	[0.00]	µg/L	14:13:43
2	Ti 334.940†	132.2	132.2	[0.00]	µg/L	14:13:23
2	Tl 190.801†	-27.5	-27.5	[0.00]	µg/L	14:13:43
2	U 409.014†	-52.6	-52.6	[0.00]	µg/L	14:13:23
2	V 292.402†	-46.9	-46.9	[0.00]	µg/L	14:13:23
2	Zn 213.857†	476.6	476.6	[0.00]	µg/L	14:13:43
3	Sc RADIAL	54318.4	54318.4	99.5	%	14:12:15
3	Al 396.153Radial†	-15.3	-15.3	[0.00]	µg/L	14:12:15
3	Ca 317.933Radial†	180.2	181.0	[0.00]	µg/L	14:12:35
3	Fe 238.204 Radial†	13.3	13.4	[0.00]	µg/L	14:12:35
3	K 766.490 Radial†	107.9	108.4	[0.00]	µg/L	14:12:15
3	Mg 279.077 IEC†	14.9	15.0	[0.00]	µg/L	14:12:35
3	Na 589.592 Radial†	529.1	531.6	[0.00]	µg/L	14:12:15
3	Sr 421.552†	38.4	38.6	[0.00]	µg/L	14:12:15
3	Sc 361.383	1907796.9	1907796.9	99.893	%	14:13:49
3	Y 371.029	1308876.2	1308876.2	99.920	%	14:13:49
3	Ag 328.068†	-566.0	-566.6	[0.00]	µg/L	14:13:55
3	As 188.979†	0.4	0.4	[0.00]	µg/L	14:14:15
3	B 249.677†	329.2	329.5	[0.00]	µg/L	14:14:15
3	Ba 233.527†	-26.4	-26.4	[0.00]	µg/L	14:14:15
3	Be 313.107†	-3434.3	-3437.9	[0.00]	µg/L	14:13:55
3	Cd 226.502†	-135.9	-136.0	[0.00]	µg/L	14:14:15
3	Co 228.616†	-17.0	-17.0	[0.00]	µg/L	14:14:15
3	Cr 267.716†	-57.1	-57.2	[0.00]	µg/L	14:13:55
3	Cu 324.752†	2425.2	2427.8	[0.00]	µg/L	14:13:55
3	Mn 257.610†	-245.3	-245.6	[0.00]	µg/L	14:14:15
3	Mo 202.031†	-11.1	-11.1	[0.00]	µg/L	14:14:15
3	Ni 231.604†	303.1	303.5	[0.00]	µg/L	14:14:15
3	P 214.914†	28.8	28.8	[0.00]	µg/L	14:14:15
3	Pb 220.353†	101.6	101.7	[0.00]	µg/L	14:14:15
3	S 181.975 Axial†	12.3	12.3	[0.00]	µg/L	14:14:15
3	Sb 206.836†	24.9	25.0	[0.00]	µg/L	14:14:15
3	Se 196.026†	18.7	18.7	[0.00]	µg/L	14:14:15
3	SiO2†	1279.2	1280.6	[0.00]	µg/L	14:13:55
3	Si 251.611†	313.6	313.9	[0.00]	µg/L	14:14:15
3	Sn 189.927†	0.3	0.3	[0.00]	µg/L	14:14:15
3	Ti 334.940†	126.8	126.9	[0.00]	µg/L	14:13:55
3	Tl 190.801†	-21.9	-21.9	[0.00]	µg/L	14:14:15
3	U 409.014†	-31.2	-31.3	[0.00]	µg/L	14:13:55
3	V 292.402†	-43.8	-43.9	[0.00]	µg/L	14:13:55
3	Zn 213.857†	475.5	476.0	[0.00]	µg/L	14:14:15

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1909840.1	2044.21	0.11%	100.00 %
Sc RADIAL	54574.4	224.80	0.41%	100 %
Y 371.029	1309918.6	939.52	0.07%	100.00 %
Ag 328.068†	-564.5	16.85	2.98%	[0.00] µg/L
Al 396.153Radial†	-10.1	7.73	76.30%	[0.00] µg/L
As 188.979†	1.1	2.09	182.38%	[0.00] µg/L
B 249.677†	331.5	20.73	6.25%	[0.00] µg/L
Ba 233.527†	-26.0	6.39	24.57%	[0.00] µg/L

Be 313.107†	-3440.4	2.66	0.08%	[0.00]	µg/L
Ca 317.933 Radial†	179.2	3.51	1.96%	[0.00]	µg/L
Cd 226.502†	-142.1	9.89	6.96%	[0.00]	µg/L
Co 228.616†	-8.8	7.85	88.83%	[0.00]	µg/L
Cr 267.716†	-52.4	6.82	13.02%	[0.00]	µg/L
Cu 324.752†	2486.1	52.42	2.11%	[0.00]	µg/L
Fe 238.204 Radial†	14.5	1.00	6.90%	[0.00]	µg/L
K 766.490 Radial†	128.4	18.15	14.13%	[0.00]	µg/L
Mg 279.077 IEC†	11.3	3.62	32.14%	[0.00]	µg/L
Mn 257.610†	-244.1	4.19	1.72%	[0.00]	µg/L
Mo 202.031†	-7.5	4.31	57.15%	[0.00]	µg/L
Na 589.592 Radial†	541.9	9.97	1.84%	[0.00]	µg/L
Ni 231.604†	302.2	6.13	2.03%	[0.00]	µg/L
P 214.914†	27.6	1.32	4.77%	[0.00]	µg/L
Pb 220.353†	97.2	5.13	5.27%	[0.00]	µg/L
S 181.975 Axial†	14.8	2.33	15.71%	[0.00]	µg/L
Sb 206.836†	27.0	1.78	6.62%	[0.00]	µg/L
Se 196.026†	15.8	3.37	21.27%	[0.00]	µg/L
SiO2†	1250.0	26.45	2.12%	[0.00]	µg/L
Si 251.611†	312.9	3.77	1.21%	[0.00]	µg/L
Sn 189.927†	-0.9	1.29	148.06%	[0.00]	µg/L
Sr 421.552†	39.6	6.94	17.54%	[0.00]	µg/L
Ti 334.940†	116.1	23.40	20.15%	[0.00]	µg/L
Tl 190.801†	-24.3	2.88	11.85%	[0.00]	µg/L
U 409.014†	-53.6	22.84	42.60%	[0.00]	µg/L
V 292.402†	-44.2	2.52	5.69%	[0.00]	µg/L
Zn 213.857†	475.5	1.38	0.29%	[0.00]	µg/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 2/11/2010 14:14:25
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	55015.9	55015.9	101 %	14:15:00
1	K 766.490 Radial†	1529.6	1388.9	[1000] µg/L	14:15:00
1	Sr 421.552†	9551.7	9435.5	[100] µg/L	14:15:00
1	Sc 361.383	1906987.6	1906987.6	99.851 %	14:15:21
1	Y 371.029	1308080.3	1308080.3	99.860 %	14:15:21
1	Ag 328.068†	12337.2	12920.2	[100] µg/L	14:15:27
1	As 188.979†	60.2	59.1	[100] µg/L	14:15:48
1	B 249.677†	2597.7	2270.1	[100] µg/L	14:15:27
1	Ba 233.527†	3962.5	3994.4	[100] µg/L	14:15:27
1	Be 313.107†	151975.4	155643.2	[100] µg/L	14:15:21
1	Cd 226.502†	3678.8	3826.5	[100] µg/L	14:15:27
1	Co 228.616†	2095.6	2107.6	[100] µg/L	14:15:48
1	Cr 267.716†	4700.6	4760.0	[100] µg/L	14:15:27
1	Cu 324.752†	17516.6	15056.7	[100] µg/L	14:15:27
1	Mn 257.610†	30035.0	30324.0	[100] µg/L	14:15:27
1	Mo 202.031†	993.1	1002.1	[100] µg/L	14:15:48
1	Ni 231.604†	2238.0	1939.1	[100] µg/L	14:15:27
1	P 214.914†	275.5	248.3	[500] µg/L	14:15:48
1	Pb 220.353†	495.9	399.5	[100] µg/L	14:15:48
1	S 181.975 Axial†	61.0	46.2	[200] µg/L	14:15:48
1	Sb 206.836†	127.3	100.5	[100] µg/L	14:15:48
1	Se 196.026†	83.6	67.8	[100] µg/L	14:15:48
1	SiO2†	6362.3	5121.8	[1069.5] µg/L	14:15:27
1	Si 251.611†	6526.8	6223.6	[500] µg/L	14:15:27
1	Sn 189.927†	236.7	237.9	[100] µg/L	14:15:48
1	Ti 334.940†	41818.8	41765.2	[100] µg/L	14:15:27
1	Tl 190.801†	52.7	77.0	[100] µg/L	14:15:48
1	U 409.014†	1125.7	1181.0	[100] µg/L	14:15:27
1	V 292.402†	9619.3	9677.9	[100] µg/L	14:15:27
1	Zn 213.857†	4700.1	4231.6	[100] µg/L	14:15:27
2	Sc RADIAL	55171.2	55171.2	101 %	14:15:05
2	K 766.490 Radial†	1577.1	1431.6	[1000] µg/L	14:15:05
2	Sr 421.552†	9725.8	9581.1	[100] µg/L	14:15:05
2	Sc 361.383	1919566.1	1919566.1	100.51 %	14:15:54
2	Y 371.029	1316225.3	1316225.3	100.48 %	14:15:54
2	Ag 328.068†	12296.8	12799.1	[100] µg/L	14:16:00
2	As 188.979†	55.3	53.9	[100] µg/L	14:16:20
2	B 249.677†	2620.3	2275.6	[100] µg/L	14:16:00
2	Ba 233.527†	3925.8	3931.9	[100] µg/L	14:16:00
2	Be 313.107†	153476.8	156139.6	[100] µg/L	14:15:54
2	Cd 226.502†	3613.9	3737.7	[100] µg/L	14:16:00
2	Co 228.616†	2078.6	2076.9	[100] µg/L	14:16:20
2	Cr 267.716†	4668.3	4697.0	[100] µg/L	14:16:00
2	Cu 324.752†	17487.1	14912.4	[100] µg/L	14:16:00
2	Mn 257.610†	29867.9	29960.6	[100] µg/L	14:16:00
2	Mo 202.031†	997.0	999.5	[100] µg/L	14:16:20
2	Ni 231.604†	2232.7	1919.2	[100] µg/L	14:16:00
2	P 214.914†	277.4	248.4	[500] µg/L	14:16:20
2	Pb 220.353†	494.0	394.3	[100] µg/L	14:16:20
2	S 181.975 Axial†	66.3	51.1	[200] µg/L	14:16:20
2	Sb 206.836†	134.2	106.6	[100] µg/L	14:16:20
2	Se 196.026†	81.0	64.7	[100] µg/L	14:16:20
2	SiO2†	6316.5	5034.4	[1069.5] µg/L	14:16:00
2	Si 251.611†	6524.6	6178.6	[500] µg/L	14:16:00
2	Sn 189.927†	229.9	229.6	[100] µg/L	14:16:20
2	Ti 334.940†	41713.2	41385.8	[100] µg/L	14:16:00
2	Tl 190.801†	46.9	70.9	[100] µg/L	14:16:20
2	U 409.014†	1094.4	1142.5	[100] µg/L	14:16:00
2	V 292.402†	9634.9	9630.3	[100] µg/L	14:16:00

2	Zn 213.857†	4683.2	4183.9	[100] µg/L	14:16:00
3	Sc RADIAL	54696.3	54696.3	100 %	14:15:11
3	K 766.490 Radial†	1613.5	1481.5	[1000] µg/L	14:15:11
3	Sr 421.552†	9663.0	9601.9	[100] µg/L	14:15:11
3	Sc 361.383	1914175.0	1914175.0	100.23 %	14:16:26
3	Y 371.029	1314459.8	1314459.8	100.35 %	14:16:26
3	Ag 328.068†	12311.6	12848.2	[100] µg/L	14:16:32
3	As 188.979†	52.2	51.0	[100] µg/L	14:16:53
3	B 249.677†	2607.8	2270.5	[100] µg/L	14:16:32
3	Ba 233.527†	3927.0	3944.1	[100] µg/L	14:16:32
3	Be 313.107†	152121.7	155217.6	[100] µg/L	14:16:26
3	Cd 226.502†	3649.8	3783.7	[100] µg/L	14:16:32
3	Co 228.616†	2092.3	2096.4	[100] µg/L	14:16:53
3	Cr 267.716†	4695.0	4736.7	[100] µg/L	14:16:32
3	Cu 324.752†	17403.9	14878.4	[100] µg/L	14:16:32
3	Mn 257.610†	29812.0	29988.6	[100] µg/L	14:16:32
3	Mo 202.031†	994.2	999.5	[100] µg/L	14:16:53
3	Ni 231.604†	2238.0	1930.8	[100] µg/L	14:16:32
3	P 214.914†	276.9	248.7	[500] µg/L	14:16:53
3	Pb 220.353†	496.4	398.1	[100] µg/L	14:16:53
3	S 181.975 Axial†	63.6	48.7	[200] µg/L	14:16:53
3	Sb 206.836†	131.7	104.5	[100] µg/L	14:16:53
3	Se 196.026†	85.1	69.1	[100] µg/L	14:16:53
3	SiO2†	6274.4	5010.2	[1069.5] µg/L	14:16:32
3	Si 251.611†	6506.8	6179.2	[500] µg/L	14:16:32
3	Sn 189.927†	233.2	233.5	[100] µg/L	14:16:53
3	Ti 334.940†	41628.8	41418.4	[100] µg/L	14:16:32
3	Tl 190.801†	52.0	76.1	[100] µg/L	14:16:53
3	U 409.014†	1167.9	1218.9	[100] µg/L	14:16:32
3	V 292.402†	9645.5	9667.9	[100] µg/L	14:16:32
3	Zn 213.857†	4697.5	4211.3	[100] µg/L	14:16:32

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1913576.2	6310.61	0.33%	100.20	%
Sc RADIAL	54961.1	242.12	0.44%	101	%
Y 371.029	1312921.8	4284.80	0.33%	100.23	%
Ag 328.068†	12855.8	60.90	0.47%	[100]	µg/L
As 188.979†	54.7	4.13	7.55%	[100]	µg/L
B 249.677†	2272.1	3.07	0.13%	[100]	µg/L
Ba 233.527†	3956.8	33.13	0.84%	[100]	µg/L
Be 313.107†	155666.8	461.42	0.30%	[100]	µg/L
Cd 226.502†	3782.6	44.38	1.17%	[100]	µg/L
Co 228.616†	2093.6	15.54	0.74%	[100]	µg/L
Cr 267.716†	4731.2	31.87	0.67%	[100]	µg/L
Cu 324.752†	14949.2	94.66	0.63%	[100]	µg/L
K 766.490 Radial†	1434.0	46.37	3.23%	[1000]	µg/L
Mn 257.610†	30091.1	202.22	0.67%	[100]	µg/L
Mo 202.031†	1000.4	1.54	0.15%	[100]	µg/L
Ni 231.604†	1929.7	10.00	0.52%	[100]	µg/L
P 214.914†	248.5	0.19	0.08%	[500]	µg/L
Pb 220.353†	397.3	2.68	0.67%	[100]	µg/L
S 181.975 Axial†	48.7	2.45	5.03%	[200]	µg/L
Sb 206.836†	103.8	3.08	2.97%	[100]	µg/L
Se 196.026†	67.2	2.24	3.33%	[100]	µg/L
SiO2†	5055.5	58.67	1.16%	[1069.5]	µg/L
Si 251.611†	6193.8	25.84	0.42%	[500]	µg/L
Sn 189.927†	233.7	4.16	1.78%	[100]	µg/L
Sr 421.552†	9539.5	90.63	0.95%	[100]	µg/L
Ti 334.940†	41523.1	210.28	0.51%	[100]	µg/L
Tl 190.801†	74.7	3.29	4.41%	[100]	µg/L
U 409.014†	1180.8	38.20	3.23%	[100]	µg/L
V 292.402†	9658.7	25.07	0.26%	[100]	µg/L
Zn 213.857†	4209.0	23.92	0.57%	[100]	µg/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 2/11/2010 14:17:03
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	56431.2	56431.2	103	%	14:17:36
1	Al 396.153Radial†	6754.1	6542.0	[5000]	µg/L	14:17:36
1	Ca 317.933Radial†	5471.1	5111.9	[5000]	µg/L	14:17:56
1	K 766.490 Radial†	7121.7	6759.0	[5000]	µg/L	14:17:36
1	Mg 279.077 IEC†	566.8	536.8	[5000]	µg/L	14:17:56
1	Sr 421.552†	48100.9	46478.6	[500]	µg/L	14:17:36
1	Sc 361.383	1949267.7	1949267.7	102.06	%	14:18:59
1	Y 371.029	1332062.2	1332062.2	101.69	%	14:18:59
1	Ag 328.068†	62715.3	62011.3	[500]	µg/L	14:19:05
1	As 188.979†	268.2	261.6	[500]	µg/L	14:19:26
1	B 249.677†	11715.5	11147.1	[500]	µg/L	14:19:05
1	Ba 233.527†	19296.1	18931.8	[500]	µg/L	14:19:05
1	Be 313.107†	765143.4	753107.4	[500]	µg/L	14:18:59
1	Cd 226.502†	18181.3	17955.7	[500]	µg/L	14:19:05
1	Co 228.616†	10302.5	10103.0	[500]	µg/L	14:19:05
1	Cr 267.716†	23080.8	22666.4	[500]	µg/L	14:19:05
1	Cu 324.752†	74689.8	70693.0	[500]	µg/L	14:19:05
1	Mn 257.610†	147455.4	144716.9	[500]	µg/L	14:18:59
1	Mo 202.031†	4948.3	4855.8	[500]	µg/L	14:19:26
1	Ni 231.604†	9587.6	9091.5	[500]	µg/L	14:19:05
1	P 214.914†	1227.3	1174.8	[2500]	µg/L	14:19:26
1	Pb 220.353†	2024.6	1886.4	[500]	µg/L	14:19:26
1	S 181.975 Axial†	257.2	237.2	[1000]	µg/L	14:19:26
1	Sb 206.836†	565.6	527.2	[500]	µg/L	14:19:26
1	Se 196.026†	349.8	326.9	[500]	µg/L	14:19:26
1	SiO2†	26268.6	24487.3	[5347.5]	µg/L	14:19:05
1	Si 251.611†	30925.0	29986.6	[2500]	µg/L	14:19:05
1	Sn 189.927†	1150.8	1128.4	[500]	µg/L	14:19:26
1	Ti 334.940†	210237.3	205868.8	[500]	µg/L	14:18:59
1	Tl 190.801†	342.7	360.1	[500]	µg/L	14:19:26
1	U 409.014†	5574.8	5515.7	[500]	µg/L	14:19:05
1	V 292.402†	47320.5	46407.6	[500]	µg/L	14:19:05
1	Zn 213.857†	20885.0	19987.0	[500]	µg/L	14:19:05
2	Sc RADIAL	56400.3	56400.3	103	%	14:18:02
2	Al 396.153Radial†	6776.8	6567.5	[5000]	µg/L	14:18:02
2	Ca 317.933Radial†	5446.0	5090.5	[5000]	µg/L	14:18:22
2	K 766.490 Radial†	7209.5	6847.7	[5000]	µg/L	14:18:02
2	Mg 279.077 IEC†	558.9	529.5	[5000]	µg/L	14:18:22
2	Sr 421.552†	48009.1	46415.3	[500]	µg/L	14:18:02
2	Sc 361.383	1969776.8	1969776.8	103.14	%	14:19:33
2	Y 371.029	1347212.9	1347212.9	102.85	%	14:19:33
2	Ag 328.068†	63263.2	61902.7	[500]	µg/L	14:19:38
2	As 188.979†	264.1	254.9	[500]	µg/L	14:19:59
2	B 249.677†	11833.7	11142.2	[500]	µg/L	14:19:38
2	Ba 233.527†	19517.7	18949.8	[500]	µg/L	14:19:38
2	Be 313.107†	769998.9	750009.7	[500]	µg/L	14:19:33
2	Cd 226.502†	18459.9	18040.3	[500]	µg/L	14:19:38
2	Co 228.616†	10435.6	10126.9	[500]	µg/L	14:19:38
2	Cr 267.716†	23319.3	22662.1	[500]	µg/L	14:19:38
2	Cu 324.752†	75284.2	70507.3	[500]	µg/L	14:19:38
2	Mn 257.610†	148076.6	143815.0	[500]	µg/L	14:19:33
2	Mo 202.031†	4926.4	4784.1	[500]	µg/L	14:19:59
2	Ni 231.604†	9732.8	9134.4	[500]	µg/L	14:19:38
2	P 214.914†	1225.6	1160.7	[2500]	µg/L	14:19:59
2	Pb 220.353†	2028.4	1869.5	[500]	µg/L	14:19:59
2	S 181.975 Axial†	257.8	235.1	[1000]	µg/L	14:19:59
2	Sb 206.836†	552.2	508.4	[500]	µg/L	14:19:59
2	Se 196.026†	361.1	334.3	[500]	µg/L	14:19:59
2	SiO2†	26477.9	24422.2	[5347.5]	µg/L	14:19:38

2	Si 251.611†	31253.2	29989.4	[2500]	µg/L	14:19:38
2	Sn 189.927†	1150.3	1116.1	[500]	µg/L	14:19:59
2	Ti 334.940†	211105.1	204565.4	[500]	µg/L	14:19:33
2	Tl 190.801†	338.9	352.9	[500]	µg/L	14:19:59
2	U 409.014†	5592.5	5475.9	[500]	µg/L	14:19:38
2	V 292.402†	47778.9	46369.3	[500]	µg/L	14:19:38
2	Zn 213.857†	21066.0	19949.5	[500]	µg/L	14:19:38
3	Sc RADIAL	56116.0	56116.0	103	%	14:18:27
3	Al 396.153Radial†	6776.6	6600.6	[5000]	µg/L	14:18:27
3	Ca 317.933Radial†	5474.8	5145.3	[5000]	µg/L	14:18:48
3	K 766.490 Radial†	7167.4	6842.1	[5000]	µg/L	14:18:27
3	Mg 279.077 IEC†	570.0	543.0	[5000]	µg/L	14:18:48
3	Sr 421.552†	47985.8	46628.0	[500]	µg/L	14:18:27
3	Sc 361.383	1956384.8	1956384.8	102.44	%	14:20:06
3	Y 371.029	1336938.7	1336938.7	102.06	%	14:20:06
3	Ag 328.068†	58992.1	58153.2	[500]	µg/L	14:20:12
3	As 188.979†	227.0	220.5	[500]	µg/L	14:20:32
3	B 249.677†	10983.9	10391.2	[500]	µg/L	14:20:12
3	Ba 233.527†	17692.5	17297.6	[500]	µg/L	14:20:12
3	Be 313.107†	719301.4	705628.8	[500]	µg/L	14:20:06
3	Cd 226.502†	16595.4	16342.7	[500]	µg/L	14:20:12
3	Co 228.616†	9342.2	9128.8	[500]	µg/L	14:20:12
3	Cr 267.716†	20357.4	19925.5	[500]	µg/L	14:20:12
3	Cu 324.752†	68152.8	64045.2	[500]	µg/L	14:20:12
3	Mn 257.610†	138782.6	135724.9	[500]	µg/L	14:20:06
3	Mo 202.031†	4112.2	4021.9	[500]	µg/L	14:20:32
3	Ni 231.604†	8700.9	8191.7	[500]	µg/L	14:20:12
3	P 214.914†	1052.8	1000.2	[2500]	µg/L	14:20:32
3	Pb 220.353†	1780.7	1641.2	[500]	µg/L	14:20:32
3	S 181.975 Axial†	220.4	200.3	[1000]	µg/L	14:20:32
3	Sb 206.836†	483.7	445.3	[500]	µg/L	14:20:32
3	Se 196.026†	314.2	290.9	[500]	µg/L	14:20:32
3	SiO2†	24349.5	22520.2	[5347.5]	µg/L	14:20:12
3	Si 251.611†	28634.1	27640.0	[2500]	µg/L	14:20:12
3	Sn 189.927†	946.2	924.5	[500]	µg/L	14:20:32
3	Ti 334.940†	196408.6	191619.7	[500]	µg/L	14:20:06
3	Tl 190.801†	311.8	328.7	[500]	µg/L	14:20:32
3	U 409.014†	4970.2	4905.6	[500]	µg/L	14:20:12
3	V 292.402†	42533.9	41566.2	[500]	µg/L	14:20:12
3	Zn 213.857†	18957.2	18030.7	[500]	µg/L	14:20:12

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1958476.4	10413.33	0.53%	102.55	%
Sc RADIAL	56315.8	173.75	0.31%	103	%
Y 371.029	1338737.9	7733.97	0.58%	102.20	%
Ag 328.068†	60689.0	2196.81	3.62%	[500]	µg/L
Al 396.153Radial†	6570.0	29.39	0.45%	[5000]	µg/L
As 188.979†	245.7	22.07	8.99%	[500]	µg/L
B 249.677†	10893.5	435.04	3.99%	[500]	µg/L
Ba 233.527†	18393.1	948.76	5.16%	[500]	µg/L
Be 313.107†	736248.6	26562.75	3.61%	[500]	µg/L
Ca 317.933Radial†	5115.9	27.60	0.54%	[5000]	µg/L
Cd 226.502†	17446.2	956.62	5.48%	[500]	µg/L
Co 228.616†	9786.2	569.47	5.82%	[500]	µg/L
Cr 267.716†	21751.3	1581.21	7.27%	[500]	µg/L
Cu 324.752†	68415.2	3785.63	5.53%	[500]	µg/L
K 766.490 Radial†	6816.2	49.68	0.73%	[5000]	µg/L
Mg 279.077 IEC†	536.5	6.79	1.26%	[5000]	µg/L
Mn 257.610†	141419.0	4951.74	3.50%	[500]	µg/L
Mo 202.031†	4553.9	462.10	10.15%	[500]	µg/L
Ni 231.604†	8805.9	532.32	6.04%	[500]	µg/L
P 214.914†	1111.9	97.02	8.73%	[2500]	µg/L
Pb 220.353†	1799.0	136.97	7.61%	[500]	µg/L
S 181.975 Axial†	224.2	20.73	9.24%	[1000]	µg/L
Sb 206.836†	493.6	42.92	8.69%	[500]	µg/L
Se 196.026†	317.4	23.20	7.31%	[500]	µg/L
SiO2†	23809.9	1117.40	4.69%	[5347.5]	µg/L
Si 251.611†	29205.3	1355.64	4.64%	[2500]	µg/L

Sn 189.927†	1056.3	114.33	10.82%	[500] µg/L
Sr 421.552†	46507.3	109.22	0.23%	[500] µg/L
Ti 334.940†	200684.6	7877.46	3.93%	[500] µg/L
Tl 190.801†	347.2	16.45	4.74%	[500] µg/L
U 409.014†	5299.1	341.35	6.44%	[500] µg/L
V 292.402†	44781.0	2784.22	6.22%	[500] µg/L
Zn 213.857†	19322.4	1118.82	5.79%	[500] µg/L

Sequence No.: 4
 Sample ID: SCAL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 2/11/2010 14:20:41
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc RADIAL	54624.1	54624.1	100 %		14:21:14
1	Al 396.153Radial†	13945.5	13943.0	[10000] µg/L		14:21:14
1	Ca 317.933Radial†	11091.0	10901.8	[10000] µg/L		14:21:34
1	Fe 238.204 Radial†	1237.7	1222.1	[10000] µg/L		14:21:34
1	K 766.490 Radial†	14553.2	14411.5	[10000] µg/L		14:21:14
1	Mg 279.077 IEC†	1145.5	1133.2	[10000] µg/L		14:21:34
1	Na 589.592 Radial†	32001.3	31430.3	[10000] µg/L		14:21:14
1	Sr 421.552†	98763.5	98634.1	[1000] µg/L		14:21:14
1	Sc 361.383	1918837.7	1918837.7	100.47 %		14:22:38
1	Y 371.029	1309873.4	1309873.4	99.997 %		14:22:38
1	Ag 328.068†	129789.4	129745.3	[1000] µg/L		14:22:44
1	As 188.979†	545.1	541.4	[1000] µg/L		14:23:05
1	B 249.677†	24100.3	23655.8	[1000] µg/L		14:22:44
1	Ba 233.527†	40021.0	39859.3	[1000] µg/L		14:22:44
1	Be 313.107†	1583359.7	1579375.6	[1000] µg/L		14:22:38
1	Cd 226.502†	37676.7	37642.1	[1000] µg/L		14:22:44
1	Co 228.616†	21224.5	21133.9	[1000] µg/L		14:22:44
1	Cr 267.716†	47864.2	47692.2	[1000] µg/L		14:22:44
1	Cu 324.752†	152208.7	149008.9	[1000] µg/L		14:22:44
1	Mn 257.610†	300264.6	299100.8	[1000] µg/L		14:22:44
1	Mo 202.031†	10059.0	10019.4	[1000] µg/L		14:23:05
1	Ni 231.604†	19417.1	19023.9	[1000] µg/L		14:22:44
1	P 214.914†	2522.7	2483.2	[5000] µg/L		14:23:05
1	Pb 220.353†	4095.0	3978.6	[1000] µg/L		14:23:05
1	S 181.975 Axial†	497.7	480.5	[2000] µg/L		14:23:05
1	Sb 206.836†	1108.7	1076.5	[1000] µg/L		14:23:05
1	Se 196.026†	705.0	685.9	[1000] µg/L		14:23:05
1	SiO2†	52879.3	51381.3	[10695] µg/L		14:22:44
1	Si 251.611†	63553.1	62942.2	[5000] µg/L		14:22:44
1	Sn 189.927†	2343.4	2333.3	[1000] µg/L		14:23:05
1	Ti 334.940†	431168.6	429030.7	[1000] µg/L		14:22:38
1	Tl 190.801†	726.4	747.3	[1000] µg/L		14:23:05
1	U 409.014†	11460.5	11460.4	[1000] µg/L		14:22:44
1	V 292.402†	98389.1	97972.0	[1000] µg/L		14:22:44
1	Zn 213.857†	42248.3	41574.6	[1000] µg/L		14:22:44
2	Sc RADIAL	55757.6	55757.6	102 %		14:21:40
2	Al 396.153Radial†	13857.6	13573.7	[10000] µg/L		14:21:40
2	Ca 317.933Radial†	11113.5	10698.5	[10000] µg/L		14:22:00
2	Fe 238.204 Radial†	1242.3	1201.4	[10000] µg/L		14:22:00
2	K 766.490 Radial†	14434.4	13999.7	[10000] µg/L		14:21:40
2	Mg 279.077 IEC†	1155.1	1119.3	[10000] µg/L		14:22:00
2	Na 589.592 Radial†	31736.9	30521.6	[10000] µg/L		14:21:40
2	Sr 421.552†	98177.9	96055.0	[1000] µg/L		14:21:40
2	Sc 361.383	1912891.8	1912891.8	100.16 %		14:23:11
2	Y 371.029	1304958.7	1304958.7	99.621 %		14:23:11
2	Ag 328.068†	130617.7	130973.8	[1000] µg/L		14:23:17
2	As 188.979†	550.1	548.1	[1000] µg/L		14:23:38
2	B 249.677†	24305.4	23935.1	[1000] µg/L		14:23:17
2	Ba 233.527†	40326.4	40288.1	[1000] µg/L		14:23:17
2	Be 313.107†	1586929.2	1587837.9	[1000] µg/L		14:23:11
2	Cd 226.502†	37959.2	38040.8	[1000] µg/L		14:23:17
2	Co 228.616†	21379.4	21354.1	[1000] µg/L		14:23:17
2	Cr 267.716†	48340.5	48315.7	[1000] µg/L		14:23:17
2	Cu 324.752†	153521.9	150790.9	[1000] µg/L		14:23:17
2	Mn 257.610†	303225.9	302986.3	[1000] µg/L		14:23:17
2	Mo 202.031†	10012.5	10004.1	[1000] µg/L		14:23:38
2	Ni 231.604†	19568.5	19235.1	[1000] µg/L		14:23:17
2	P 214.914†	2513.0	2481.4	[5000] µg/L		14:23:38
2	Pb 220.353†	4075.3	3971.6	[1000] µg/L		14:23:38

2	S 181.975 Axial†	494.3	478.7	[2000]	µg/L	14:23:38
2	Sb 206.836†	1106.5	1077.8	[1000]	µg/L	14:23:38
2	Se 196.026†	715.1	698.1	[1000]	µg/L	14:23:38
2	SiO2†	53340.3	52005.2	[10695]	µg/L	14:23:17
2	Si 251.611†	64000.9	63585.9	[5000]	µg/L	14:23:17
2	Sn 189.927†	2345.0	2342.2	[1000]	µg/L	14:23:38
2	Ti 334.940†	432325.2	431519.3	[1000]	µg/L	14:23:11
2	Tl 190.801†	726.1	749.2	[1000]	µg/L	14:23:38
2	U 409.014†	11741.1	11776.0	[1000]	µg/L	14:23:17
2	V 292.402†	99181.6	99067.5	[1000]	µg/L	14:23:17
2	Zn 213.857†	42614.4	42070.9	[1000]	µg/L	14:23:17
3	Sc RADIAL	54875.2	54875.2	101	%	14:22:06
3	Al 396.153Radial†	13886.4	13820.4	[10000]	µg/L	14:22:06
3	Ca 317.933Radial†	11079.2	10839.4	[10000]	µg/L	14:22:26
3	Fe 238.204 Radial†	1232.3	1211.0	[10000]	µg/L	14:22:26
3	K 766.490 Radial†	14321.1	14114.2	[10000]	µg/L	14:22:06
3	Mg 279.077 IEC†	1147.7	1130.1	[10000]	µg/L	14:22:26
3	Na 589.592 Radial†	31806.0	31089.8	[10000]	µg/L	14:22:06
3	Sr 421.552†	97911.9	97335.8	[1000]	µg/L	14:22:06
3	Sc 361.383	1943388.7	1943388.7	101.76	%	14:23:44
3	Y 371.029	1326037.1	1326037.1	101.23	%	14:23:44
3	Ag 328.068†	122308.3	120761.4	[1000]	µg/L	14:23:50
3	As 188.979†	468.8	459.6	[1000]	µg/L	14:24:11
3	B 249.677†	22603.8	21882.1	[1000]	µg/L	14:23:50
3	Ba 233.527†	36855.9	36245.6	[1000]	µg/L	14:23:50
3	Be 313.107†	1492194.6	1469875.4	[1000]	µg/L	14:23:44
3	Cd 226.502†	34480.3	34027.2	[1000]	µg/L	14:23:50
3	Co 228.616†	19338.4	19013.4	[1000]	µg/L	14:23:50
3	Cr 267.716†	42475.6	41794.7	[1000]	µg/L	14:23:50
3	Cu 324.752†	139121.1	134233.4	[1000]	µg/L	14:23:50
3	Mn 257.610†	272803.2	268337.9	[1000]	µg/L	14:23:50
3	Mo 202.031†	8402.4	8264.9	[1000]	µg/L	14:24:11
3	Ni 231.604†	17696.7	17089.1	[1000]	µg/L	14:23:50
3	P 214.914†	2160.3	2095.4	[5000]	µg/L	14:24:11
3	Pb 220.353†	3557.4	3398.8	[1000]	µg/L	14:24:11
3	S 181.975 Axial†	437.7	415.3	[2000]	µg/L	14:24:11
3	Sb 206.836†	957.8	914.3	[1000]	µg/L	14:24:11
3	Se 196.026†	625.8	599.2	[1000]	µg/L	14:24:11
3	SiO2†	49204.0	47104.6	[10695]	µg/L	14:23:50
3	Si 251.611†	59050.8	57718.6	[5000]	µg/L	14:23:50
3	Sn 189.927†	1920.9	1888.6	[1000]	µg/L	14:24:11
3	Ti 334.940†	404515.4	397416.1	[1000]	µg/L	14:23:44
3	Tl 190.801†	655.3	668.3	[1000]	µg/L	14:24:11
3	U 409.014†	10336.6	10211.8	[1000]	µg/L	14:23:50
3	V 292.402†	89071.2	87577.8	[1000]	µg/L	14:23:50
3	Zn 213.857†	38626.6	37484.3	[1000]	µg/L	14:23:50

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1925039.4	16166.66	0.84%	100.80 %
Sc RADIAL	55085.6	595.31	1.08%	101 %
Y 371.029	1313623.1	11028.13	0.84%	100.28 %
Ag 328.068†	127160.2	5575.45	4.38%	[1000] µg/L
Al 396.153Radial†	13779.0	188.09	1.37%	[10000] µg/L
As 188.979†	516.3	49.27	9.54%	[1000] µg/L
B 249.677†	23157.7	1113.46	4.81%	[1000] µg/L
Ba 233.527†	38797.7	2220.52	5.72%	[1000] µg/L
Be 313.107†	1545696.3	65799.01	4.26%	[1000] µg/L
Ca 317.933Radial†	10813.2	104.13	0.96%	[10000] µg/L
Cd 226.502†	36570.0	2211.18	6.05%	[1000] µg/L
Co 228.616†	20500.4	1292.54	6.30%	[1000] µg/L
Cr 267.716†	45934.2	3598.42	7.83%	[1000] µg/L
Cu 324.752†	144677.7	9088.85	6.28%	[1000] µg/L
Fe 238.204 Radial†	1211.5	10.32	0.85%	[10000] µg/L
K 766.490 Radial†	14175.1	212.58	1.50%	[10000] µg/L
Mg 279.077 IEC†	1127.5	7.31	0.65%	[10000] µg/L
Mn 257.610†	290141.7	18982.26	6.54%	[1000] µg/L
Mo 202.031†	9429.5	1008.55	10.70%	[1000] µg/L
Na 589.592 Radial†	31013.9	459.06	1.48%	[10000] µg/L

Ni 231.604†	18449.4	1182.78	6.41%	[1000]	µg/L
P 214.914†	2353.3	223.38	9.49%	[5000]	µg/L
Pb 220.353†	3783.0	332.79	8.80%	[1000]	µg/L
S 181.975 Axial†	458.2	37.14	8.10%	[2000]	µg/L
Sb 206.836†	1022.9	94.00	9.19%	[1000]	µg/L
Se 196.026†	661.1	53.94	8.16%	[1000]	µg/L
SiO2†	50163.7	2667.59	5.32%	[10695]	µg/L
Si 251.611†	61415.6	3217.81	5.24%	[5000]	µg/L
Sn 189.927†	2188.0	259.31	11.85%	[1000]	µg/L
Sr 421.552†	97341.6	1289.53	1.32%	[1000]	µg/L
Ti 334.940†	419322.0	19011.87	4.53%	[1000]	µg/L
Tl 190.801†	721.6	46.19	6.40%	[1000]	µg/L
U 409.014†	11149.4	827.15	7.42%	[1000]	µg/L
V 292.402†	94872.5	6341.05	6.68%	[1000]	µg/L
Zn 213.857†	40376.6	2517.08	6.23%	[1000]	µg/L

Sequence No.: 5

Sample ID: S10

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 2/11/2010 14:24:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc RADIAL	55734.1	55734.1	102 %	14:24:53
1	Al 396.153Radial†	68477.1	67062.5	[50000] µg/L	14:24:53
1	Ca 317.933Radial†	54301.8	52992.8	[50000] µg/L	14:24:53
1	Fe 238.204 Radial†	2420.6	2355.7	[20000] µg/L	14:25:13
1	Mg 279.077 IEC†	5505.9	5380.1	[50000] µg/L	14:25:13
1	Na 589.592 Radial†	62235.4	60398.5	[20000] µg/L	14:24:53
1	Sc 361.383	1922257.7	1922257.7	100.65 %	14:26:17
1	Y 371.029	1306511.6	1306511.6	99.740 %	14:26:17
2	Sc RADIAL	55997.4	55997.4	103 %	14:25:19
2	Al 396.153Radial†	68696.2	66960.7	[50000] µg/L	14:25:19
2	Ca 317.933Radial†	54670.5	53102.1	[50000] µg/L	14:25:19
2	Fe 238.204 Radial†	2419.7	2343.7	[20000] µg/L	14:25:39
2	Mg 279.077 IEC†	5512.9	5361.5	[50000] µg/L	14:25:39
2	Na 589.592 Radial†	62504.6	60374.4	[20000] µg/L	14:25:19
2	Sc 361.383	1943938.9	1943938.9	101.79 %	14:26:25
2	Y 371.029	1321297.0	1321297.0	100.87 %	14:26:25
3	Sc RADIAL	56208.4	56208.4	103 %	14:25:45
3	Al 396.153Radial†	69051.1	67053.9	[50000] µg/L	14:25:45
3	Ca 317.933Radial†	54933.8	53157.7	[50000] µg/L	14:25:45
3	Fe 238.204 Radial†	2417.0	2332.2	[20000] µg/L	14:26:05
3	Mg 279.077 IEC†	5516.6	5344.9	[50000] µg/L	14:26:05
3	Na 589.592 Radial†	62899.5	60529.1	[20000] µg/L	14:25:45
3	Sc 361.383	1959647.9	1959647.9	102.61 %	14:26:33
3	Y 371.029	1332766.9	1332766.9	101.74 %	14:26:33

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1941948.2	18774.43	0.97%	101.68 %
Sc RADIAL	55979.9	237.64	0.42%	103 %
Y 371.029	1320191.8	13162.49	1.00%	100.78 %
Al 396.153Radial†	67025.7	56.44	0.08%	[50000] µg/L
Ca 317.933Radial†	53084.2	83.91	0.16%	[50000] µg/L
Fe 238.204 Radial†	2343.9	11.76	0.50%	[20000] µg/L
Mg 279.077 IEC†	5362.2	17.57	0.33%	[50000] µg/L
Na 589.592 Radial†	60434.0	83.23	0.14%	[20000] µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	126.0	0.00000	0.999831	
Al 396.153Radial	3	Lin Thru 0	0.0	1.342	0.00000	0.999984	
As 188.979	3	Lin Thru 0	0.0	0.5116	0.00000	0.999791	
B 249.677	3	Lin Thru 0	0.0	22.88	0.00000	0.999715	
Ba 233.527	3	Lin Thru 0	0.0	38.40	0.00000	0.999779	
Be 313.107	3	Lin Thru 0	0.0	1531	0.00000	0.999818	
Ca 317.933Radial	3	Lin Thru 0	0.0	1.062	0.00000	0.999987	
Cd 226.502	3	Lin Thru 0	0.0	36.25	0.00000	0.999822	
Co 228.616	3	Lin Thru 0	0.0	20.32	0.00000	0.999831	
Cr 267.716	3	Lin Thru 0	0.0	45.46	0.00000	0.999766	
Cu 324.752	3	Lin Thru 0	0.0	143.2	0.00000	0.999754	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.1180	0.00000	0.999910	
K 766.490 Radial	3	Lin Thru 0	0.0	1.407	0.00000	0.999880	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.1075	0.00000	0.999952	
Mn 257.610	3	Lin Thru 0	0.0	288.8	0.00000	0.999942	
Mo 202.031	3	Lin Thru 0	0.0	9.370	0.00000	0.999888	
Na 589.592 Radia	2	Lin Thru 0	0.0	3.038	0.00000	0.999945	

Ni 231.604	3	Lin Thru 0	0.0	18.29	0.00000	0.999821
P 214.914	3	Lin Thru 0	0.0	0.4657	0.00000	0.999737
Pb 220.353	3	Lin Thru 0	0.0	3.748	0.00000	0.999792
S 181.975 Axial	3	Lin Thru 0	0.0	0.2282	0.00000	0.999946
Sb 206.836	3	Lin Thru 0	0.0	1.016	0.00000	0.999901
Se 196.026	3	Lin Thru 0	0.0	0.6559	0.00000	0.999870
SiO2	3	Lin Thru 0	0.0	4.643	0.00000	0.999791
Si 251.611	3	Lin Thru 0	0.0	12.16	0.00000	0.999805
Sn 189.927	3	Lin Thru 0	0.0	2.174	0.00000	0.999882
Sr 421.552	3	Lin Thru 0	0.0	96.47	0.00000	0.999840
Ti 334.940	3	Lin Thru 0	0.0	415.7	0.00000	0.999852
Tl 190.801	3	Lin Thru 0	0.0	0.7164	0.00000	0.999879
U 409.014	3	Lin Thru 0	0.0	11.05	0.00000	0.999783
V 292.402	3	Lin Thru 0	0.0	93.83	0.00000	0.999742
Zn 213.857	3	Lin Thru 0	0.0	40.05	0.00000	0.999841

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 2/11/2010 14:26:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56175.2	56175.2	103 %		14:27:15
1	Al 396.153Radial†	6827.4	6643.0	4939.9 µg/L	4939.9 ppb	14:27:35
1	Ca 317.933Radial†	5504.7	5168.7	4866.7 µg/L	4866.7 ppb	14:27:35
1	Fe 238.204 Radial†	619.4	587.3	4988.2 µg/L	4988.2 ppb	14:27:35
1	K 766.490 Radial†	3573.7	3343.4	2376.5 µg/L	2376.5 ppb	14:27:15
1	Mg 279.077 IEC†	579.7	551.9	5140.1 µg/L	5140.1 ppb	14:27:35
1	Na 589.592 Radial†	7985.2	7215.8	2375.5 µg/L	2375.5 ppb	14:27:15
1	Sr 421.552†	49736.5	48279.6	500.47 µg/L	500.47 ppb	14:27:15
1	Sc 361.383	1963746.6	1963746.6	102.82 %		14:28:38
1	Y 371.029	1343456.9	1343456.9	102.56 %		14:28:38
1	Ag 328.068†	32402.4	32077.4	258.20 µg/L	258.20 ppb	14:28:44
1	As 188.979†	252.0	244.0	475.79 µg/L	475.79 ppb	14:29:05
1	B 249.677†	12299.6	11630.5	506.47 µg/L	506.47 ppb	14:28:44
1	Ba 233.527†	19805.3	19287.7	503.14 µg/L	503.14 ppb	14:28:44
1	Be 313.107†	400944.5	393378.7	256.71 µg/L	256.71 ppb	14:28:38
1	Cd 226.502†	18448.5	18084.2	498.85 µg/L	498.85 ppb	14:28:44
1	Co 228.616†	10564.7	10283.6	505.57 µg/L	505.57 ppb	14:28:44
1	Cr 267.716†	22885.3	22309.5	491.04 µg/L	491.04 ppb	14:28:44
1	Cu 324.752†	76882.1	72285.6	505.62 µg/L	505.62 ppb	14:28:44
1	Mn 257.610†	151694.6	147774.6	512.18 µg/L	512.18 ppb	14:28:38
1	Mo 202.031†	5332.7	5193.9	554.49 µg/L	554.49 ppb	14:29:05
1	Ni 231.604†	9713.9	9145.0	499.47 µg/L	499.47 ppb	14:28:44
1	P 214.914†	1269.4	1206.9	2543.7 µg/L	2543.7 ppb	14:29:05
1	Pb 220.353†	2051.9	1898.4	506.85 µg/L	506.85 ppb	14:29:05
1	S 181.975 Axial†	610.0	578.4	2534.1 µg/L	2534.1 ppb	14:29:05
1	Sb 206.836†	565.9	523.4	518.27 µg/L	518.27 ppb	14:29:05
1	Se 196.026†	1740.7	1677.1	2564.5 µg/L	2564.5 ppb	14:29:05
1	SiO2†	50702.0	48060.2	10350 µg/L	10350 ppb	14:28:44
1	Si 251.611†	60656.9	58679.0	4823.7 µg/L	4823.7 ppb	14:28:44
1	Sn 189.927†	1247.6	1214.2	558.50 µg/L	558.50 ppb	14:29:05
1	Ti 334.940†	209346.8	203483.9	489.14 µg/L	489.14 ppb	14:28:38
1	Tl 190.801†	364.1	378.4	534.06 µg/L	534.06 ppb	14:29:05
1	U 409.014†	5596.2	5496.2	496.62 µg/L	496.62 ppb	14:28:44
1	V 292.402†	48924.8	47626.0	514.07 µg/L	514.07 ppb	14:28:44
1	Zn 213.857†	21567.2	20499.6	508.35 µg/L	508.35 ppb	14:28:44
2	Sc RADIAL	56033.1	56033.1	103 %		14:27:40
2	Al 396.153Radial†	6802.0	6635.1	4934.1 µg/L	4934.1 ppb	14:28:01
2	Ca 317.933Radial†	5475.3	5153.6	4852.4 µg/L	4852.4 ppb	14:28:01
2	Fe 238.204 Radial†	614.3	583.8	4958.8 µg/L	4958.8 ppb	14:28:01
2	K 766.490 Radial†	3641.5	3418.3	2429.7 µg/L	2429.7 ppb	14:27:40
2	Mg 279.077 IEC†	579.8	553.4	5154.4 µg/L	5154.4 ppb	14:28:01
2	Na 589.592 Radial†	8029.7	7278.8	2396.2 µg/L	2396.2 ppb	14:27:40
2	Sr 421.552†	50111.3	48767.2	505.53 µg/L	505.53 ppb	14:27:40
2	Sc 361.383	1959108.8	1959108.8	102.58 %		14:29:12
2	Y 371.029	1337906.1	1337906.1	102.14 %		14:29:12
2	Ag 328.068†	32371.7	32122.1	258.56 µg/L	258.56 ppb	14:29:17
2	As 188.979†	250.3	242.8	473.56 µg/L	473.56 ppb	14:29:38
2	B 249.677†	12349.9	11707.8	509.86 µg/L	509.86 ppb	14:29:17
2	Ba 233.527†	19859.1	19385.7	505.69 µg/L	505.69 ppb	14:29:17
2	Be 313.107†	397767.3	391204.5	255.29 µg/L	255.29 ppb	14:29:12
2	Cd 226.502†	18445.9	18124.1	499.96 µg/L	499.96 ppb	14:29:17
2	Co 228.616†	10616.9	10358.7	509.26 µg/L	509.26 ppb	14:29:17
2	Cr 267.716†	22880.0	22357.0	492.09 µg/L	492.09 ppb	14:29:17
2	Cu 324.752†	76966.8	72545.1	507.43 µg/L	507.43 ppb	14:29:17
2	Mn 257.610†	150503.7	146962.9	509.37 µg/L	509.37 ppb	14:29:12
2	Mo 202.031†	5249.3	5124.9	547.12 µg/L	547.12 ppb	14:29:38
2	Ni 231.604†	9710.9	9164.5	500.53 µg/L	500.53 ppb	14:29:17
2	P 214.914†	1234.6	1175.9	2476.8 µg/L	2476.8 ppb	14:29:38
2	Pb 220.353†	2014.2	1866.4	498.27 µg/L	498.27 ppb	14:29:38

2	S 181.975 Axial†	603.9	573.9	2514.5 µg/L	2514.5 ppb	14:29:38
2	Sb 206.836†	552.1	511.3	506.22 µg/L	506.22 ppb	14:29:38
2	Se 196.026†	1718.6	1659.6	2537.7 µg/L	2537.7 ppb	14:29:38
2	SiO2†	50804.5	48276.9	10397 µg/L	10397 ppb	14:29:17
2	Si 251.611†	60707.2	58867.6	4839.2 µg/L	4839.2 ppb	14:29:17
2	Sn 189.927†	1227.9	1197.9	551.01 µg/L	551.01 ppb	14:29:38
2	Ti 334.940†	208068.6	202719.9	487.30 µg/L	487.30 ppb	14:29:12
2	Tl 190.801†	356.4	371.7	524.72 µg/L	524.72 ppb	14:29:38
2	U 409.014†	5657.2	5568.6	503.18 µg/L	503.18 ppb	14:29:17
2	V 292.402†	48911.7	47725.9	515.09 µg/L	515.09 ppb	14:29:17
2	Zn 213.857†	21491.7	20475.7	507.74 µg/L	507.74 ppb	14:29:17
3	Sc RADIAL	55710.7	55710.7	102 %		14:28:06
3	Al 396.153Radial†	6837.6	6708.3	4990.5 µg/L	4990.5 ppb	14:28:27
3	Ca 317.933Radial†	5503.3	5211.9	4907.4 µg/L	4907.4 ppb	14:28:27
3	Fe 238.204 Radial†	619.1	592.0	5027.4 µg/L	5027.4 ppb	14:28:27
3	K 766.490 Radial†	3604.3	3402.4	2418.4 µg/L	2418.4 ppb	14:28:06
3	Mg 279.077 IEC†	577.0	553.9	5157.4 µg/L	5157.4 ppb	14:28:27
3	Na 589.592 Radial†	7999.1	7294.1	2401.2 µg/L	2401.2 ppb	14:28:06
3	Sr 421.552†	49756.2	48701.8	504.85 µg/L	504.85 ppb	14:28:06
3	Sc 361.383	1966591.1	1966591.1	102.97 %		14:29:45
3	Y 371.029	1344829.1	1344829.1	102.67 %		14:29:45
3	Ag 328.068†	30447.1	30133.0	242.44 µg/L	242.44 ppb	14:29:51
3	As 188.979†	212.1	204.8	399.46 µg/L	399.46 ppb	14:30:11
3	B 249.677†	11543.9	10879.3	473.52 µg/L	473.52 ppb	14:29:51
3	Ba 233.527†	18235.3	17735.1	462.62 µg/L	462.62 ppb	14:29:51
3	Be 313.107†	376544.4	369118.7	240.88 µg/L	240.88 ppb	14:29:45
3	Cd 226.502†	16808.4	16465.5	454.14 µg/L	454.14 ppb	14:29:51
3	Co 228.616†	9616.6	9347.9	459.50 µg/L	459.50 ppb	14:29:51
3	Cr 267.716†	20282.2	19749.2	434.69 µg/L	434.69 ppb	14:29:51
3	Cu 324.752†	70054.3	65546.6	458.56 µg/L	458.56 ppb	14:29:51
3	Mn 257.610†	142833.7	138956.0	481.65 µg/L	481.65 ppb	14:29:45
3	Mo 202.031†	4404.7	4285.1	457.51 µg/L	457.51 ppb	14:30:11
3	Ni 231.604†	8886.0	8327.4	454.82 µg/L	454.82 ppb	14:29:51
3	P 214.914†	1057.7	999.5	2101.9 µg/L	2101.9 ppb	14:30:11
3	Pb 220.353†	1779.9	1631.4	435.46 µg/L	435.46 ppb	14:30:11
3	S 181.975 Axial†	527.5	497.5	2179.7 µg/L	2179.7 ppb	14:30:11
3	Sb 206.836†	492.5	451.4	446.41 µg/L	446.41 ppb	14:30:11
3	Se 196.026†	1501.7	1442.5	2207.0 µg/L	2207.0 ppb	14:30:11
3	SiO2†	47105.5	44496.1	9582.5 µg/L	9582.5 ppb	14:29:51
3	Si 251.611†	56262.5	54326.1	4465.9 µg/L	4465.9 ppb	14:29:51
3	Sn 189.927†	1018.6	990.0	455.40 µg/L	455.40 ppb	14:30:11
3	Ti 334.940†	196112.8	190337.3	457.51 µg/L	457.51 ppb	14:29:45
3	Tl 190.801†	328.3	343.2	484.58 µg/L	484.58 ppb	14:30:11
3	U 409.014†	4922.5	4834.1	436.66 µg/L	436.66 ppb	14:29:51
3	V 292.402†	44109.1	42880.5	462.56 µg/L	462.56 ppb	14:29:51
3	Zn 213.857†	19646.9	18604.4	461.29 µg/L	461.29 ppb	14:29:51

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1963148.8	102.79 %	0.198			0.19%
Sc RADIAL	55973.0	103 %	0.4			0.43%
Y 371.029	1342064.0	102.45 %	0.280			0.27%
Ag 328.068†	31444.2	253.06 µg/L	9.205	253.06 ppb	9.205	3.64%
QC value within limits for Ag 328.068 Recovery = 101.23%						
Al 396.153Radial†	6662.1	4954.8 µg/L	31.04	4954.8 ppb	31.04	0.63%
QC value within limits for Al 396.153Radial Recovery = 99.10%						
As 188.979†	230.5	449.61 µg/L	43.438	449.61 ppb	43.438	9.66%
QC value less than the lower limit for As 188.979 Recovery = 89.92%						
B 249.677†	11405.9	496.62 µg/L	20.071	496.62 ppb	20.071	4.04%
QC value within limits for B 249.677 Recovery = 99.32%						
Ba 233.527†	18802.8	490.48 µg/L	24.164	490.48 ppb	24.164	4.93%
QC value within limits for Ba 233.527 Recovery = 98.10%						
Be 313.107†	384567.3	250.96 µg/L	8.759	250.96 ppb	8.759	3.49%
QC value within limits for Be 313.107 Recovery = 100.38%						
Ca 317.933Radial†	5178.1	4875.5 µg/L	28.51	4875.5 ppb	28.51	0.58%
QC value within limits for Ca 317.933Radial Recovery = 97.51%						
Cd 226.502†	17558.0	484.32 µg/L	26.137	484.32 ppb	26.137	5.40%
QC value within limits for Cd 226.502 Recovery = 96.86%						
Co 228.616†	9996.7	491.44 µg/L	27.727	491.44 ppb	27.727	5.64%

Cr	267.716†	21471.9	472.61 µg/L	32.838	472.61 ppb	32.838	6.95%
Cu	324.752†	70125.8	490.54 µg/L	27.712	490.54 ppb	27.712	5.65%
Fe	238.204 Radial†	587.7	4991.5 µg/L	34.44	4991.5 ppb	34.44	0.69%
K	766.490 Radial†	3388.1	2408.2 µg/L	28.04	2408.2 ppb	28.04	1.16%
Mg	279.077 IEC†	553.1	5150.6 µg/L	9.21	5150.6 ppb	9.21	0.18%
Mn	257.610†	144564.5	501.06 µg/L	16.874	501.06 ppb	16.874	3.37%
Mo	202.031†	4868.0	519.70 µg/L	53.991	519.70 ppb	53.991	10.39%
Na	589.592 Radial†	7262.9	2391.0 µg/L	13.66	2391.0 ppb	13.66	0.57%
Ni	231.604†	8879.0	484.94 µg/L	26.089	484.94 ppb	26.089	5.38%
P	214.914†	1127.4	2374.2 µg/L	238.13	2374.2 ppb	238.13	10.03%
Pb	220.353†	1798.7	480.19 µg/L	38.976	480.19 ppb	38.976	8.12%
S	181.975 Axial†	549.9	2409.5 µg/L	199.20	2409.5 ppb	199.20	8.27%
Sb	206.836†	495.4	490.30 µg/L	38.486	490.30 ppb	38.486	7.85%
Se	196.026†	1593.1	2436.4 µg/L	199.13	2436.4 ppb	199.13	8.17%
SiO2†		46944.4	10110 µg/L	457.2	10110 ppb	457.2	4.52%
Si	251.611†	57290.9	4709.6 µg/L	211.21	4709.6 ppb	211.21	4.48%
Sn	189.927†	1134.1	521.64 µg/L	57.487	521.64 ppb	57.487	11.02%
Sr	421.552†	48582.8	503.62 µg/L	2.743	503.62 ppb	2.743	0.54%
Ti	334.940†	198847.0	477.98 µg/L	17.751	477.98 ppb	17.751	3.71%
Tl	190.801†	364.4	514.45 µg/L	26.290	514.45 ppb	26.290	5.11%
U	409.014†	5299.6	478.82 µg/L	36.655	478.82 ppb	36.655	7.66%
V	292.402†	46077.4	497.24 µg/L	30.036	497.24 ppb	30.036	6.04%
Zn	213.857†	19859.9	492.46 µg/L	26.995	492.46 ppb	26.995	5.48%

QC value within limits for Co 228.616 Recovery = 98.29%

QC value within limits for Cr 267.716 Recovery = 94.52%

QC value within limits for Cu 324.752 Recovery = 98.11%

QC value within limits for Fe 238.204 Radial Recovery = 99.83%

QC value within limits for K 766.490 Radial Recovery = 96.33%

QC value within limits for Mg 279.077 IEC Recovery = 103.01%

QC value within limits for Mn 257.610 Recovery = 100.21%

QC value within limits for Mo 202.031 Recovery = 103.94%

QC value within limits for Na 589.592 Radial Recovery = 95.64%

QC value within limits for Ni 231.604 Recovery = 96.99%

QC value within limits for P 214.914 Recovery = 94.97%

QC value within limits for Pb 220.353 Recovery = 96.04%

QC value within limits for S 181.975 Axial Recovery = 96.38%

QC value within limits for Sb 206.836 Recovery = 98.06%

QC value within limits for Se 196.026 Recovery = 97.46%

QC value within limits for SiO2 Recovery = 94.53%

QC value within limits for Si 251.611 Recovery = 94.19%

QC value within limits for Sn 189.927 Recovery = 104.33%

QC value within limits for Sr 421.552 Recovery = 100.72%

QC value within limits for Ti 334.940 Recovery = 95.60%

QC value within limits for Tl 190.801 Recovery = 102.89%

QC value within limits for U 409.014 Recovery = 95.76%

QC value within limits for V 292.402 Recovery = 99.45%

QC value within limits for Zn 213.857 Recovery = 98.49%

QC Failed. Continue with analysis.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 2/11/2010 14:30:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55908.8	55908.8	102 %		14:30:53
1	Al 396.153Radial†	-5.0	5.2	3.8899 µg/L	3.8899 ppb	14:30:53
1	Ca 317.933Radial†	192.7	9.0	8.4299 µg/L	8.4299 ppb	14:31:14
1	Fe 238.204 Radial†	14.3	-0.6	-4.9645 µg/L	-4.9645 ppb	14:31:14
1	K 766.490 Radial†	107.9	-23.1	-16.426 µg/L	-16.426 ppb	14:30:53
1	Mg 279.077 IEC†	15.7	4.0	37.295 µg/L	37.295 ppb	14:31:14
1	Na 589.592 Radial†	574.2	18.7	6.1420 µg/L	6.1420 ppb	14:30:53
1	Sr 421.552†	57.3	16.3	0.1694 µg/L	0.1694 ppb	14:30:53
1	Sc 361.383	1944300.1	1944300.1	101.80 %		14:32:16
1	Y 371.029	1332393.9	1332393.9	101.72 %		14:32:16
1	Ag 328.068†	-508.2	65.3	0.5177 µg/L	0.5177 ppb	14:32:21
1	As 188.979†	2.4	1.2	2.3247 µg/L	2.3247 ppb	14:32:42
1	B 249.677†	341.3	3.8	0.1701 µg/L	0.1701 ppb	14:32:42
1	Ba 233.527†	-14.2	12.0	0.3135 µg/L	0.3135 ppb	14:32:42
1	Be 313.107†	-3420.4	80.6	0.0526 µg/L	0.0526 ppb	14:32:21
1	Cd 226.502†	-141.7	2.9	0.0816 µg/L	0.0816 ppb	14:32:42
1	Co 228.616†	-8.8	0.2	0.0094 µg/L	0.0094 ppb	14:32:42
1	Cr 267.716†	-52.4	0.9	0.0196 µg/L	0.0196 ppb	14:32:21
1	Cu 324.752†	2516.4	-14.3	-0.1006 µg/L	-0.1006 ppb	14:32:21
1	Mn 257.610†	-222.7	25.3	0.0856 µg/L	0.0856 ppb	14:32:42
1	Mo 202.031†	-0.2	7.3	0.7799 µg/L	0.7799 ppb	14:32:42
1	Ni 231.604†	301.0	-6.6	-0.3591 µg/L	-0.3591 ppb	14:32:42
1	P 214.914†	32.4	4.2	8.9740 µg/L	8.9740 ppb	14:32:42
1	Pb 220.353†	88.6	-10.1	-2.7035 µg/L	-2.7035 ppb	14:32:42
1	S 181.975 Axial†	16.5	1.4	6.0966 µg/L	6.0966 ppb	14:32:42
1	Sb 206.836†	22.8	-4.6	-4.5144 µg/L	-4.5144 ppb	14:32:42
1	Se 196.026†	21.7	5.5	8.3158 µg/L	8.3158 ppb	14:32:42
1	SiO2†	1261.7	-10.7	-2.2937 µg/L	-2.2937 ppb	14:32:21
1	Si 251.611†	339.4	20.5	1.6875 µg/L	1.6875 ppb	14:32:42
1	Sn 189.927†	1.1	2.0	0.9031 µg/L	0.9031 ppb	14:32:42
1	Ti 334.940†	148.3	29.6	0.0683 µg/L	0.0683 ppb	14:32:21
1	Tl 190.801†	-21.8	2.8	3.9713 µg/L	3.9713 ppb	14:32:42
1	U 409.014†	-33.0	21.2	1.9223 µg/L	1.9223 ppb	14:32:21
1	V 292.402†	-53.1	-7.9	-0.0767 µg/L	-0.0767 ppb	14:32:21
1	Zn 213.857†	482.8	-1.3	-0.0325 µg/L	-0.0325 ppb	14:32:42
2	Sc RADIAL	55881.3	55881.3	102 %		14:31:19
2	Al 396.153Radial†	-15.6	-5.1	-3.7901 µg/L	-3.7901 ppb	14:31:19
2	Ca 317.933Radial†	181.6	-1.8	-1.6610 µg/L	-1.6610 ppb	14:31:40
2	Fe 238.204 Radial†	14.4	-0.5	-4.0234 µg/L	-4.0234 ppb	14:31:40
2	K 766.490 Radial†	165.7	33.4	23.714 µg/L	23.714 ppb	14:31:19
2	Mg 279.077 IEC†	9.4	-2.1	-19.910 µg/L	-19.910 ppb	14:31:40
2	Na 589.592 Radial†	521.5	-32.6	-10.727 µg/L	-10.727 ppb	14:31:19
2	Sr 421.552†	60.7	19.7	0.2040 µg/L	0.2040 ppb	14:31:19
2	Sc 361.383	1964760.3	1964760.3	102.88 %		14:32:48
2	Y 371.029	1347613.8	1347613.8	102.88 %		14:32:48
2	Ag 328.068†	-518.5	60.5	0.4799 µg/L	0.4799 ppb	14:32:53
2	As 188.979†	-1.3	-2.4	-4.7694 µg/L	-4.7694 ppb	14:33:14
2	B 249.677†	344.7	3.6	0.1600 µg/L	0.1600 ppb	14:33:14
2	Ba 233.527†	-16.3	10.1	0.2637 µg/L	0.2637 ppb	14:33:14
2	Be 313.107†	-3298.7	234.0	0.1527 µg/L	0.1527 ppb	14:32:53
2	Cd 226.502†	-133.3	12.6	0.3477 µg/L	0.3477 ppb	14:33:14
2	Co 228.616†	-4.9	4.1	0.2028 µg/L	0.2028 ppb	14:33:14
2	Cr 267.716†	-12.9	39.8	0.8752 µg/L	0.8752 ppb	14:32:53
2	Cu 324.752†	2529.4	-27.4	-0.1918 µg/L	-0.1918 ppb	14:32:53
2	Mn 257.610†	-202.1	47.7	0.1654 µg/L	0.1654 ppb	14:33:14
2	Mo 202.031†	1.2	8.7	0.9303 µg/L	0.9303 ppb	14:33:14
2	Ni 231.604†	305.7	-5.0	-0.2753 µg/L	-0.2753 ppb	14:33:14
2	P 214.914†	24.2	-4.1	-8.8167 µg/L	-8.8167 ppb	14:33:14
2	Pb 220.353†	97.8	-2.1	-0.5597 µg/L	-0.5597 ppb	14:33:14

2	S 181.975 Axial†	15.1	-0.1	-0.5770 µg/L	-0.5770 ppb	14:33:14
2	Sb 206.836†	27.2	-0.5	-0.4890 µg/L	-0.4890 ppb	14:33:14
2	Se 196.026†	14.7	-1.6	-2.3575 µg/L	-2.3575 ppb	14:33:14
2	SiO2†	1242.8	-41.9	-9.0338 µg/L	-9.0338 ppb	14:32:53
2	Si 251.611†	360.2	37.3	3.0664 µg/L	3.0664 ppb	14:33:14
2	Sn 189.927†	0.7	1.6	0.7280 µg/L	0.7280 ppb	14:33:14
2	Ti 334.940†	261.8	138.4	0.3344 µg/L	0.3344 ppb	14:32:53
2	Tl 190.801†	-26.1	-1.1	-1.5598 µg/L	-1.5598 ppb	14:33:14
2	U 409.014†	-15.1	39.0	3.5273 µg/L	3.5273 ppb	14:32:53
2	V 292.402†	-42.6	2.8	0.0426 µg/L	0.0426 ppb	14:32:53
2	Zn 213.857†	491.7	2.4	0.0627 µg/L	0.0627 ppb	14:33:14
3	Sc RADIAL	56329.8	56329.8	103 %		14:31:45
3	Al 396.153Radial†	2.8	12.8	9.5317 µg/L	9.5317 ppb	14:31:45
3	Ca 317.933Radial†	174.0	-10.6	-9.9765 µg/L	-9.9765 ppb	14:32:05
3	Fe 238.204 Radial†	15.1	0.1	1.1942 µg/L	1.1942 ppb	14:32:05
3	K 766.490 Radial†	116.0	-16.0	-11.375 µg/L	-11.375 ppb	14:31:45
3	Mg 279.077 IEC†	9.4	-2.1	-19.858 µg/L	-19.858 ppb	14:32:05
3	Na 589.592 Radial†	536.5	-22.1	-7.2800 µg/L	-7.2800 ppb	14:31:45
3	Sr 421.552†	17.2	-22.9	-0.2369 µg/L	-0.2369 ppb	14:31:45
3	Sc 361.383	1963041.8	1963041.8	102.79 %		14:33:20
3	Y 371.029	1346546.9	1346546.9	102.80 %		14:33:20
3	Ag 328.068†	-542.7	36.6	0.2929 µg/L	0.2929 ppb	14:33:26
3	As 188.979†	1.8	0.6	1.1689 µg/L	1.1689 ppb	14:33:46
3	B 249.677†	343.0	2.2	0.0978 µg/L	0.0978 ppb	14:33:46
3	Ba 233.527†	-18.5	8.0	0.2082 µg/L	0.2082 ppb	14:33:46
3	Be 313.107†	-3230.6	297.4	0.1942 µg/L	0.1942 ppb	14:33:26
3	Cd 226.502†	-130.1	15.5	0.4281 µg/L	0.4281 ppb	14:33:46
3	Co 228.616†	-21.8	-12.4	-0.6104 µg/L	-0.6104 ppb	14:33:46
3	Cr 267.716†	-41.2	12.3	0.2708 µg/L	0.2708 ppb	14:33:26
3	Cu 324.752†	2546.0	-9.1	-0.0637 µg/L	-0.0637 ppb	14:33:26
3	Mn 257.610†	-170.0	78.8	0.2737 µg/L	0.2737 ppb	14:33:46
3	Mo 202.031†	0.3	7.9	0.8413 µg/L	0.8413 ppb	14:33:46
3	Ni 231.604†	307.9	-2.6	-0.1428 µg/L	-0.1428 ppb	14:33:46
3	P 214.914†	31.7	3.2	7.0023 µg/L	7.0023 ppb	14:33:46
3	Pb 220.353†	97.7	-2.1	-0.5651 µg/L	-0.5651 ppb	14:33:46
3	S 181.975 Axial†	14.0	-1.2	-5.1565 µg/L	-5.1565 ppb	14:33:46
3	Sb 206.836†	18.5	-9.0	-8.8540 µg/L	-8.8540 ppb	14:33:46
3	Se 196.026†	7.7	-8.4	-12.762 µg/L	-12.762 ppb	14:33:46
3	SiO2†	1231.2	-52.2	-11.239 µg/L	-11.239 ppb	14:33:26
3	Si 251.611†	338.7	16.6	1.3655 µg/L	1.3655 ppb	14:33:46
3	Sn 189.927†	2.7	3.5	1.5931 µg/L	1.5931 ppb	14:33:46
3	Ti 334.940†	206.7	84.9	0.2057 µg/L	0.2057 ppb	14:33:26
3	Tl 190.801†	-23.5	1.4	1.9821 µg/L	1.9821 ppb	14:33:46
3	U 409.014†	-82.4	-26.6	-2.4037 µg/L	-2.4037 ppb	14:33:26
3	V 292.402†	-5.0	39.3	0.4238 µg/L	0.4238 ppb	14:33:26
3	Zn 213.857†	490.6	1.7	0.0448 µg/L	0.0448 ppb	14:33:46

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1957367.4	102.49 %	0.594			0.58%
Sc RADIAL	56040.0	103 %	0.5			0.45%
Y 371.029	1342184.9	102.46 %	0.649			0.63%
Ag 328.068†	54.1	0.4302 µg/L	0.12036	0.4302 ppb	0.12036	27.98%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	4.3	3.2105 µg/L	6.68686	3.2105 ppb	6.68686	208.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-0.2	-0.4253 µg/L	3.80624	-0.4253 ppb	3.80624	895.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	3.2	0.1426 µg/L	0.03915	0.1426 ppb	0.03915	27.45%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	10.0	0.2618 µg/L	0.05266	0.2618 ppb	0.05266	20.11%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	204.0	0.1331 µg/L	0.07275	0.1331 ppb	0.07275	54.64%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.1	-1.0692 µg/L	9.21745	-1.0692 ppb	9.21745	862.10%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.4	0.2858 µg/L	0.18136	0.2858 ppb	0.18136	63.46%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.7	-0.1327 µg/L	0.42483	-0.1327 ppb	0.42483	320.06%

QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	17.7	0.3886 µg/L	0.43975	0.3886 ppb	0.43975 113.17%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-16.9	-0.1187 µg/L	0.06593	-0.1187 ppb	0.06593 55.55%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.3	-2.5979 µg/L	3.31761	-2.5979 ppb	3.31761 127.70%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	-1.9	-1.3625 µg/L	21.86298	-1.3625 ppb	21.86298 >999.9%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.1	-0.8244 µg/L	33.01203	-0.8244 ppb	33.01203 >999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	50.6	0.1749 µg/L	0.09441	0.1749 ppb	0.09441 53.98%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	8.0	0.8505 µg/L	0.07561	0.8505 ppb	0.07561 8.89%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-12.0	-3.9548 µg/L	8.91231	-3.9548 ppb	8.91231 225.35%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-4.7	-0.2590 µg/L	0.10906	-0.2590 ppb	0.10906 42.10%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	1.1	2.3865 µg/L	9.75229	2.3865 ppb	9.75229 408.64%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-4.8	-1.2761 µg/L	1.23617	-1.2761 ppb	1.23617 96.87%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	0.0	0.1210 µg/L	5.65896	0.1210 ppb	5.65896 >999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-4.7	-4.6191 µg/L	4.18349	-4.6191 ppb	4.18349 90.57%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-1.5	-2.2678 µg/L	10.53912	-2.2678 ppb	10.53912 464.73%
QC value within limits for Se 196.026 Recovery = Not calculated					
SiO2†	-34.9	-7.5220 µg/L	4.66014	-7.5220 ppb	4.66014 61.95%
QC value within limits for SiO2 Recovery = Not calculated					
Si 251.611†	24.8	2.0398 µg/L	0.90350	2.0398 ppb	0.90350 44.29%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	2.3	1.0747 µg/L	0.45737	1.0747 ppb	0.45737 42.56%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	4.4	0.0455 µg/L	0.24518	0.0455 ppb	0.24518 539.15%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	84.3	0.2028 µg/L	0.13307	0.2028 ppb	0.13307 65.62%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	1.0	1.4645 µg/L	2.80164	1.4645 ppb	2.80164 191.30%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	11.2	1.0153 µg/L	3.06778	1.0153 ppb	3.06778 302.16%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	11.4	0.1299 µg/L	0.26143	0.1299 ppb	0.26143 201.23%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	0.9	0.0250 µg/L	0.05061	0.0250 ppb	0.05061 202.72%
QC value within limits for Zn 213.857 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 101

Date Collected: 2/11/2010 14:33:56

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54747.4	54747.4	100 %		14:34:28
1	Al 396.153Radial†	273.1	282.4	210.27 µg/L	210.27 ppb	14:34:28
1	Ca 317.933Radial†	397.1	216.7	204.01 µg/L	204.01 ppb	14:34:49
1	Fe 238.204 Radial†	30.8	16.2	137.25 µg/L	137.25 ppb	14:34:49
1	K 766.490 Radial†	363.7	234.1	166.40 µg/L	166.40 ppb	14:34:28
1	Mg 279.077 IEC†	45.5	34.1	317.43 µg/L	317.43 ppb	14:34:49
1	Na 589.592 Radial†	1424.0	877.6	288.92 µg/L	288.92 ppb	14:34:28
1	Sr 421.552†	486.3	445.2	4.6152 µg/L	4.6152 ppb	14:34:28
1	Sc 361.383	1940350.4	1940350.4	101.60 %		14:35:51
1	Y 371.029	1331501.6	1331501.6	101.65 %		14:35:51
1	Ag 328.068†	65.6	629.1	5.0332 µg/L	5.0332 ppb	14:35:56
1	As 188.979†	15.0	13.6	26.557 µg/L	26.557 ppb	14:36:17
1	B 249.677†	1481.9	1127.1	49.194 µg/L	49.194 ppb	14:35:56
1	Ba 233.527†	167.0	190.4	4.9664 µg/L	4.9664 ppb	14:36:17
1	Be 313.107†	4123.9	7499.6	4.8957 µg/L	4.8957 ppb	14:35:56
1	Cd 226.502†	43.2	184.7	5.0837 µg/L	5.0837 ppb	14:36:17
1	Co 228.616†	90.6	98.0	4.8213 µg/L	4.8213 ppb	14:36:17
1	Cr 267.716†	181.4	230.9	5.0824 µg/L	5.0824 ppb	14:36:17
1	Cu 324.752†	4005.0	1456.0	10.189 µg/L	10.189 ppb	14:35:56
1	Mn 257.610†	2747.7	2948.6	10.216 µg/L	10.216 ppb	14:35:56
1	Mo 202.031†	89.7	95.8	10.232 µg/L	10.232 ppb	14:36:17
1	Ni 231.604†	390.7	82.4	4.5019 µg/L	4.5019 ppb	14:36:17
1	P 214.914†	110.5	81.1	173.12 µg/L	173.12 ppb	14:36:17
1	Pb 220.353†	141.4	42.0	11.169 µg/L	11.169 ppb	14:36:17
1	S 181.975 Axial†	37.1	21.7	95.029 µg/L	95.029 ppb	14:36:17
1	Sb 206.836†	32.7	5.2	5.2344 µg/L	5.2344 ppb	14:36:17
1	Se 196.026†	25.6	9.4	14.367 µg/L	14.367 ppb	14:36:17
1	SiO2†	2267.0	981.4	211.34 µg/L	211.34 ppb	14:35:56
1	Si 251.611†	1501.7	1165.2	95.786 µg/L	95.786 ppb	14:36:17
1	Sn 189.927†	16.7	17.3	7.9752 µg/L	7.9752 ppb	14:36:17
1	Ti 334.940†	2212.8	2061.9	4.9379 µg/L	4.9379 ppb	14:35:56
1	Tl 190.801†	-5.1	19.2	27.011 µg/L	27.011 ppb	14:36:17
1	U 409.014†	558.4	603.3	54.587 µg/L	54.587 ppb	14:35:56
1	V 292.402†	425.6	463.2	5.0996 µg/L	5.0996 ppb	14:35:56
1	Zn 213.857†	892.7	403.1	10.006 µg/L	10.006 ppb	14:36:17
2	Sc RADIAL	54832.7	54832.7	100 %		14:34:54
2	Al 396.153Radial†	256.5	265.4	197.60 µg/L	197.60 ppb	14:34:54
2	Ca 317.933Radial†	389.1	208.2	196.00 µg/L	196.00 ppb	14:35:15
2	Fe 238.204 Radial†	27.3	12.7	107.86 µg/L	107.86 ppb	14:35:15
2	K 766.490 Radial†	367.8	237.7	168.93 µg/L	168.93 ppb	14:34:54
2	Mg 279.077 IEC†	46.2	34.7	322.64 µg/L	322.64 ppb	14:35:15
2	Na 589.592 Radial†	1434.3	885.7	291.57 µg/L	291.57 ppb	14:34:54
2	Sr 421.552†	510.9	468.9	4.8611 µg/L	4.8611 ppb	14:34:54
2	Sc 361.383	1945380.3	1945380.3	101.86 %		14:36:23
2	Y 371.029	1334631.9	1334631.9	101.89 %		14:36:23
2	Ag 328.068†	83.1	646.1	5.1667 µg/L	5.1667 ppb	14:36:29
2	As 188.979†	13.7	12.3	23.962 µg/L	23.962 ppb	14:36:49
2	B 249.677†	1439.6	1081.8	47.230 µg/L	47.230 ppb	14:36:29
2	Ba 233.527†	163.8	186.8	4.8734 µg/L	4.8734 ppb	14:36:49
2	Be 313.107†	4161.3	7525.8	4.9129 µg/L	4.9129 ppb	14:36:29
2	Cd 226.502†	40.3	181.7	5.0056 µg/L	5.0056 ppb	14:36:49
2	Co 228.616†	95.9	103.0	5.0691 µg/L	5.0691 ppb	14:36:49
2	Cr 267.716†	184.6	233.6	5.1411 µg/L	5.1411 ppb	14:36:49
2	Cu 324.752†	3976.5	1417.8	9.9186 µg/L	9.9186 ppb	14:36:29
2	Mn 257.610†	2754.8	2948.6	10.212 µg/L	10.212 ppb	14:36:29
2	Mo 202.031†	93.7	99.6	10.631 µg/L	10.631 ppb	14:36:49
2	Ni 231.604†	392.3	82.9	4.5279 µg/L	4.5279 ppb	14:36:49
2	P 214.914†	107.2	77.6	165.67 µg/L	165.67 ppb	14:36:49
2	Pb 220.353†	143.7	43.9	11.669 µg/L	11.669 ppb	14:36:49

2	S 181.975 Axial†	37.9	22.4	98.282 µg/L	98.282 ppb	14:36:49
2	Sb 206.836†	37.0	9.4	9.3125 µg/L	9.3125 ppb	14:36:49
2	Se 196.026†	40.5	23.9	36.431 µg/L	36.431 ppb	14:36:49
2	SiO2†	2237.3	946.4	203.81 µg/L	203.81 ppb	14:36:29
2	Si 251.611†	1509.6	1169.2	96.111 µg/L	96.111 ppb	14:36:49
2	Sn 189.927†	28.9	29.3	13.482 µg/L	13.482 ppb	14:36:49
2	Ti 334.940†	2191.1	2034.9	4.8725 µg/L	4.8725 ppb	14:36:29
2	Tl 190.801†	-12.7	11.8	16.671 µg/L	16.671 ppb	14:36:49
2	U 409.014†	565.8	609.0	55.113 µg/L	55.113 ppb	14:36:29
2	V 292.402†	429.8	466.2	5.1319 µg/L	5.1319 ppb	14:36:29
2	Zn 213.857†	888.5	396.7	9.8472 µg/L	9.8472 ppb	14:36:49
3	Sc RADIAL	54719.3	54719.3	100 %		14:35:20
3	Al 396.153Radial†	252.3	261.8	194.95 µg/L	194.95 ppb	14:35:20
3	Ca 317.933Radial†	392.4	212.2	199.82 µg/L	199.82 ppb	14:35:41
3	Fe 238.204 Radial†	27.7	13.1	111.51 µg/L	111.51 ppb	14:35:41
3	K 766.490 Radial†	437.0	307.5	218.53 µg/L	218.53 ppb	14:35:20
3	Mg 279.077 IEC†	40.7	29.3	272.95 µg/L	272.95 ppb	14:35:41
3	Na 589.592 Radial†	1460.8	915.0	301.22 µg/L	301.22 ppb	14:35:20
3	Sr 421.552†	523.6	482.7	5.0036 µg/L	5.0036 ppb	14:35:20
3	Sc 361.383	1939953.9	1939953.9	101.58 %		14:36:55
3	Y 371.029	1330294.0	1330294.0	101.56 %		14:36:55
3	Ag 328.068†	50.3	614.0	4.9107 µg/L	4.9107 ppb	14:37:01
3	As 188.979†	19.6	18.1	35.385 µg/L	35.385 ppb	14:37:21
3	B 249.677†	1372.3	1019.5	44.505 µg/L	44.505 ppb	14:37:01
3	Ba 233.527†	145.4	169.2	4.4133 µg/L	4.4133 ppb	14:37:21
3	Be 313.107†	3478.0	6864.4	4.4811 µg/L	4.4811 ppb	14:37:01
3	Cd 226.502†	11.9	153.8	4.2359 µg/L	4.2359 ppb	14:37:21
3	Co 228.616†	75.0	82.7	4.0666 µg/L	4.0666 ppb	14:37:21
3	Cr 267.716†	166.3	216.1	4.7559 µg/L	4.7559 ppb	14:37:21
3	Cu 324.752†	3902.1	1355.5	9.4837 µg/L	9.4837 ppb	14:37:01
3	Mn 257.610†	2548.1	2752.7	9.5360 µg/L	9.5360 ppb	14:37:01
3	Mo 202.031†	79.0	85.3	9.1080 µg/L	9.1080 ppb	14:37:21
3	Ni 231.604†	393.4	85.1	4.6522 µg/L	4.6522 ppb	14:37:21
3	P 214.914†	100.3	71.1	151.77 µg/L	151.77 ppb	14:37:21
3	Pb 220.353†	126.2	27.0	7.1738 µg/L	7.1738 ppb	14:37:21
3	S 181.975 Axial†	34.7	19.3	84.720 µg/L	84.720 ppb	14:37:21
3	Sb 206.836†	29.4	2.0	2.0741 µg/L	2.0741 ppb	14:37:21
3	Se 196.026†	39.6	23.1	35.285 µg/L	35.285 ppb	14:37:21
3	SiO2†	2171.3	887.6	191.15 µg/L	191.15 ppb	14:37:01
3	Si 251.611†	1361.3	1027.3	84.447 µg/L	84.447 ppb	14:37:21
3	Sn 189.927†	21.9	22.4	10.338 µg/L	10.338 ppb	14:37:21
3	Ti 334.940†	2058.9	1910.8	4.5779 µg/L	4.5779 ppb	14:37:01
3	Tl 190.801†	-4.2	20.2	28.271 µg/L	28.271 ppb	14:37:21
3	U 409.014†	515.1	560.7	50.740 µg/L	50.740 ppb	14:37:01
3	V 292.402†	407.9	445.8	4.8980 µg/L	4.8980 ppb	14:37:01
3	Zn 213.857†	822.6	334.3	8.2901 µg/L	8.2901 ppb	14:37:21

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1941894.9	101.68 %	0.158			0.16%
Sc RADIAL	54766.5	100 %	0.1			0.11%
Y 371.029	1332142.5	101.70 %	0.171			0.17%
Ag 328.068†	629.8	5.0369 µg/L	0.12806	5.0369 ppb	0.12806	2.54%
QC value within limits for Ag 328.068 Recovery = 100.74%						
Al 396.153Radial†	269.9	200.94 µg/L	8.187	200.94 ppb	8.187	4.07%
QC value within limits for Al 396.153Radial Recovery = 100.47%						
As 188.979†	14.7	28.634 µg/L	5.9881	28.634 ppb	5.9881	20.91%
QC value within limits for As 188.979 Recovery = 95.45%						
B 249.677†	1076.2	46.976 µg/L	2.3545	46.976 ppb	2.3545	5.01%
QC value within limits for B 249.677 Recovery = 93.95%						
Ba 233.527†	182.1	4.7510 µg/L	0.29615	4.7510 ppb	0.29615	6.23%
QC value within limits for Ba 233.527 Recovery = 95.02%						
Be 313.107†	7296.6	4.7633 µg/L	0.24448	4.7633 ppb	0.24448	5.13%
QC value within limits for Be 313.107 Recovery = 95.27%						
Ca 317.933Radial†	212.4	199.94 µg/L	4.009	199.94 ppb	4.009	2.00%
QC value within limits for Ca 317.933Radial Recovery = 99.97%						
Cd 226.502†	173.4	4.7751 µg/L	0.46856	4.7751 ppb	0.46856	9.81%
QC value within limits for Cd 226.502 Recovery = 95.50%						
Co 228.616†	94.6	4.6523 µg/L	0.52218	4.6523 ppb	0.52218	11.22%

Cr	267.716†	226.9	4.9931 µg/L	0.20751	4.9931 ppb	0.20751	4.16%
QC value within limits for Cr 267.716 Recovery = 99.86%							
Cu	324.752†	1409.7	9.8638 µg/L	0.35593	9.8638 ppb	0.35593	3.61%
QC value within limits for Cu 324.752 Recovery = 98.64%							
Fe	238.204 Radial†	14.0	118.87 µg/L	16.021	118.87 ppb	16.021	13.48%
QC value within limits for Fe 238.204 Radial Recovery = 118.87%							
K	766.490 Radial†	259.7	184.62 µg/L	29.396	184.62 ppb	29.396	15.92%
QC value within limits for K 766.490 Radial Recovery = 123.08%							
Mg	279.077 IEC†	32.7	304.34 µg/L	27.307	304.34 ppb	27.307	8.97%
QC value within limits for Mg 279.077 IEC Recovery = 101.45%							
Mn	257.610†	2883.3	9.9880 µg/L	0.39151	9.9880 ppb	0.39151	3.92%
QC value within limits for Mn 257.610 Recovery = 99.88%							
Mo	202.031†	93.6	9.9904 µg/L	0.78979	9.9904 ppb	0.78979	7.91%
QC value within limits for Mo 202.031 Recovery = 99.90%							
Na	589.592 Radial†	892.8	293.90 µg/L	6.477	293.90 ppb	6.477	2.20%
QC value within limits for Na 589.592 Radial Recovery = 97.97%							
Ni	231.604†	83.5	4.5606 µg/L	0.08032	4.5606 ppb	0.08032	1.76%
QC value within limits for Ni 231.604 Recovery = 91.21%							
P	214.914†	76.6	163.52 µg/L	10.837	163.52 ppb	10.837	6.63%
QC value within limits for P 214.914 Recovery = 109.01%							
Pb	220.353†	37.6	10.004 µg/L	2.4639	10.004 ppb	2.4639	24.63%
QC value within limits for Pb 220.353 Recovery = 100.04%							
S	181.975 Axial†	21.2	92.677 µg/L	7.0801	92.677 ppb	7.0801	7.64%
QC value within limits for S 181.975 Axial Recovery = 92.68%							
Sb	206.836†	5.5	5.5403 µg/L	3.62890	5.5403 ppb	3.62890	65.50%
QC value less than the lower limit for Sb 206.836 Recovery = 55.40%							
Se	196.026†	18.8	28.694 µg/L	12.4212	28.694 ppb	12.4212	43.29%
QC value within limits for Se 196.026 Recovery = 95.65%							
SiO2†		938.5	202.10 µg/L	10.205	202.10 ppb	10.205	5.05%
QC value within limits for SiO2 Recovery = 94.88%							
Si	251.611†	1120.6	92.115 µg/L	6.6423	92.115 ppb	6.6423	7.21%
QC value within limits for Si 251.611 Recovery = 92.11%							
Sn	189.927†	23.0	10.598 µg/L	2.7624	10.598 ppb	2.7624	26.06%
QC value within limits for Sn 189.927 Recovery = 105.98%							
Sr	421.552†	465.6	4.8266 µg/L	0.19650	4.8266 ppb	0.19650	4.07%
QC value within limits for Sr 421.552 Recovery = 96.53%							
Ti	334.940†	2002.5	4.7961 µg/L	0.19174	4.7961 ppb	0.19174	4.00%
QC value within limits for Ti 334.940 Recovery = 95.92%							
Tl	190.801†	17.1	23.984 µg/L	6.3650	23.984 ppb	6.3650	26.54%
QC value within limits for Tl 190.801 Recovery = 119.92%							
U	409.014†	591.0	53.480 µg/L	2.3877	53.480 ppb	2.3877	4.46%
QC value within limits for U 409.014 Recovery = 106.96%							
V	292.402†	458.4	5.0431 µg/L	0.12672	5.0431 ppb	0.12672	2.51%
QC value within limits for V 292.402 Recovery = 100.86%							
Zn	213.857†	378.0	9.3810 µg/L	0.94809	9.3810 ppb	0.94809	10.11%
QC value within limits for Zn 213.857 Recovery = 93.81%							
QC Failed. Continue with analysis.							

Sequence No.: 9
 Sample ID: ICSA
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 103
 Date Collected: 2/11/2010 14:37:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54929.8	54929.8	101 %		14:38:12
1	Al 396.153Radial†	662864.4	658585.8	490860 µg/L	490860 ppb	14:38:07
1	Ca 317.933Radial†	501017.0	497596.3	468520 µg/L	468520 ppb	14:38:07
1	Fe 238.204 Radial†	21302.2	21149.9	179260 µg/L	179260 ppb	14:38:12
1	K 766.490 Radial†	133.6	4.3	3.0615 µg/L	3.0615 ppb	14:38:12
1	Mg 279.077 IEC†	50419.1	50081.6	465880 µg/L	465880 ppb	14:38:12
1	Na 589.592 Radial†	588.4	42.7	14.053 µg/L	14.053 ppb	14:38:12
1	Sr 421.552†	369.2	327.3	3.3927 µg/L	3.3927 ppb	14:38:12
1	Sc 361.383	1857257.4	1857257.4	97.247 %		14:38:45
1	Y 371.029	1267408.3	1267408.3	96.755 %		14:38:45
1	Ag 328.068†	-2882.1	-2399.2	-7.8752 µg/L	-7.8752 ppb	14:38:51
1	As 188.979†	-10.9	-12.4	-38.129 µg/L	-38.129 ppb	14:39:11
1	B 249.677†	826.3	518.2	-70.891 µg/L	-70.891 ppb	14:38:51
1	Ba 233.527†	265.1	298.7	7.7406 µg/L	7.7406 ppb	14:39:11
1	Be 313.107†	-4111.4	-787.4	-0.5240 µg/L	-0.5240 ppb	14:38:51
1	Cd 226.502†	352.3	504.4	-6.3482 µg/L	-6.3482 ppb	14:39:11
1	Co 228.616†	33.3	43.1	2.0584 µg/L	2.0584 ppb	14:39:11
1	Cr 267.716†	-59.0	-8.3	-0.1945 µg/L	-0.1945 ppb	14:39:11
1	Cu 324.752†	-1400.3	-3926.0	-2.5072 µg/L	-2.5072 ppb	14:38:51
1	Mn 257.610†	37.6	282.8	6.1777 µg/L	6.1777 ppb	14:38:51
1	Mo 202.031†	-107.0	-102.5	-4.1257 µg/L	-4.1257 ppb	14:39:11
1	Ni 231.604†	157.1	-140.7	-5.3633 µg/L	-5.3633 ppb	14:39:11
1	P 214.914†	101.4	76.6	162.80 µg/L	162.80 ppb	14:39:11
1	Pb 220.353†	54.2	-41.5	9.1341 µg/L	9.1341 ppb	14:39:11
1	S 181.975 Axial†	32.3	18.4	80.756 µg/L	80.756 ppb	14:39:11
1	Sb 206.836†	58.1	32.8	-8.6501 µg/L	-8.6501 ppb	14:39:11
1	Se 196.026†	34.1	19.3	-25.969 µg/L	-25.969 ppb	14:39:11
1	SiO2†	1033.7	-187.0	-40.276 µg/L	-40.276 ppb	14:39:11
1	Si 251.611†	428.1	127.4	10.470 µg/L	10.470 ppb	14:39:11
1	Sn 189.927†	-61.0	-61.9	5.0665 µg/L	5.0665 ppb	14:39:11
1	Ti 334.940†	10534.2	10716.3	-3.5463 µg/L	-3.5463 ppb	14:38:51
1	Tl 190.801†	-30.9	-7.5	8.6675 µg/L	8.6675 ppb	14:39:11
1	U 409.014†	-29.2	23.6	-51.357 µg/L	-51.357 ppb	14:38:51
1	V 292.402†	-1857.1	-1865.5	1.1351 µg/L	1.1351 ppb	14:38:51
1	Zn 213.857†	1452.2	1017.8	-9.4487 µg/L	-9.4487 ppb	14:39:11
2	Sc RADIAL	55009.9	55009.9	101 %		14:38:23
2	Al 396.153Radial†	661057.1	655833.6	488810 µg/L	488810 ppb	14:38:18
2	Ca 317.933Radial†	498837.3	494708.8	465800 µg/L	465800 ppb	14:38:18
2	Fe 238.204 Radial†	21470.3	21285.8	180410 µg/L	180410 ppb	14:38:23
2	K 766.490 Radial†	106.0	-23.2	-16.506 µg/L	-16.506 ppb	14:38:23
2	Mg 279.077 IEC†	50738.3	50325.3	468150 µg/L	468150 ppb	14:38:23
2	Na 589.592 Radial†	648.0	101.0	33.250 µg/L	33.250 ppb	14:38:23
2	Sr 421.552†	361.1	318.7	3.3032 µg/L	3.3032 ppb	14:38:23
2	Sc 361.383	1846098.6	1846098.6	96.662 %		14:39:17
2	Y 371.029	1260367.6	1260367.6	96.217 %		14:39:17
2	Ag 328.068†	-2932.2	-2468.9	-8.3594 µg/L	-8.3594 ppb	14:39:23
2	As 188.979†	-14.6	-16.3	-45.537 µg/L	-45.537 ppb	14:39:43
2	B 249.677†	858.5	556.6	-69.813 µg/L	-69.813 ppb	14:39:23
2	Ba 233.527†	262.3	297.4	7.7059 µg/L	7.7059 ppb	14:39:43
2	Be 313.107†	-4105.1	-806.4	-0.5367 µg/L	-0.5367 ppb	14:39:23
2	Cd 226.502†	337.6	491.4	-6.8376 µg/L	-6.8376 ppb	14:39:43
2	Co 228.616†	17.7	27.1	1.2707 µg/L	1.2707 ppb	14:39:43
2	Cr 267.716†	-53.0	-2.4	-0.0661 µg/L	-0.0661 ppb	14:39:43
2	Cu 324.752†	-1461.5	-3998.0	-2.8500 µg/L	-2.8500 ppb	14:39:23
2	Mn 257.610†	43.7	289.4	6.2629 µg/L	6.2629 ppb	14:39:23
2	Mo 202.031†	-104.0	-100.0	-3.8203 µg/L	-3.8203 ppb	14:39:43
2	Ni 231.604†	142.4	-154.9	-6.1246 µg/L	-6.1246 ppb	14:39:43
2	P 214.914†	112.7	89.0	187.84 µg/L	187.84 ppb	14:39:43
2	Pb 220.353†	58.0	-37.2	10.116 µg/L	10.116 ppb	14:39:43

2	S 181.975 Axial†	36.2	22.6	98.941 µg/L	98.941 ppb	14:39:43
2	Sb 206.836†	53.9	28.8	-12.353 µg/L	-12.353 ppb	14:39:43
2	Se 196.026†	26.7	11.8	-35.549 µg/L	-35.549 ppb	14:39:43
2	SiO2†	1052.3	-161.4	-34.761 µg/L	-34.761 ppb	14:39:43
2	Si 251.611†	458.0	160.9	13.230 µg/L	13.230 ppb	14:39:43
2	Sn 189.927†	-63.6	-65.0	3.8069 µg/L	3.8069 ppb	14:39:43
2	Ti 334.940†	10748.6	11003.6	-3.0781 µg/L	-3.0781 ppb	14:39:23
2	Tl 190.801†	-35.3	-12.3	2.2973 µg/L	2.2973 ppb	14:39:43
2	U 409.014†	-80.2	-29.4	-56.150 µg/L	-56.150 ppb	14:39:23
2	V 292.402†	-1894.8	-1916.0	0.7299 µg/L	0.7299 ppb	14:39:23
2	Zn 213.857†	1462.8	1037.8	-9.1272 µg/L	-9.1272 ppb	14:39:43
3	Sc RADIAL	54631.5	54631.5	100 %		14:38:35
3	Al 396.153Radial†	667869.4	667182.1	497270 µg/L	497270 ppb	14:38:29
3	Ca 317.933Radial†	503599.4	502894.4	473510 µg/L	473510 ppb	14:38:29
3	Fe 238.204 Radial†	21467.0	21430.1	181630 µg/L	181630 ppb	14:38:35
3	K 766.490 Radial†	96.7	-31.8	-22.617 µg/L	-22.617 ppb	14:38:35
3	Mg 279.077 IEC†	50895.3	50830.8	472850 µg/L	472850 ppb	14:38:35
3	Na 589.592 Radial†	627.0	84.4	27.800 µg/L	27.800 ppb	14:38:35
3	Sr 421.552†	372.9	333.0	3.4514 µg/L	3.4514 ppb	14:38:35
3	Sc 361.383	1825493.4	1825493.4	95.584 %		14:39:49
3	Y 371.029	1244094.0	1244094.0	94.975 %		14:39:49
3	Ag 328.068†	-2843.3	-2410.2	-7.8207 µg/L	-7.8207 ppb	14:39:55
3	As 188.979†	-21.3	-23.4	-59.893 µg/L	-59.893 ppb	14:40:16
3	B 249.677†	774.3	478.6	-73.863 µg/L	-73.863 ppb	14:39:55
3	Ba 233.527†	257.2	295.1	7.6465 µg/L	7.6465 ppb	14:40:16
3	Be 313.107†	-4046.5	-793.0	-0.5281 µg/L	-0.5281 ppb	14:39:55
3	Cd 226.502†	377.7	537.3	-5.7094 µg/L	-5.7094 ppb	14:40:16
3	Co 228.616†	37.6	48.2	2.3043 µg/L	2.3043 ppb	14:40:16
3	Cr 267.716†	-81.4	-32.7	-0.7334 µg/L	-0.7334 ppb	14:40:16
3	Cu 324.752†	-1475.8	-4030.1	-2.9042 µg/L	-2.9042 ppb	14:39:55
3	Mn 257.610†	50.9	297.4	6.2652 µg/L	6.2652 ppb	14:39:55
3	Mo 202.031†	-108.7	-106.2	-4.4310 µg/L	-4.4310 ppb	14:40:16
3	Ni 231.604†	152.6	-142.5	-5.4329 µg/L	-5.4329 ppb	14:40:16
3	P 214.914†	105.4	82.6	175.78 µg/L	175.78 ppb	14:40:16
3	Pb 220.353†	72.0	-21.8	14.642 µg/L	14.642 ppb	14:40:16
3	S 181.975 Axial†	29.0	15.5	67.783 µg/L	67.783 ppb	14:40:16
3	Sb 206.836†	45.6	20.7	-20.949 µg/L	-20.949 ppb	14:40:16
3	Se 196.026†	33.1	18.8	-27.759 µg/L	-27.759 ppb	14:40:16
3	SiO2†	1033.4	-168.9	-36.378 µg/L	-36.378 ppb	14:40:16
3	Si 251.611†	441.5	149.0	12.252 µg/L	12.252 ppb	14:40:16
3	Sn 189.927†	-53.7	-55.3	8.6518 µg/L	8.6518 ppb	14:40:16
3	Ti 334.940†	10848.2	11233.3	-2.7738 µg/L	-2.7738 ppb	14:39:55
3	Tl 190.801†	-26.7	-3.6	14.470 µg/L	14.470 ppb	14:40:16
3	U 409.014†	-83.2	-33.5	-57.162 µg/L	-57.162 ppb	14:39:55
3	V 292.402†	-1928.3	-1973.2	0.2572 µg/L	0.2572 ppb	14:39:55
3	Zn 213.857†	1454.4	1046.1	-9.2482 µg/L	-9.2482 ppb	14:40:16

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1842949.8	96.498 %	0.8438			0.87%
Sc RADIAL	54857.1	101 %	0.4			0.36%
Y 371.029	1257290.0	95.982 %	0.9129			0.95%
Ag 328.068†	-2426.1	-8.0184 µg/L	0.29656	-8.0184 ppb	0.29656	3.70%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	660533.8	492320 µg/L	4412.2	492320 ppb	4412.2	0.90%
QC value within limits for Al 396.153Radial Recovery = 98.46%						
As 188.979†	-17.4	-47.853 µg/L	11.0657	-47.853 ppb	11.0657	23.12%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	517.8	-71.522 µg/L	2.0977	-71.522 ppb	2.0977	2.93%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	297.0	7.6977 µg/L	0.04758	7.6977 ppb	0.04758	0.62%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-795.6	-0.5296 µg/L	0.00649	-0.5296 ppb	0.00649	1.23%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	498399.8	469270 µg/L	3908.9	469270 ppb	3908.9	0.83%
QC value within limits for Ca 317.933Radial Recovery = 93.85%						
Cd 226.502†	511.0	-6.2984 µg/L	0.56575	-6.2984 ppb	0.56575	8.98%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	39.5	1.8778 µg/L	0.53996	1.8778 ppb	0.53996	28.75%

QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-14.5	-0.3313 µg/L	0.35406	-0.3313 ppb	0.35406 106.86%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-3984.7	-2.7538 µg/L	0.21524	-2.7538 ppb	0.21524 7.82%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	21288.6	180430 µg/L	1187.5	180430 ppb	1187.5 0.66%
QC value within limits for Fe 238.204 Radial Recovery = 90.22%					
K 766.490 Radial†	-16.9	-12.020 µg/L	13.4139	-12.020 ppb	13.4139 111.59%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	50412.6	468960 µg/L	3555.4	468960 ppb	3555.4 0.76%
QC value within limits for Mg 279.077 IEC Recovery = 93.79%					
Mn 257.610†	289.9	6.2353 µg/L	0.04986	6.2353 ppb	0.04986 0.80%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	-102.9	-4.1257 µg/L	0.30534	-4.1257 ppb	0.30534 7.40%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	76.0	25.034 µg/L	9.8929	25.034 ppb	9.8929 39.52%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-146.0	-5.6403 µg/L	0.42090	-5.6403 ppb	0.42090 7.46%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	82.7	175.47 µg/L	12.518	175.47 ppb	12.518 7.13%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-33.5	11.297 µg/L	2.9376	11.297 ppb	2.9376 26.00%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	18.8	82.493 µg/L	15.6511	82.493 ppb	15.6511 18.97%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	27.4	-13.984 µg/L	6.3094	-13.984 ppb	6.3094 45.12%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	16.6	-29.759 µg/L	5.0935	-29.759 ppb	5.0935 17.12%
QC value within limits for Se 196.026 Recovery = Not calculated					
SiO2†	-172.5	-37.139 µg/L	2.8350	-37.139 ppb	2.8350 7.63%
QC value within limits for SiO2 Recovery = Not calculated					
Si 251.611†	145.8	11.984 µg/L	1.3994	11.984 ppb	1.3994 11.68%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-60.7	5.8417 µg/L	2.51374	5.8417 ppb	2.51374 43.03%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	326.3	3.3825 µg/L	0.07464	3.3825 ppb	0.07464 2.21%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	10984.4	-3.1328 µg/L	0.38914	-3.1328 ppb	0.38914 12.42%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	-7.8	8.4783 µg/L	6.08871	8.4783 ppb	6.08871 71.81%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-13.1	-54.890 µg/L	3.1009	-54.890 ppb	3.1009 5.65%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-1918.2	0.7074 µg/L	0.43934	0.7074 ppb	0.43934 62.11%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	1033.9	-9.2747 µg/L	0.16235	-9.2747 ppb	0.16235 1.75%
QC value within limits for Zn 213.857 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 104
 Date Collected: 2/11/2010 14:40:25
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54743.7	54743.7	100 %		14:41:04
1	Al 396.153Radial†	662601.8	660562.7	492330 µg/L	492330 ppb	14:40:59
1	Ca 317.933Radial†	498259.5	496539.4	467520 µg/L	467520 ppb	14:40:59
1	Fe 238.204 Radial†	21341.6	21261.1	180210 µg/L	180210 ppb	14:41:04
1	K 766.490 Radial†	6958.5	6808.5	4839.5 µg/L	4839.5 ppb	14:41:04
1	Mg 279.077 IEC†	50755.9	50587.7	470600 µg/L	470600 ppb	14:41:04
1	Na 589.592 Radial†	15455.3	14865.6	4893.8 µg/L	4893.8 ppb	14:41:04
1	Sr 421.552†	46875.8	46691.2	484.01 µg/L	484.01 ppb	14:41:04
1	Sc 361.383	1846856.3	1846856.3	96.702 %		14:41:38
1	Y 371.029	1258300.6	1258300.6	96.059 %		14:41:38
1	Ag 328.068†	27332.2	28828.8	243.20 µg/L	243.20 ppb	14:41:44
1	As 188.979†	237.2	244.2	462.48 µg/L	462.48 ppb	14:42:04
1	B 249.677†	11716.6	11784.7	421.73 µg/L	421.73 ppb	14:41:44
1	Ba 233.527†	17712.8	18342.8	478.47 µg/L	478.47 ppb	14:41:44
1	Be 313.107†	339671.1	354695.4	231.45 µg/L	231.45 ppb	14:41:38
1	Cd 226.502†	15868.9	16552.3	436.70 µg/L	436.70 ppb	14:41:44
1	Co 228.616†	8171.6	8459.1	415.69 µg/L	415.69 ppb	14:42:04
1	Cr 267.716†	20395.5	21143.4	465.37 µg/L	465.37 ppb	14:41:44
1	Cu 324.752†	70107.6	70012.4	514.10 µg/L	514.10 ppb	14:41:44
1	Mn 257.610†	126842.6	131412.5	460.20 µg/L	460.20 ppb	14:41:44
1	Mo 202.031†	4309.3	4463.8	483.23 µg/L	483.23 ppb	14:42:04
1	Ni 231.604†	7535.7	7490.5	411.39 µg/L	411.39 ppb	14:42:04
1	P 214.914†	1206.8	1220.3	2570.8 µg/L	2570.8 ppb	14:42:04
1	Pb 220.353†	1703.5	1664.4	464.39 µg/L	464.39 ppb	14:42:04
1	S 181.975 Axial†	587.6	592.8	2597.2 µg/L	2597.2 ppb	14:42:04
1	Sb 206.836†	550.1	541.9	495.21 µg/L	495.21 ppb	14:42:04
1	Se 196.026†	1471.2	1505.6	2238.6 µg/L	2238.6 ppb	14:42:04
1	SiO2†	47866.2	48248.6	10391 µg/L	10391 ppb	14:41:44
1	Si 251.611†	57854.9	59515.0	4892.4 µg/L	4892.4 ppb	14:41:44
1	Sn 189.927†	962.7	996.5	492.28 µg/L	492.28 ppb	14:42:04
1	Ti 334.940†	201101.7	207843.8	470.24 µg/L	470.24 ppb	14:41:44
1	Tl 190.801†	278.9	312.7	461.24 µg/L	461.24 ppb	14:42:04
1	U 409.014†	5055.9	5282.0	424.65 µg/L	424.65 ppb	14:41:44
1	V 292.402†	42477.1	43969.9	495.05 µg/L	495.05 ppb	14:41:44
1	Zn 213.857†	19021.9	19195.0	441.47 µg/L	441.47 ppb	14:41:44
2	Sc RADIAL	55060.7	55060.7	101 %		14:41:16
2	Al 396.153Radial†	664887.8	659025.8	491180 µg/L	491180 ppb	14:41:10
2	Ca 317.933Radial†	499367.7	494778.3	465860 µg/L	465860 ppb	14:41:10
2	Fe 238.204 Radial†	21754.5	21547.8	182640 µg/L	182640 ppb	14:41:16
2	K 766.490 Radial†	7103.8	6912.7	4913.5 µg/L	4913.5 ppb	14:41:16
2	Mg 279.077 IEC†	51410.3	50945.0	473920 µg/L	473920 ppb	14:41:16
2	Na 589.592 Radial†	15635.7	14955.7	4923.5 µg/L	4923.5 ppb	14:41:16
2	Sr 421.552†	47418.4	46960.1	486.80 µg/L	486.80 ppb	14:41:16
2	Sc 361.383	1837075.1	1837075.1	96.190 %		14:42:10
2	Y 371.029	1253427.6	1253427.6	95.687 %		14:42:10
2	Ag 328.068†	27052.1	28688.2	242.21 µg/L	242.21 ppb	14:42:16
2	As 188.979†	226.7	234.5	443.77 µg/L	443.77 ppb	14:42:37
2	B 249.677†	11617.2	11745.8	418.76 µg/L	418.76 ppb	14:42:16
2	Ba 233.527†	17456.8	18174.2	474.07 µg/L	474.07 ppb	14:42:16
2	Be 313.107†	337736.8	354554.8	231.36 µg/L	231.36 ppb	14:42:10
2	Cd 226.502†	15582.5	16341.8	430.62 µg/L	430.62 ppb	14:42:16
2	Co 228.616†	8172.6	8505.1	417.96 µg/L	417.96 ppb	14:42:37
2	Cr 267.716†	20089.6	20937.7	460.84 µg/L	460.84 ppb	14:42:16
2	Cu 324.752†	69141.0	69393.5	510.12 µg/L	510.12 ppb	14:42:16
2	Mn 257.610†	124994.1	130189.1	456.15 µg/L	456.15 ppb	14:42:16
2	Mo 202.031†	4295.8	4473.5	484.36 µg/L	484.36 ppb	14:42:37
2	Ni 231.604†	7541.0	7537.5	413.99 µg/L	413.99 ppb	14:42:37
2	P 214.914†	1237.1	1258.5	2651.1 µg/L	2651.1 ppb	14:42:37
2	Pb 220.353†	1701.2	1671.4	466.10 µg/L	466.10 ppb	14:42:37

2	S 181.975 Axial†	598.3	607.2	2660.4 µg/L	2660.4 ppb	14:42:37
2	Sb 206.836†	550.2	545.1	498.59 µg/L	498.59 ppb	14:42:37
2	Se 196.026†	1466.3	1508.6	2247.3 µg/L	2247.3 ppb	14:42:37
2	SiO2†	47231.2	47852.0	10305 µg/L	10305 ppb	14:42:16
2	Si 251.611†	57079.6	59027.6	4852.4 µg/L	4852.4 ppb	14:42:16
2	Sn 189.927†	972.7	1012.1	499.64 µg/L	499.64 ppb	14:42:37
2	Ti 334.940†	198343.7	206083.8	465.72 µg/L	465.72 ppb	14:42:16
2	Tl 190.801†	259.5	294.1	435.56 µg/L	435.56 ppb	14:42:37
2	U 409.014†	4974.7	5225.3	419.28 µg/L	419.28 ppb	14:42:16
2	V 292.402†	41844.6	43546.2	490.82 µg/L	490.82 ppb	14:42:16
2	Zn 213.857†	18719.4	18985.3	435.92 µg/L	435.92 ppb	14:42:16
3	Sc RADIAL	54836.5	54836.5	100 %		14:41:27
3	Al 396.153Radial†	666707.4	663530.3	494540 µg/L	494540 ppb	14:41:21
3	Ca 317.933Radial†	500342.9	497771.9	468680 µg/L	468680 ppb	14:41:21
3	Fe 238.204 Radial†	21386.7	21269.9	180290 µg/L	180290 ppb	14:41:27
3	K 766.490 Radial†	6994.6	6832.8	4856.7 µg/L	4856.7 ppb	14:41:27
3	Mg 279.077 IEC†	50805.9	50551.7	470260 µg/L	470260 ppb	14:41:27
3	Na 589.592 Radial†	15470.0	14854.1	4890.0 µg/L	4890.0 ppb	14:41:27
3	Sr 421.552†	46844.7	46581.2	482.87 µg/L	482.87 ppb	14:41:27
3	Sc 361.383	1833431.9	1833431.9	95.999 %		14:42:43
3	Y 371.029	1252123.0	1252123.0	95.588 %		14:42:43
3	Ag 328.068†	27588.4	29302.7	247.00 µg/L	247.00 ppb	14:42:49
3	As 188.979†	241.1	250.0	473.71 µg/L	473.71 ppb	14:43:09
3	B 249.677†	11855.2	12017.8	431.89 µg/L	431.89 ppb	14:42:49
3	Ba 233.527†	17813.9	18582.3	484.71 µg/L	484.71 ppb	14:42:49
3	Be 313.107†	338767.0	356325.5	232.51 µg/L	232.51 ppb	14:42:43
3	Cd 226.502†	15965.4	16772.9	442.77 µg/L	442.77 ppb	14:42:49
3	Co 228.616†	8119.3	8466.6	416.04 µg/L	416.04 ppb	14:43:09
3	Cr 267.716†	20600.1	21511.0	473.46 µg/L	473.46 ppb	14:42:49
3	Cu 324.752†	70720.9	71182.1	522.28 µg/L	522.28 ppb	14:42:49
3	Mn 257.610†	127685.2	133250.6	466.59 µg/L	466.59 ppb	14:42:49
3	Mo 202.031†	4277.4	4463.2	483.17 µg/L	483.17 ppb	14:43:09
3	Ni 231.604†	7478.0	7487.4	411.22 µg/L	411.22 ppb	14:43:09
3	P 214.914†	1197.0	1219.3	2568.4 µg/L	2568.4 ppb	14:43:09
3	Pb 220.353†	1703.7	1677.5	467.96 µg/L	467.96 ppb	14:43:09
3	S 181.975 Axial†	585.7	595.2	2608.0 µg/L	2608.0 ppb	14:43:09
3	Sb 206.836†	542.2	537.9	491.06 µg/L	491.06 ppb	14:43:09
3	Se 196.026†	1453.1	1497.9	2227.0 µg/L	2227.0 ppb	14:43:09
3	SiO2†	48266.6	49028.1	10558 µg/L	10558 ppb	14:42:49
3	Si 251.611†	58341.2	60459.7	4970.1 µg/L	4970.1 ppb	14:42:49
3	Sn 189.927†	964.4	1005.4	496.36 µg/L	496.36 ppb	14:43:09
3	Ti 334.940†	202865.6	211203.9	478.37 µg/L	478.37 ppb	14:42:49
3	Tl 190.801†	278.4	314.2	463.55 µg/L	463.55 ppb	14:43:09
3	U 409.014†	5159.4	5428.1	437.79 µg/L	437.79 ppb	14:42:49
3	V 292.402†	42697.4	44521.1	500.97 µg/L	500.97 ppb	14:42:49
3	Zn 213.857†	19157.2	19480.1	448.59 µg/L	448.59 ppb	14:42:49

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1839121.1	96.297 %	0.3635			0.38%
Sc RADIAL	54880.3	101 %	0.3			0.30%
Y 371.029	1254617.1	95.778 %	0.2486			0.26%
Ag 328.068†	28939.9	244.14 µg/L	2.532	244.14 ppb	2.532	1.04%
QC value within limits for Ag 328.068 Recovery = 97.66%						
Al 396.153Radial†	661039.6	492680 µg/L	1706.7	492680 ppb	1706.7	0.35%
QC value within limits for Al 396.153Radial Recovery = 98.54%						
As 188.979†	242.9	459.99 µg/L	15.123	459.99 ppb	15.123	3.29%
QC value within limits for As 188.979 Recovery = 92.00%						
B 249.677†	11849.4	424.12 µg/L	6.887	424.12 ppb	6.887	1.62%
QC value within limits for B 249.677 Recovery = 84.82%						
Ba 233.527†	18366.5	479.08 µg/L	5.348	479.08 ppb	5.348	1.12%
QC value within limits for Ba 233.527 Recovery = 95.82%						
Be 313.107†	355191.9	231.77 µg/L	0.640	231.77 ppb	0.640	0.28%
QC value within limits for Be 313.107 Recovery = 92.71%						
Ca 317.933Radial†	496363.2	467360 µg/L	1416.6	467360 ppb	1416.6	0.30%
QC value within limits for Ca 317.933Radial Recovery = 93.47%						
Cd 226.502†	16555.7	436.70 µg/L	6.077	436.70 ppb	6.077	1.39%
QC value within limits for Cd 226.502 Recovery = 87.34%						
Co 228.616†	8476.9	416.56 µg/L	1.225	416.56 ppb	1.225	0.29%

Cr	267.716†	21197.4	466.55 µg/L	6.392	466.55 ppb	6.392	1.37%
Cu	324.752†	70196.0	515.50 µg/L	6.202	515.50 ppb	6.202	1.20%
Fe	238.204 Radial†	21359.6	181050 µg/L	1382.0	181050 ppb	1382.0	0.76%
K	766.490 Radial†	6851.3	4869.9 µg/L	38.72	4869.9 ppb	38.72	0.80%
Mg	279.077 IEC†	50694.8	471600 µg/L	2021.9	471600 ppb	2021.9	0.43%
Mn	257.610†	131617.4	460.98 µg/L	5.261	460.98 ppb	5.261	1.14%
Mo	202.031†	4466.8	483.58 µg/L	0.671	483.58 ppb	0.671	0.14%
Na	589.592 Radial†	14891.8	4902.4 µg/L	18.32	4902.4 ppb	18.32	0.37%
Ni	231.604†	7505.2	412.20 µg/L	1.552	412.20 ppb	1.552	0.38%
P	214.914†	1232.7	2596.7 µg/L	47.05	2596.7 ppb	47.05	1.81%
Pb	220.353†	1671.1	466.15 µg/L	1.785	466.15 ppb	1.785	0.38%
S	181.975 Axial†	598.4	2621.9 µg/L	33.79	2621.9 ppb	33.79	1.29%
Sb	206.836†	541.6	494.95 µg/L	3.768	494.95 ppb	3.768	0.76%
Se	196.026†	1504.0	2237.7 µg/L	10.19	2237.7 ppb	10.19	0.46%
SiO2†		48376.2	10418 µg/L	128.9	10418 ppb	128.9	1.24%
Si	251.611†	59667.4	4905.0 µg/L	59.86	4905.0 ppb	59.86	1.22%
Sn	189.927†	1004.7	496.10 µg/L	3.686	496.10 ppb	3.686	0.74%
Sr	421.552†	46744.2	484.56 µg/L	2.020	484.56 ppb	2.020	0.42%
Ti	334.940†	208377.1	471.44 µg/L	6.410	471.44 ppb	6.410	1.36%
Tl	190.801†	307.0	453.45 µg/L	15.538	453.45 ppb	15.538	3.43%
U	409.014†	5311.8	427.24 µg/L	9.525	427.24 ppb	9.525	2.23%
V	292.402†	44012.4	495.61 µg/L	5.099	495.61 ppb	5.099	1.03%
Zn	213.857†	19220.1	441.99 µg/L	6.349	441.99 ppb	6.349	1.44%

QC value within limits for Co 228.616 Recovery = 83.31%

QC value within limits for Cr 267.716 Recovery = 93.31%

QC value within limits for Cu 324.752 Recovery = 103.10%

QC value within limits for Fe 238.204 Radial Recovery = 90.52%

QC value within limits for K 766.490 Radial Recovery = 97.40%

QC value within limits for Mg 279.077 IEC Recovery = 94.32%

QC value within limits for Mn 257.610 Recovery = 92.20%

QC value within limits for Mo 202.031 Recovery = 96.72%

QC value within limits for Na 589.592 Radial Recovery = 98.05%

QC value within limits for Ni 231.604 Recovery = 82.44%

QC value within limits for P 214.914 Recovery = 103.87%

QC value within limits for Pb 220.353 Recovery = 93.23%

QC value within limits for S 181.975 Axial Recovery = 104.87%

QC value within limits for Sb 206.836 Recovery = 98.99%

QC value within limits for Se 196.026 Recovery = 89.51%

QC value within limits for SiO2 Recovery = 97.41%

QC value within limits for Si 251.611 Recovery = 98.10%

QC value within limits for Sn 189.927 Recovery = 99.22%

QC value within limits for Sr 421.552 Recovery = 96.91%

QC value within limits for Ti 334.940 Recovery = 94.29%

QC value within limits for Tl 190.801 Recovery = 90.69%

QC value within limits for U 409.014 Recovery = 85.45%

QC value within limits for V 292.402 Recovery = 99.12%

QC value within limits for Zn 213.857 Recovery = 88.40%

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: LR1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 105

Date Collected: 2/11/2010 14:43:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54698.7	54698.7	100 %		14:43:59
1	Al 396.153Radial†	649050.7	647585.6	482670 µg/L	482670 ppb	14:43:54
1	Ca 317.933Radial†	489494.3	488202.6	459670 µg/L	459670 ppb	14:43:54
1	Fe 238.204 Radial†	51606.4	51474.6	436280 µg/L	436280 ppb	14:43:59
1	K 766.490 Radial†	59.9	-68.6	-48.776 µg/L	-48.776 ppb	14:43:59
1	Mg 279.077 IEC†	49787.3	49662.9	461710 µg/L	461710 ppb	14:43:59
1	Na 589.592 Radial†	1412387.5	1408635.5	463730 µg/L	463730 ppb	14:43:54
1	Sr 421.552†	535.1	494.4	5.1247 µg/L	5.1247 ppb	14:43:59
1	Sc 361.383	1832827.1	1832827.1	95.968 %		14:44:34
1	Y 371.029	1243371.2	1243371.2	94.920 %		14:44:34
1	Ag 328.068†	-5331.8	-4991.3	-12.516 µg/L	-12.516 ppb	14:44:40
1	As 188.979†	-25.3	-27.5	-52.401 µg/L	-52.401 ppb	14:45:01
1	B 249.677†	1493.7	1225.0	-174.11 µg/L	-174.11 ppb	14:44:40
1	Ba 233.527†	574.9	625.1	16.169 µg/L	16.169 ppb	14:45:01
1	Be 313.107†	-11067.4	-8092.0	-5.2972 µg/L	-5.2972 ppb	14:44:40
1	Cd 226.502†	1038.3	1224.0	-15.542 µg/L	-15.542 ppb	14:44:40
1	Co 228.616†	189.5	206.3	10.066 µg/L	10.066 ppb	14:45:01
1	Cr 267.716†	137.7	195.9	4.2704 µg/L	4.2704 ppb	14:45:01
1	Cu 324.752†	-8795.2	-11650.9	-20.741 µg/L	-20.741 ppb	14:44:40
1	Mn 257.610†	-7006.5	-7056.8	15.101 µg/L	15.101 ppb	14:44:34
1	Mo 202.031†	-203.3	-204.2	-5.2185 µg/L	-5.2185 ppb	14:45:01
1	Ni 231.604†	92.3	-206.0	-5.6060 µg/L	-5.6060 ppb	14:45:01
1	P 214.914†	278.7	262.7	357.28 µg/L	357.28 ppb	14:45:01
1	Pb 220.353†	191.0	101.8	23.594 µg/L	23.594 ppb	14:45:01
1	S 181.975 Axial†	34.6	21.2	93.001 µg/L	93.001 ppb	14:45:01
1	Sb 206.836†	60.3	35.8	-5.1147 µg/L	-5.1147 ppb	14:45:01
1	Se 196.026†	-124.6	-145.7	431.09 µg/L	431.09 ppb	14:45:01
1	SiO2†	971.9	-237.3	-51.105 µg/L	-51.105 ppb	14:45:01
1	Si 251.611†	-251.2	-574.6	-47.235 µg/L	-47.235 ppb	14:45:01
1	Sn 189.927†	-32.5	-33.0	-9.5042 µg/L	-9.5042 ppb	14:45:01
1	Ti 334.940†	13370.7	13816.4	4.0770 µg/L	4.0770 ppb	14:44:40
1	Tl 190.801†	-49.5	-27.3	33.449 µg/L	33.449 ppb	14:45:01
1	U 409.014†	138681.8	144562.6	13000 µg/L	13000 ppb	14:44:40
1	V 292.402†	-5434.6	-5618.7	4.9101 µg/L	4.9101 ppb	14:44:40
1	Zn 213.857†	2732.6	2371.8	12.479 µg/L	12.479 ppb	14:45:01
2	Sc RADIAL	54113.0	54113.0	99.2 %		14:44:11
2	Al 396.153Radial†	645987.5	651505.9	485590 µg/L	485590 ppb	14:44:06
2	Ca 317.933Radial†	485663.6	489625.6	461010 µg/L	461010 ppb	14:44:06
2	Fe 238.204 Radial†	51235.5	51657.9	437830 µg/L	437830 ppb	14:44:11
2	K 766.490 Radial†	83.9	-43.8	-31.167 µg/L	-31.167 ppb	14:44:11
2	Mg 279.077 IEC†	49624.6	50036.5	465180 µg/L	465180 ppb	14:44:11
2	Na 589.592 Radial†	1405673.5	1417117.7	466520 µg/L	466520 ppb	14:44:06
2	Sr 421.552†	505.9	470.7	4.8794 µg/L	4.8794 ppb	14:44:11
2	Sc 361.383	1837825.9	1837825.9	96.229 %		14:45:07
2	Y 371.029	1247268.6	1247268.6	95.217 %		14:45:07
2	Ag 328.068†	-5248.4	-4889.5	-11.624 µg/L	-11.624 ppb	14:45:13
2	As 188.979†	-21.7	-23.6	-44.761 µg/L	-44.761 ppb	14:45:33
2	B 249.677†	1467.3	1193.4	-176.30 µg/L	-176.30 ppb	14:45:13
2	Ba 233.527†	558.0	605.8	15.663 µg/L	15.663 ppb	14:45:33
2	Be 313.107†	-10966.6	-7955.9	-5.2083 µg/L	-5.2083 ppb	14:45:13
2	Cd 226.502†	1019.9	1202.0	-16.327 µg/L	-16.327 ppb	14:45:13
2	Co 228.616†	178.5	194.3	9.4767 µg/L	9.4767 ppb	14:45:33
2	Cr 267.716†	83.6	139.3	3.0246 µg/L	3.0246 ppb	14:45:33
2	Cu 324.752†	-8717.3	-11545.0	-19.786 µg/L	-19.786 ppb	14:45:13
2	Mn 257.610†	-6988.4	-7018.1	15.303 µg/L	15.303 ppb	14:45:07
2	Mo 202.031†	-191.4	-191.4	-3.7840 µg/L	-3.7840 ppb	14:45:33
2	Ni 231.604†	81.9	-217.1	-6.1913 µg/L	-6.1913 ppb	14:45:33
2	P 214.914†	298.0	282.1	398.14 µg/L	398.14 ppb	14:45:33
2	Pb 220.353†	188.3	98.5	22.919 µg/L	22.919 ppb	14:45:33

2	S 181.975 Axial†	34.5	21.1	92.318 µg/L	92.318 ppb	14:45:33
2	Sb 206.836†	49.5	24.4	-16.430 µg/L	-16.430 ppb	14:45:33
2	Se 196.026†	-135.7	-156.8	414.89 µg/L	414.89 ppb	14:45:33
2	SiO2†	995.7	-215.3	-46.357 µg/L	-46.357 ppb	14:45:33
2	Si 251.611†	-242.1	-564.4	-46.400 µg/L	-46.400 ppb	14:45:33
2	Sn 189.927†	-48.8	-49.9	-17.017 µg/L	-17.017 ppb	14:45:33
2	Ti 334.940†	13350.9	13757.9	3.6830 µg/L	3.6830 ppb	14:45:13
2	Tl 190.801†	-50.6	-28.2	32.395 µg/L	32.395 ppb	14:45:33
2	U 409.014†	138028.8	143491.0	12902 µg/L	12902 ppb	14:45:13
2	V 292.402†	-5635.2	-5811.8	2.9425 µg/L	2.9425 ppb	14:45:13
2	Zn 213.857†	2709.5	2340.1	11.417 µg/L	11.417 ppb	14:45:33
3	Sc RADIAL	54398.5	54398.5	99.7 %		14:44:23
3	Al 396.153Radial†	647423.4	649527.5	484110 µg/L	484110 ppb	14:44:18
3	Ca 317.933Radial†	488211.3	489611.2	461000 µg/L	461000 ppb	14:44:18
3	Fe 238.204 Radial†	51015.9	51166.4	433670 µg/L	433670 ppb	14:44:23
3	K 766.490 Radial†	138.6	10.6	7.5591 µg/L	7.5591 ppb	14:44:23
3	Mg 279.077 IEC†	49363.7	49512.1	460310 µg/L	460310 ppb	14:44:23
3	Na 589.592 Radial†	1412371.3	1416397.4	466280 µg/L	466280 ppb	14:44:18
3	Sr 421.552†	507.2	469.3	4.8646 µg/L	4.8646 ppb	14:44:23
3	Sc 361.383	1837461.1	1837461.1	96.210 %		14:45:40
3	Y 371.029	1245635.1	1245635.1	95.093 %		14:45:40
3	Ag 328.068†	-5107.3	-4744.0	-10.729 µg/L	-10.729 ppb	14:45:45
3	As 188.979†	-16.7	-18.5	-34.960 µg/L	-34.960 ppb	14:46:06
3	B 249.677†	1484.3	1211.3	-173.35 µg/L	-173.35 ppb	14:45:45
3	Ba 233.527†	553.8	601.6	15.554 µg/L	15.554 ppb	14:46:06
3	Be 313.107†	-10842.7	-7829.4	-5.1258 µg/L	-5.1258 ppb	14:45:45
3	Cd 226.502†	1000.6	1182.1	-16.404 µg/L	-16.404 ppb	14:45:45
3	Co 228.616†	166.8	182.2	8.8812 µg/L	8.8812 ppb	14:46:06
3	Cr 267.716†	114.6	171.5	3.7340 µg/L	3.7340 ppb	14:46:06
3	Cu 324.752†	-8778.8	-11610.6	-20.823 µg/L	-20.823 ppb	14:45:45
3	Mn 257.610†	-6849.7	-6875.4	15.438 µg/L	15.438 ppb	14:45:40
3	Mo 202.031†	-180.2	-179.7	-2.7014 µg/L	-2.7014 ppb	14:46:06
3	Ni 231.604†	78.6	-220.5	-6.4261 µg/L	-6.4261 ppb	14:46:06
3	P 214.914†	292.5	276.4	389.07 µg/L	389.07 ppb	14:46:06
3	Pb 220.353†	166.9	76.3	17.067 µg/L	17.067 ppb	14:46:06
3	S 181.975 Axial†	27.8	14.1	61.607 µg/L	61.607 ppb	14:46:06
3	Sb 206.836†	44.0	18.8	-21.940 µg/L	-21.940 ppb	14:46:06
3	Se 196.026†	-130.2	-151.2	416.38 µg/L	416.38 ppb	14:46:06
3	SiO2†	1012.2	-197.9	-42.626 µg/L	-42.626 ppb	14:46:06
3	Si 251.611†	-265.6	-588.9	-48.410 µg/L	-48.410 ppb	14:46:06
3	Sn 189.927†	-42.0	-42.7	-13.864 µg/L	-13.864 ppb	14:46:06
3	Ti 334.940†	13514.7	13930.9	4.4846 µg/L	4.4846 ppb	14:45:45
3	Tl 190.801†	-39.7	-17.0	47.407 µg/L	47.407 ppb	14:46:06
3	U 409.014†	138148.6	143644.0	12917 µg/L	12917 ppb	14:45:45
3	V 292.402†	-5603.1	-5779.6	2.8210 µg/L	2.8210 ppb	14:45:45
3	Zn 213.857†	2726.7	2358.5	12.353 µg/L	12.353 ppb	14:46:06

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1836038.0	96.136 %	0.1459			0.15%
Sc RADIAL	54403.4	99.7 %	0.54			0.54%
Y 371.029	1245425.0	95.077 %	0.1494			0.16%
Ag 328.068†	-4875.0	-11.623 µg/L	0.8935	-11.623 ppb	0.8935	7.69%
Al 396.153Radial†	649539.7	484120 µg/L	1461.0	484120 ppb	1461.0	0.30%
QC value within limits for Al 396.153Radial Recovery = 96.82%						
As 188.979†	-23.2	-44.041 µg/L	8.7426	-44.041 ppb	8.7426	19.85%
B 249.677†	1209.9	-174.59 µg/L	1.536	-174.59 ppb	1.536	0.88%
Ba 233.527†	610.9	15.795 µg/L	0.3282	15.795 ppb	0.3282	2.08%
Be 313.107†	-7959.1	-5.2104 µg/L	0.08573	-5.2104 ppb	0.08573	1.65%
Ca 317.933Radial†	489146.5	460560 µg/L	769.6	460560 ppb	769.6	0.17%
QC value within limits for Ca 317.933Radial Recovery = 92.11%						
Cd 226.502†	1202.7	-16.091 µg/L	0.4769	-16.091 ppb	0.4769	2.96%
Co 228.616†	194.3	9.4746 µg/L	0.59237	9.4746 ppb	0.59237	6.25%
Cr 267.716†	168.9	3.6764 µg/L	0.62486	3.6764 ppb	0.62486	17.00%
Cu 324.752†	-11602.2	-20.450 µg/L	0.5769	-20.450 ppb	0.5769	2.82%
Fe 238.204 Radial†	51433.0	435930 µg/L	2105.0	435930 ppb	2105.0	0.48%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.19%						
K 766.490 Radial†	-33.9	-24.128 µg/L	28.8197	-24.128 ppb	28.8197	119.44%
Mg 279.077 IEC†	49737.1	462400 µg/L	2510.3	462400 ppb	2510.3	0.54%

QC value within limits for Mg 279.077 IEC Recovery = 92.48%

Mn 257.610†	-6983.5	15.281 µg/L	0.1695	15.281 ppb	0.1695	1.11%
Mo 202.031†	-191.8	-3.9013 µg/L	1.26264	-3.9013 ppb	1.26264	32.36%
Na 589.592 Radial†	1414050.2	465510 µg/L	1548.3	465510 ppb	1548.3	0.33%

QC value within limits for Na 589.592 Radial Recovery = 93.10%

Ni 231.604†	-214.5	-6.0745 µg/L	0.42234	-6.0745 ppb	0.42234	6.95%
P 214.914†	273.7	381.50 µg/L	21.461	381.50 ppb	21.461	5.63%
Pb 220.353†	92.2	21.194 µg/L	3.5893	21.194 ppb	3.5893	16.94%
S 181.975 Axial†	18.8	82.309 µg/L	17.9317	82.309 ppb	17.9317	21.79%
Sb 206.836†	26.4	-14.495 µg/L	8.5779	-14.495 ppb	8.5779	59.18%
Se 196.026†	-151.2	420.79 µg/L	8.956	420.79 ppb	8.956	2.13%
SiO2†	-216.8	-46.696 µg/L	4.2500	-46.696 ppb	4.2500	9.10%
Si 251.611†	-576.0	-47.348 µg/L	1.0098	-47.348 ppb	1.0098	2.13%
Sn 189.927†	-41.9	-13.462 µg/L	3.7726	-13.462 ppb	3.7726	28.02%
Sr 421.552†	478.1	4.9562 µg/L	0.14608	4.9562 ppb	0.14608	2.95%
Ti 334.940†	13835.1	4.0815 µg/L	0.40078	4.0815 ppb	0.40078	9.82%
Tl 190.801†	-24.2	37.750 µg/L	8.3798	37.750 ppb	8.3798	22.20%
U 409.014†	143899.2	12939 µg/L	52.5	12939 ppb	52.5	0.41%

QC value less than the lower limit for U 409.014 Recovery = 86.26%

V 292.402†	-5736.7	3.5579 µg/L	1.17264	3.5579 ppb	1.17264	32.96%
Zn 213.857†	2356.8	12.083 µg/L	0.5800	12.083 ppb	0.5800	4.80%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 108

Date Collected: 2/11/2010 14:46:15

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55399.0	55399.0	102	%		14:46:58
1	Al 396.153Radial†	399.7	403.8	92.521	µg/L	92.521 ppb	14:46:58
1	Ca 317.933Radial†	334.1	149.9	141.18	µg/L	141.18 ppb	14:47:18
1	Fe 238.204 Radial†	7.1	-7.5	138.28	µg/L	138.28 ppb	14:47:18
1	K 766.490 Radial†	420398.0	414012.0	294280	µg/L	294280 ppb	14:46:52
1	Mg 279.077 IEC†	6.8	-4.5	128.44	µg/L	128.44 ppb	14:47:18
1	Na 589.592 Radial†	1342.1	780.2	256.86	µg/L	256.86 ppb	14:46:58
1	Sr 421.552†	951196.0	936997.9	9713.1	µg/L	9713.1 ppb	14:46:52
1	Sc 361.383	1973675.2	1973675.2	103.34	%		14:48:49
1	Y 371.029	1341693.6	1341693.6	102.43	%		14:48:49
1	Ag 328.068†	-7295.5	-6495.0	14.834	µg/L	14.834 ppb	14:48:55
1	As 188.979†	5210.7	5041.0	9833.2	µg/L	9833.2 ppb	14:48:55
1	B 249.677†	116645.4	112541.3	4957.2	µg/L	4957.2 ppb	14:48:49
1	Ba 233.527†	564583.2	546348.7	14244	µg/L	14244 ppb	14:48:49
1	Be 313.107†	4590165.2	4445144.6	2899.1	µg/L	2899.1 ppb	14:48:39
1	Cd 226.502†	360765.0	349238.8	9644.6	µg/L	9644.6 ppb	14:48:49
1	Co 228.616†	199452.7	193010.6	9487.0	µg/L	9487.0 ppb	14:48:49
1	Cr 267.716†	1141741.3	1104866.0	24309	µg/L	24309 ppb	14:48:49
1	Cu 324.752†	2993464.1	2894159.5	20216	µg/L	20216 ppb	14:48:49
1	Mn 257.610†	2858381.7	2766176.3	9578.9	µg/L	9578.9 ppb	14:48:49
1	Mo 202.031†	98264.3	95093.6	10148	µg/L	10148 ppb	14:48:49
1	Ni 231.604†	183070.7	176847.4	9657.8	µg/L	9657.8 ppb	14:48:49
1	P 214.914†	7469.6	7200.4	13482	µg/L	13482 ppb	14:48:55
1	Pb 220.353†	97644.4	94389.0	25180	µg/L	25180 ppb	14:48:49
1	S 181.975 Axial†	12516.5	12096.9	53001	µg/L	53001 ppb	14:48:55
1	Sb 206.836†	11239.2	10848.7	10569	µg/L	10569 ppb	14:48:55
1	Se 196.026†	6584.9	6356.1	9690.0	µg/L	9690.0 ppb	14:48:55
1	SiO2†	476520.0	459857.7	99033	µg/L	99033 ppb	14:48:49
1	Si 251.611†	580361.7	561278.0	46140	µg/L	46140 ppb	14:48:49
1	Sn 189.927†	23760.5	22992.8	10575	µg/L	10575 ppb	14:48:55
1	Ti 334.940†	4290484.1	4151599.7	9986.4	µg/L	9986.4 ppb	14:48:39
1	Tl 190.801†	7036.0	6832.7	9632.0	µg/L	9632.0 ppb	14:48:55
1	U 409.014†	835.4	862.0	78.046	µg/L	78.046 ppb	14:48:49
1	V 292.402†	975452.7	943947.6	10194	µg/L	10194 ppb	14:48:49
1	Zn 213.857†	598917.9	579071.4	14385	µg/L	14385 ppb	14:48:49
2	Sc RADIAL	55030.3	55030.3	101	%		14:47:30
2	Al 396.153Radial†	384.6	391.5	90.444	µg/L	90.444 ppb	14:47:30
2	Ca 317.933Radial†	398.0	215.6	202.97	µg/L	202.97 ppb	14:47:50
2	Fe 238.204 Radial†	10.5	-4.0	160.36	µg/L	160.36 ppb	14:47:50
2	K 766.490 Radial†	423060.2	419427.1	298130	µg/L	298130 ppb	14:47:24
2	Mg 279.077 IEC†	11.3	-0.0	164.54	µg/L	164.54 ppb	14:47:50
2	Na 589.592 Radial†	1212.5	660.6	217.48	µg/L	217.48 ppb	14:47:30
2	Sr 421.552†	957912.4	949937.4	9847.2	µg/L	9847.2 ppb	14:47:24
2	Sc 361.383	1973904.3	1973904.3	103.35	%		14:49:14
2	Y 371.029	1342735.7	1342735.7	102.51	%		14:49:14
2	Ag 328.068†	-6836.3	-6049.9	16.075	µg/L	16.075 ppb	14:49:19
2	As 188.979†	5005.3	4841.7	9444.3	µg/L	9444.3 ppb	14:49:19
2	B 249.677†	114403.0	110358.5	4860.1	µg/L	4860.1 ppb	14:49:14
2	Ba 233.527†	548071.4	530309.5	13826	µg/L	13826 ppb	14:49:14
2	Be 313.107†	4469193.3	4327583.5	2822.5	µg/L	2822.5 ppb	14:49:04
2	Cd 226.502†	349367.5	338170.7	9338.9	µg/L	9338.9 ppb	14:49:14
2	Co 228.616†	192536.9	186296.8	9156.8	µg/L	9156.8 ppb	14:49:14
2	Cr 267.716†	1093055.4	1057632.1	23270	µg/L	23270 ppb	14:49:14
2	Cu 324.752†	2898656.7	2802093.0	19573	µg/L	19573 ppb	14:49:14
2	Mn 257.610†	2761508.2	2672125.9	9253.2	µg/L	9253.2 ppb	14:49:14
2	Mo 202.031†	94921.3	91848.1	9802.1	µg/L	9802.1 ppb	14:49:14
2	Ni 231.604†	176871.2	170828.6	9329.1	µg/L	9329.1 ppb	14:49:14
2	P 214.914†	7023.8	6768.2	12612	µg/L	12612 ppb	14:49:19
2	Pb 220.353†	95131.3	91946.6	24529	µg/L	24529 ppb	14:49:14

2	S 181.975 Axial†	12036.4	11630.9	50959 µg/L	50959 ppb	14:49:19
2	Sb 206.836†	10693.6	10319.6	10054 µg/L	10054 ppb	14:49:19
2	Se 196.026†	6359.9	6137.7	9357.1 µg/L	9357.1 ppb	14:49:19
2	SiO2†	465181.8	448834.1	96659 µg/L	96659 ppb	14:49:14
2	Si 251.611†	566752.0	548044.9	45052 µg/L	45052 ppb	14:49:14
2	Sn 189.927†	22166.4	21447.8	9864.4 µg/L	9864.4 ppb	14:49:19
2	Ti 334.940†	4180020.8	4044239.7	9728.1 µg/L	9728.1 ppb	14:49:04
2	Tl 190.801†	6890.0	6690.7	9431.4 µg/L	9431.4 ppb	14:49:19
2	U 409.014†	947.2	970.1	87.818 µg/L	87.818 ppb	14:49:14
2	V 292.402†	941864.4	911339.9	9841.7 µg/L	9841.7 ppb	14:49:14
2	Zn 213.857†	579745.6	560454.1	13922 µg/L	13922 ppb	14:49:14
3	Sc RADIAL	56038.9	56038.9	103 %		14:48:02
3	Al 396.153Radial†	479.5	477.1	179.56 µg/L	179.56 ppb	14:48:02
3	Ca 317.933Radial†	383.6	194.4	183.07 µg/L	183.07 ppb	14:48:22
3	Fe 238.204 Radial†	9.4	-5.4	124.22 µg/L	124.22 ppb	14:48:22
3	K 766.490 Radial†	428756.3	417423.2	296700 µg/L	296700 ppb	14:47:56
3	Mg 279.077 IEC†	6.3	-5.2	95.926 µg/L	95.926 ppb	14:48:22
3	Na 589.592 Radial†	1260.6	685.8	225.77 µg/L	225.77 ppb	14:48:02
3	Sr 421.552†	974533.2	949026.3	9837.8 µg/L	9837.8 ppb	14:47:56
3	Sc 361.383	1967182.2	1967182.2	103.00 %		14:49:39
3	Y 371.029	1337106.2	1337106.2	102.08 %		14:49:39
3	Ag 328.068†	-5873.5	-5137.8	14.957 µg/L	14.957 ppb	14:49:44
3	As 188.979†	4335.2	4207.7	8207.5 µg/L	8207.5 ppb	14:49:44
3	B 249.677†	103256.6	99915.3	4398.2 µg/L	4398.2 ppb	14:49:39
3	Ba 233.527†	483121.0	469064.3	12229 µg/L	12229 ppb	14:49:39
3	Be 313.107†	4064814.3	3949767.9	2576.0 µg/L	2576.0 ppb	14:49:28
3	Cd 226.502†	306350.7	297562.9	8217.4 µg/L	8217.4 ppb	14:49:39
3	Co 228.616†	167417.3	162546.1	7988.6 µg/L	7988.6 ppb	14:49:39
3	Cr 267.716†	928569.1	901554.3	19836 µg/L	19836 ppb	14:49:39
3	Cu 324.752†	2527919.1	2451745.7	17126 µg/L	17126 ppb	14:49:39
3	Mn 257.610†	2402081.4	2332306.4	8076.5 µg/L	8076.5 ppb	14:49:39
3	Mo 202.031†	82713.5	80310.0	8570.8 µg/L	8570.8 ppb	14:49:39
3	Ni 231.604†	153785.8	149000.9	8137.1 µg/L	8137.1 ppb	14:49:39
3	P 214.914†	6020.9	5817.7	10807 µg/L	10807 ppb	14:49:44
3	Pb 220.353†	84806.2	82236.9	21938 µg/L	21938 ppb	14:49:39
3	S 181.975 Axial†	10412.0	10093.6	44224 µg/L	44224 ppb	14:49:44
3	Sb 206.836†	9221.8	8926.1	8701.4 µg/L	8701.4 ppb	14:49:44
3	Se 196.026†	5513.0	5336.4	8135.5 µg/L	8135.5 ppb	14:49:44
3	SiO2†	415353.7	401996.4	86572 µg/L	86572 ppb	14:49:39
3	Si 251.611†	505959.6	490898.3	40354 µg/L	40354 ppb	14:49:39
3	Sn 189.927†	18682.4	18138.7	8342.5 µg/L	8342.5 ppb	14:49:44
3	Ti 334.940†	3801346.2	3690423.2	8877.0 µg/L	8877.0 ppb	14:49:28
3	Tl 190.801†	6155.2	6000.1	8459.0 µg/L	8459.0 ppb	14:49:44
3	U 409.014†	834.8	864.1	78.225 µg/L	78.225 ppb	14:49:39
3	V 292.402†	816284.9	792534.9	8558.2 µg/L	8558.2 ppb	14:49:39
3	Zn 213.857†	507712.5	492437.5	12233 µg/L	12233 ppb	14:49:39

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1971587.2	103.23 %	0.200			0.19%
Sc RADIAL	55489.4	102 %	0.9			0.92%
Y 371.029	1340511.8	102.34 %	0.229			0.22%
Ag 328.068†	-5894.2	15.288 µg/L	0.6836	15.288 ppb	0.6836	4.47%
Al 396.153Radial†	424.2	120.84 µg/L	50.861	120.84 ppb	50.861	42.09%
As 188.979†	4696.8	9161.7 µg/L	848.90	9161.7 ppb	848.90	9.27%
QC value within limits for As 188.979 Recovery = 91.62%						
B 249.677†	107605.0	4738.5 µg/L	298.66	4738.5 ppb	298.66	6.30%
QC value within limits for B 249.677 Recovery = 94.77%						
Ba 233.527†	515240.8	13433 µg/L	1063.5	13433 ppb	1063.5	7.92%
QC value less than the lower limit for Ba 233.527 Recovery = 89.55%						
Be 313.107†	4240832.0	2765.9 µg/L	168.81	2765.9 ppb	168.81	6.10%
QC value within limits for Be 313.107 Recovery = 92.20%						
Ca 317.933Radial†	186.6	175.74 µg/L	31.540	175.74 ppb	31.540	17.95%
Cd 226.502†	328324.1	9067.0 µg/L	751.45	9067.0 ppb	751.45	8.29%
QC value within limits for Cd 226.502 Recovery = 90.67%						
Co 228.616†	180617.8	8877.5 µg/L	787.27	8877.5 ppb	787.27	8.87%
QC value less than the lower limit for Co 228.616 Recovery = 88.77%						
Cr 267.716†	1021350.8	22472 µg/L	2340.9	22472 ppb	2340.9	10.42%
QC value less than the lower limit for Cr 267.716 Recovery = 89.89%						

Cu 324.752†	2715999.4	18972 µg/L	1630.6	18972 ppb	1630.6	8.59%
QC value within limits for Cu 324.752 Recovery = 94.86%						
Fe 238.204 Radial†	-5.6	140.95 µg/L	18.221	140.95 ppb	18.221	12.93%
K 766.490 Radial†	416954.1	296370 µg/L	1946.1	296370 ppb	1946.1	0.66%
QC value within limits for K 766.490 Radial Recovery = 98.79%						
Mg 279.077 IEC†	-3.2	129.64 µg/L	34.323	129.64 ppb	34.323	26.48%
Mn 257.610†	2590202.9	8969.5 µg/L	790.37	8969.5 ppb	790.37	8.81%
QC value less than the lower limit for Mn 257.610 Recovery = 89.70%						
Mo 202.031†	89083.9	9507.1 µg/L	829.20	9507.1 ppb	829.20	8.72%
QC value within limits for Mo 202.031 Recovery = 95.07%						
Na 589.592 Radial†	708.9	233.37 µg/L	20.762	233.37 ppb	20.762	8.90%
Ni 231.604†	165559.0	9041.3 µg/L	800.17	9041.3 ppb	800.17	8.85%
QC value within limits for Ni 231.604 Recovery = 90.41%						
P 214.914†	6595.5	12300 µg/L	1364.7	12300 ppb	1364.7	11.09%
QC value less than the lower limit for P 214.914 Recovery = 82.00%						
Pb 220.353†	89524.2	23882 µg/L	1714.8	23882 ppb	1714.8	7.18%
QC value within limits for Pb 220.353 Recovery = 95.53%						
S 181.975 Axial†	11273.8	49394 µg/L	4592.8	49394 ppb	4592.8	9.30%
QC value within limits for S 181.975 Axial Recovery = 98.79%						
Sb 206.836†	10031.5	9774.9 µg/L	964.64	9774.9 ppb	964.64	9.87%
QC value within limits for Sb 206.836 Recovery = 97.75%						
Se 196.026†	5943.4	9060.9 µg/L	818.48	9060.9 ppb	818.48	9.03%
QC value within limits for Se 196.026 Recovery = 90.61%						
SiO2†	436896.1	94088 µg/L	6616.3	94088 ppb	6616.3	7.03%
QC value less than the lower limit for SiO2 Recovery = 87.93%						
Si 251.611†	533407.1	43849 µg/L	3074.8	43849 ppb	3074.8	7.01%
QC value less than the lower limit for Si 251.611 Recovery = 87.70%						
Sn 189.927†	20859.8	9594.0 µg/L	1140.59	9594.0 ppb	1140.59	11.89%
QC value within limits for Sn 189.927 Recovery = 95.94%						
Sr 421.552†	945320.6	9799.4 µg/L	74.86	9799.4 ppb	74.86	0.76%
QC value within limits for Sr 421.552 Recovery = 97.99%						
Ti 334.940†	3962087.5	9530.5 µg/L	580.46	9530.5 ppb	580.46	6.09%
QC value within limits for Ti 334.940 Recovery = 95.30%						
Tl 190.801†	6507.8	9174.1 µg/L	627.37	9174.1 ppb	627.37	6.84%
QC value within limits for Tl 190.801 Recovery = 91.74%						
U 409.014†	898.7	81.363 µg/L	5.5909	81.363 ppb	5.5909	6.87%
V 292.402†	882607.5	9531.4 µg/L	861.08	9531.4 ppb	861.08	9.03%
QC value within limits for V 292.402 Recovery = 95.31%						
Zn 213.857†	543987.7	13513 µg/L	1132.6	13513 ppb	1132.6	8.38%
QC value within limits for Zn 213.857 Recovery = 90.09%						
QC Failed. Continue with analysis.						

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 14:49:53

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56804.1	56804.1	104 %		14:50:31
1	Al 396.153Radial†	6842.1	6583.7	4896.3 µg/L	4896.3 ppb	14:50:31
1	Ca 317.933Radial†	5575.3	5177.3	4874.7 µg/L	4874.7 ppb	14:50:52
1	Fe 238.204 Radial†	620.0	581.2	4936.5 µg/L	4936.5 ppb	14:50:52
1	K 766.490 Radial†	7520.1	7096.5	5044.1 µg/L	5044.1 ppb	14:50:31
1	Mg 279.077 IEC†	574.4	540.6	5034.2 µg/L	5034.2 ppb	14:50:52
1	Na 589.592 Radial†	31573.0	29791.8	9807.5 µg/L	9807.5 ppb	14:50:31
1	Sr 421.552†	48614.5	46666.6	483.75 µg/L	483.75 ppb	14:50:31
1	Sc 361.383	1985086.2	1985086.2	103.94 %		14:51:55
1	Y 371.029	1355705.3	1355705.3	103.50 %		14:51:55
1	Ag 328.068†	63419.1	61579.6	492.20 µg/L	492.20 ppb	14:52:00
1	As 188.979†	283.1	271.2	529.04 µg/L	529.04 ppb	14:52:21
1	B 249.677†	12082.8	11293.3	491.77 µg/L	491.77 ppb	14:52:00
1	Ba 233.527†	19621.7	18904.0	493.12 µg/L	493.12 ppb	14:52:00
1	Be 313.107†	773609.6	747725.8	488.12 µg/L	488.12 ppb	14:51:55
1	Cd 226.502†	18494.8	17935.8	494.76 µg/L	494.76 ppb	14:52:00
1	Co 228.616†	10503.4	10114.1	497.19 µg/L	497.19 ppb	14:52:00
1	Cr 267.716†	23548.0	22707.7	499.79 µg/L	499.79 ppb	14:52:00
1	Cu 324.752†	76174.0	70800.5	495.24 µg/L	495.24 ppb	14:52:00
1	Mn 257.610†	149145.1	143735.7	498.19 µg/L	498.19 ppb	14:51:55
1	Mo 202.031†	5080.3	4895.3	522.62 µg/L	522.62 ppb	14:52:21
1	Ni 231.604†	9759.2	9087.1	496.31 µg/L	496.31 ppb	14:52:00
1	P 214.914†	1255.3	1180.1	2486.8 µg/L	2486.8 ppb	14:52:21
1	Pb 220.353†	2124.3	1946.6	519.63 µg/L	519.63 ppb	14:52:21
1	S 181.975 Axial†	258.7	234.1	1025.7 µg/L	1025.7 ppb	14:52:21
1	Sb 206.836†	589.1	539.9	533.84 µg/L	533.84 ppb	14:52:21
1	Se 196.026†	360.1	330.7	511.73 µg/L	511.73 ppb	14:52:21
1	SiO2†	26768.3	24503.7	5277.0 µg/L	5277.0 ppb	14:52:00
1	Si 251.611†	31600.0	30089.3	2473.5 µg/L	2473.5 ppb	14:52:00
1	Sn 189.927†	1182.0	1138.1	523.47 µg/L	523.47 ppb	14:52:21
1	Ti 334.940†	213092.8	204899.2	492.55 µg/L	492.55 ppb	14:51:55
1	Tl 190.801†	347.4	358.5	506.37 µg/L	506.37 ppb	14:52:21
1	U 409.014†	5696.3	5534.0	500.04 µg/L	500.04 ppb	14:52:00
1	V 292.402†	48064.4	46286.7	499.57 µg/L	499.57 ppb	14:52:00
1	Zn 213.857†	21219.3	19939.4	494.39 µg/L	494.39 ppb	14:52:00
2	Sc RADIAL	56818.7	56818.7	104 %		14:50:57
2	Al 396.153Radial†	6864.1	6603.1	4910.8 µg/L	4910.8 ppb	14:50:57
2	Ca 317.933Radial†	5535.1	5137.3	4837.1 µg/L	4837.1 ppb	14:51:17
2	Fe 238.204 Radial†	615.6	576.8	4899.1 µg/L	4899.1 ppb	14:51:17
2	K 766.490 Radial†	7426.8	7005.0	4979.1 µg/L	4979.1 ppb	14:50:57
2	Mg 279.077 IEC†	575.7	541.7	5044.4 µg/L	5044.4 ppb	14:51:17
2	Na 589.592 Radial†	31604.5	29814.2	9814.9 µg/L	9814.9 ppb	14:50:57
2	Sr 421.552†	48545.6	46588.5	482.94 µg/L	482.94 ppb	14:50:57
2	Sc 361.383	1982851.3	1982851.3	103.82 %		14:52:28
2	Y 371.029	1354649.3	1354649.3	103.41 %		14:52:28
2	Ag 328.068†	64081.0	62286.0	497.83 µg/L	497.83 ppb	14:52:34
2	As 188.979†	276.6	265.3	517.47 µg/L	517.47 ppb	14:52:54
2	B 249.677†	12111.5	11334.1	493.59 µg/L	493.59 ppb	14:52:34
2	Ba 233.527†	19855.9	19150.8	499.56 µg/L	499.56 ppb	14:52:34
2	Be 313.107†	767601.6	742777.9	484.89 µg/L	484.89 ppb	14:52:28
2	Cd 226.502†	18724.1	18176.8	501.42 µg/L	501.42 ppb	14:52:34
2	Co 228.616†	10623.9	10241.5	503.47 µg/L	503.47 ppb	14:52:34
2	Cr 267.716†	23965.4	23135.3	509.20 µg/L	509.20 ppb	14:52:34
2	Cu 324.752†	76944.2	71624.9	501.00 µg/L	501.00 ppb	14:52:34
2	Mn 257.610†	147951.6	142747.9	494.77 µg/L	494.77 ppb	14:52:28
2	Mo 202.031†	5059.8	4881.0	521.09 µg/L	521.09 ppb	14:52:54
2	Ni 231.604†	9897.9	9231.3	504.18 µg/L	504.18 ppb	14:52:34
2	P 214.914†	1254.5	1180.6	2487.4 µg/L	2487.4 ppb	14:52:54
2	Pb 220.353†	2113.7	1938.7	517.51 µg/L	517.51 ppb	14:52:54

2	S 181.975 Axial†	253.9	229.7	1006.6 µg/L	1006.6 ppb	14:52:54
2	Sb 206.836†	570.0	522.0	516.18 µg/L	516.18 ppb	14:52:54
2	Se 196.026†	357.5	328.5	508.28 µg/L	508.28 ppb	14:52:54
2	SiO2†	27016.3	24771.5	5334.7 µg/L	5334.7 ppb	14:52:34
2	Si 251.611†	31927.7	30439.2	2502.3 µg/L	2502.3 ppb	14:52:34
2	Sn 189.927†	1183.2	1140.5	524.61 µg/L	524.61 ppb	14:52:54
2	Ti 334.940†	211586.4	203679.4	489.61 µg/L	489.61 ppb	14:52:28
2	Tl 190.801†	345.3	356.8	503.93 µg/L	503.93 ppb	14:52:54
2	U 409.014†	5694.5	5538.4	500.46 µg/L	500.46 ppb	14:52:34
2	V 292.402†	48494.6	46753.2	504.55 µg/L	504.55 ppb	14:52:34
2	Zn 213.857†	21488.9	20222.1	501.41 µg/L	501.41 ppb	14:52:34
3	Sc RADIAL	57349.9	57349.9	105 %		14:51:23
3	Al 396.153Radial†	6954.4	6628.0	4931.1 µg/L	4931.1 ppb	14:51:23
3	Ca 317.933Radial†	5532.3	5085.5	4788.3 µg/L	4788.3 ppb	14:51:43
3	Fe 238.204 Radial†	617.1	572.8	4864.4 µg/L	4864.4 ppb	14:51:43
3	K 766.490 Radial†	7512.2	7020.2	4989.9 µg/L	4989.9 ppb	14:51:23
3	Mg 279.077 IEC†	569.2	530.4	4937.8 µg/L	4937.8 ppb	14:51:43
3	Na 589.592 Radial†	31885.8	29800.8	9810.5 µg/L	9810.5 ppb	14:51:23
3	Sr 421.552†	49101.8	46686.0	483.95 µg/L	483.95 ppb	14:51:23
3	Sc 361.383	1990626.4	1990626.4	104.23 %		14:53:01
3	Y 371.029	1359542.7	1359542.7	103.79 %		14:53:01
3	Ag 328.068†	60113.1	58238.1	465.39 µg/L	465.39 ppb	14:53:07
3	As 188.979†	235.3	224.6	438.16 µg/L	438.16 ppb	14:53:28
3	B 249.677†	11347.7	10555.7	459.50 µg/L	459.50 ppb	14:53:07
3	Ba 233.527†	18299.9	17583.2	458.65 µg/L	458.65 ppb	14:53:07
3	Be 313.107†	726470.7	700428.5	457.24 µg/L	457.24 ppb	14:53:01
3	Cd 226.502†	17137.6	16584.2	457.44 µg/L	457.44 ppb	14:53:07
3	Co 228.616†	9675.2	9291.3	456.68 µg/L	456.68 ppb	14:53:07
3	Cr 267.716†	21632.8	20807.2	457.96 µg/L	457.96 ppb	14:53:07
3	Cu 324.752†	71181.3	65806.4	460.35 µg/L	460.35 ppb	14:53:07
3	Mn 257.610†	140886.2	135412.6	469.36 µg/L	469.36 ppb	14:53:01
3	Mo 202.031†	4241.7	4077.1	435.30 µg/L	435.30 ppb	14:53:28
3	Ni 231.604†	9011.2	8343.3	455.69 µg/L	455.69 ppb	14:53:07
3	P 214.914†	1075.3	1004.1	2111.2 µg/L	2111.2 ppb	14:53:28
3	Pb 220.353†	1866.0	1693.1	451.84 µg/L	451.84 ppb	14:53:28
3	S 181.975 Axial†	232.5	208.2	912.40 µg/L	912.40 ppb	14:53:28
3	Sb 206.836†	504.7	457.3	451.62 µg/L	451.62 ppb	14:53:28
3	Se 196.026†	310.0	281.6	436.86 µg/L	436.86 ppb	14:53:28
3	SiO2†	25184.9	22912.8	4934.4 µg/L	4934.4 ppb	14:53:07
3	Si 251.611†	29623.3	28108.2	2310.6 µg/L	2310.6 ppb	14:53:07
3	Sn 189.927†	974.4	935.7	430.40 µg/L	430.40 ppb	14:53:28
3	Ti 334.940†	200395.3	192146.5	461.88 µg/L	461.88 ppb	14:53:01
3	Tl 190.801†	314.8	326.3	461.00 µg/L	461.00 ppb	14:53:28
3	U 409.014†	5084.0	4931.3	445.50 µg/L	445.50 ppb	14:53:07
3	V 292.402†	43900.0	42162.6	454.79 µg/L	454.79 ppb	14:53:07
3	Zn 213.857†	19753.8	18476.6	458.11 µg/L	458.11 ppb	14:53:07

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1986188.0	104.00 %	0.210			0.20%
Sc RADIAL	56990.9	104 %	0.6			0.55%
Y 371.029	1356632.4	103.57 %	0.197			0.19%
Ag 328.068†	60701.2	485.14 µg/L	17.336	485.14 ppb	17.336	3.57%
QC value within limits for Ag 328.068 Recovery = 97.03%						
Al 396.153Radial†	6604.9	4912.7 µg/L	17.49	4912.7 ppb	17.49	0.36%
QC value within limits for Al 396.153Radial Recovery = 98.25%						
As 188.979†	253.7	494.89 µg/L	49.467	494.89 ppb	49.467	10.00%
QC value within limits for As 188.979 Recovery = 98.98%						
B 249.677†	11061.0	481.62 µg/L	19.175	481.62 ppb	19.175	3.98%
QC value within limits for B 249.677 Recovery = 96.32%						
Ba 233.527†	18546.0	483.78 µg/L	21.996	483.78 ppb	21.996	4.55%
QC value within limits for Ba 233.527 Recovery = 96.76%						
Be 313.107†	730310.7	476.75 µg/L	16.971	476.75 ppb	16.971	3.56%
QC value within limits for Be 313.107 Recovery = 95.35%						
Ca 317.933Radial†	5133.4	4833.4 µg/L	43.35	4833.4 ppb	43.35	0.90%
QC value within limits for Ca 317.933Radial Recovery = 96.67%						
Cd 226.502†	17565.6	484.54 µg/L	23.706	484.54 ppb	23.706	4.89%
QC value within limits for Cd 226.502 Recovery = 96.91%						
Co 228.616†	9882.3	485.78 µg/L	25.392	485.78 ppb	25.392	5.23%

Cr	267.716†	22216.8	488.98 µg/L	27.276	488.98 ppb	27.276	5.58%
Cu	324.752†	69410.6	485.53 µg/L	21.996	485.53 ppb	21.996	4.53%
Fe	238.204 Radial†	576.9	4900.0 µg/L	36.10	4900.0 ppb	36.10	0.74%
K	766.490 Radial†	7040.6	5004.4 µg/L	34.84	5004.4 ppb	34.84	0.70%
Mg	279.077 IEC†	537.5	5005.5 µg/L	58.81	5005.5 ppb	58.81	1.17%
Mn	257.610†	140632.1	487.44 µg/L	15.748	487.44 ppb	15.748	3.23%
Mo	202.031†	4617.8	493.00 µg/L	49.981	493.00 ppb	49.981	10.14%
Na	589.592 Radial†	29802.3	9811.0 µg/L	3.72	9811.0 ppb	3.72	0.04%
Ni	231.604†	8887.2	485.39 µg/L	26.026	485.39 ppb	26.026	5.36%
P	214.914†	1121.6	2361.8 µg/L	217.03	2361.8 ppb	217.03	9.19%
Pb	220.353†	1859.5	496.33 µg/L	38.539	496.33 ppb	38.539	7.76%
S	181.975 Axial†	224.0	981.57 µg/L	60.664	981.57 ppb	60.664	6.18%
Sb	206.836†	506.4	500.55 µg/L	43.281	500.55 ppb	43.281	8.65%
Se	196.026†	313.6	485.62 µg/L	42.263	485.62 ppb	42.263	8.70%
SiO2†		24062.6	5182.0 µg/L	216.38	5182.0 ppb	216.38	4.18%
Si	251.611†	29545.6	2428.8 µg/L	103.33	2428.8 ppb	103.33	4.25%
Sn	189.927†	1071.4	492.83 µg/L	54.065	492.83 ppb	54.065	10.97%
Sr	421.552†	46647.0	483.55 µg/L	0.535	483.55 ppb	0.535	0.11%
Ti	334.940†	200241.7	481.35 µg/L	16.923	481.35 ppb	16.923	3.52%
Tl	190.801†	347.2	490.43 µg/L	25.519	490.43 ppb	25.519	5.20%
U	409.014†	5334.6	482.00 µg/L	31.611	482.00 ppb	31.611	6.56%
V	292.402†	45067.5	486.30 µg/L	27.408	486.30 ppb	27.408	5.64%
Zn	213.857†	19546.0	484.64 µg/L	23.239	484.64 ppb	23.239	4.80%

QC value within limits for Co 228.616 Recovery = 97.16%

QC value within limits for Cr 267.716 Recovery = 97.80%

QC value within limits for Cu 324.752 Recovery = 97.11%

QC value within limits for Fe 238.204 Radial Recovery = 98.00%

QC value within limits for K 766.490 Radial Recovery = 100.09%

QC value within limits for Mg 279.077 IEC Recovery = 100.11%

QC value within limits for Mn 257.610 Recovery = 97.49%

QC value within limits for Mo 202.031 Recovery = 98.60%

QC value within limits for Na 589.592 Radial Recovery = 98.11%

QC value within limits for Ni 231.604 Recovery = 97.08%

QC value within limits for P 214.914 Recovery = 94.47%

QC value within limits for Pb 220.353 Recovery = 99.27%

QC value within limits for S 181.975 Axial Recovery = 98.16%

QC value within limits for Sb 206.836 Recovery = 100.11%

QC value within limits for Se 196.026 Recovery = 97.12%

QC value within limits for SiO2 Recovery = 96.91%

QC value within limits for Si 251.611 Recovery = 97.15%

QC value within limits for Sn 189.927 Recovery = 98.57%

QC value within limits for Sr 421.552 Recovery = 96.71%

QC value within limits for Ti 334.940 Recovery = 96.27%

QC value within limits for Tl 190.801 Recovery = 98.09%

QC value within limits for U 409.014 Recovery = 96.40%

QC value within limits for V 292.402 Recovery = 97.26%

QC value within limits for Zn 213.857 Recovery = 96.93%

All analyte(s) passed QC.

Sequence No.: 14
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/11/2010 14:53:37
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56199.9	56199.9	103 %		14:54:10
1	Al 396.153Radial†	38.0	47.1	35.072 µg/L	35.072 ppb	14:54:10
1	Ca 317.933Radial†	231.4	45.6	42.930 µg/L	42.930 ppb	14:54:31
1	Fe 238.204 Radial†	23.4	8.2	69.822 µg/L	69.822 ppb	14:54:31
1	K 766.490 Radial†	243.5	108.1	76.828 µg/L	76.828 ppb	14:54:10
1	Mg 279.077 IEC†	18.5	6.7	62.643 µg/L	62.643 ppb	14:54:31
1	Na 589.592 Radial†	743.1	179.7	59.159 µg/L	59.159 ppb	14:54:10
1	Sr 421.552†	105.8	63.2	0.6552 µg/L	0.6552 ppb	14:54:10
1	Sc 361.383	1982476.6	1982476.6	103.80 %		14:55:33
1	Y 371.029	1357413.1	1357413.1	103.63 %		14:55:33
1	Ag 328.068†	-522.2	61.5	0.4946 µg/L	0.4946 ppb	14:55:38
1	As 188.979†	1.8	0.6	1.0901 µg/L	1.0901 ppb	14:55:59
1	B 249.677†	408.1	61.7	2.6625 µg/L	2.6625 ppb	14:55:59
1	Ba 233.527†	2.5	28.5	0.7415 µg/L	0.7415 ppb	14:55:59
1	Be 313.107†	-3213.4	344.8	0.2250 µg/L	0.2250 ppb	14:55:38
1	Cd 226.502†	-134.6	12.5	0.3368 µg/L	0.3368 ppb	14:55:59
1	Co 228.616†	-7.7	1.4	0.0712 µg/L	0.0712 ppb	14:55:59
1	Cr 267.716†	4.1	56.4	1.2401 µg/L	1.2401 ppb	14:55:59
1	Cu 324.752†	2752.9	165.9	1.1688 µg/L	1.1688 ppb	14:55:38
1	Mn 257.610†	-137.5	111.6	0.3934 µg/L	0.3934 ppb	14:55:59
1	Mo 202.031†	2.7	10.2	1.0859 µg/L	1.0859 ppb	14:55:59
1	Ni 231.604†	309.2	-4.3	-0.2339 µg/L	-0.2339 ppb	14:55:59
1	P 214.914†	25.1	-3.5	-7.5860 µg/L	-7.5860 ppb	14:55:59
1	Pb 220.353†	124.3	22.6	6.0147 µg/L	6.0147 ppb	14:55:59
1	S 181.975 Axial†	16.6	1.2	5.2644 µg/L	5.2644 ppb	14:55:59
1	Sb 206.836†	32.4	4.3	4.2069 µg/L	4.2069 ppb	14:55:59
1	Se 196.026†	17.5	1.0	1.6734 µg/L	1.6734 ppb	14:55:59
1	SiO2†	1299.2	1.6	0.3503 µg/L	0.3503 ppb	14:55:38
1	Si 251.611†	379.1	52.3	4.3027 µg/L	4.3027 ppb	14:55:59
1	Sn 189.927†	7.8	8.4	3.8780 µg/L	3.8780 ppb	14:55:59
1	Ti 334.940†	271.8	145.7	0.3462 µg/L	0.3462 ppb	14:55:38
1	Tl 190.801†	-19.8	5.2	7.2432 µg/L	7.2432 ppb	14:55:59
1	U 409.014†	-9.7	44.3	3.9980 µg/L	3.9980 ppb	14:55:38
1	V 292.402†	-10.8	33.8	0.3839 µg/L	0.3839 ppb	14:55:38
1	Zn 213.857†	539.3	44.0	1.0899 µg/L	1.0899 ppb	14:55:59
2	Sc RADIAL	56663.5	56663.5	104 %		14:54:36
2	Al 396.153Radial†	53.4	61.6	45.892 µg/L	45.892 ppb	14:54:36
2	Ca 317.933Radial†	224.0	36.6	34.458 µg/L	34.458 ppb	14:54:57
2	Fe 238.204 Radial†	18.3	3.1	26.399 µg/L	26.399 ppb	14:54:57
2	K 766.490 Radial†	257.1	119.2	84.727 µg/L	84.727 ppb	14:54:36
2	Mg 279.077 IEC†	17.6	5.7	53.162 µg/L	53.162 ppb	14:54:57
2	Na 589.592 Radial†	788.5	217.6	71.620 µg/L	71.620 ppb	14:54:36
2	Sr 421.552†	88.8	46.0	0.4764 µg/L	0.4764 ppb	14:54:36
2	Sc 361.383	1976808.7	1976808.7	103.51 %		14:56:05
2	Y 371.029	1355511.3	1355511.3	103.48 %		14:56:05
2	Ag 328.068†	-510.0	71.8	0.5752 µg/L	0.5752 ppb	14:56:10
2	As 188.979†	1.2	0.0	0.0279 µg/L	0.0279 ppb	14:56:31
2	B 249.677†	396.3	51.4	2.2364 µg/L	2.2364 ppb	14:56:31
2	Ba 233.527†	2.6	28.5	0.7438 µg/L	0.7438 ppb	14:56:31
2	Be 313.107†	-3268.6	282.6	0.1844 µg/L	0.1844 ppb	14:56:10
2	Cd 226.502†	-122.2	24.1	0.6618 µg/L	0.6618 ppb	14:56:31
2	Co 228.616†	-10.0	-0.8	-0.0395 µg/L	-0.0395 ppb	14:56:31
2	Cr 267.716†	5.1	57.3	1.2611 µg/L	1.2611 ppb	14:56:31
2	Cu 324.752†	2702.2	124.6	0.8738 µg/L	0.8738 ppb	14:56:10
2	Mn 257.610†	-107.9	139.8	0.4856 µg/L	0.4856 ppb	14:56:31
2	Mo 202.031†	-1.1	6.4	0.6888 µg/L	0.6888 ppb	14:56:31
2	Ni 231.604†	302.7	-9.7	-0.5298 µg/L	-0.5298 ppb	14:56:31
2	P 214.914†	20.2	-8.1	-17.441 µg/L	-17.441 ppb	14:56:31
2	Pb 220.353†	118.9	17.7	4.7183 µg/L	4.7183 ppb	14:56:31

2	S 181.975 Axial†	14.4	-0.9	-4.1582 µg/L	-4.1582 ppb	14:56:31
2	Sb 206.836†	28.3	0.4	0.3915 µg/L	0.3915 ppb	14:56:31
2	Se 196.026†	9.3	-6.9	-10.429 µg/L	-10.429 ppb	14:56:31
2	SiO2†	1222.9	-68.6	-14.765 µg/L	-14.765 ppb	14:56:10
2	Si 251.611†	359.0	34.0	2.7936 µg/L	2.7936 ppb	14:56:31
2	Sn 189.927†	7.1	7.7	3.5568 µg/L	3.5568 ppb	14:56:31
2	Ti 334.940†	232.6	108.6	0.2576 µg/L	0.2576 ppb	14:56:10
2	Tl 190.801†	-24.5	0.6	0.8244 µg/L	0.8244 ppb	14:56:31
2	U 409.014†	-107.5	-50.2	-4.5523 µg/L	-4.5523 ppb	14:56:10
2	V 292.402†	15.1	58.8	0.6333 µg/L	0.6333 ppb	14:56:10
2	Zn 213.857†	534.3	40.7	1.0126 µg/L	1.0126 ppb	14:56:31
3	Sc RADIAL	56320.6	56320.6	103 %		14:55:02
3	Al 396.153Radial†	8.5	18.4	13.663 µg/L	13.663 ppb	14:55:02
3	Ca 317.933Radial†	216.9	31.1	29.241 µg/L	29.241 ppb	14:55:23
3	Fe 238.204 Radial†	17.6	2.6	21.668 µg/L	21.668 ppb	14:55:23
3	K 766.490 Radial†	236.5	100.7	71.584 µg/L	71.584 ppb	14:55:02
3	Mg 279.077 IEC†	12.2	0.5	5.0859 µg/L	5.0859 ppb	14:55:23
3	Na 589.592 Radial†	760.7	195.3	64.287 µg/L	64.287 ppb	14:55:02
3	Sr 421.552†	71.7	29.9	0.3097 µg/L	0.3097 ppb	14:55:02
3	Sc 361.383	1993913.4	1993913.4	104.40 %		14:56:37
3	Y 371.029	1367504.2	1367504.2	104.40 %		14:56:37
3	Ag 328.068†	-498.3	87.2	0.6944 µg/L	0.6944 ppb	14:56:43
3	As 188.979†	0.4	-0.8	-1.5138 µg/L	-1.5138 ppb	14:57:03
3	B 249.677†	385.9	38.1	1.6564 µg/L	1.6564 ppb	14:57:03
3	Ba 233.527†	1.2	27.2	0.7082 µg/L	0.7082 ppb	14:57:03
3	Be 313.107†	-3126.9	445.4	0.2907 µg/L	0.2907 ppb	14:56:43
3	Cd 226.502†	-117.4	29.7	0.8162 µg/L	0.8162 ppb	14:57:03
3	Co 228.616†	-8.6	0.6	0.0304 µg/L	0.0304 ppb	14:57:03
3	Cr 267.716†	2.0	54.3	1.1938 µg/L	1.1938 ppb	14:57:03
3	Cu 324.752†	2701.6	101.6	0.7126 µg/L	0.7126 ppb	14:56:43
3	Mn 257.610†	-86.5	161.3	0.5611 µg/L	0.5611 ppb	14:57:03
3	Mo 202.031†	5.2	12.5	1.3355 µg/L	1.3355 ppb	14:57:03
3	Ni 231.604†	315.6	0.1	0.0043 µg/L	0.0043 ppb	14:57:03
3	P 214.914†	33.2	4.1	8.8077 µg/L	8.8077 ppb	14:57:03
3	Pb 220.353†	109.3	7.5	2.0114 µg/L	2.0114 ppb	14:57:03
3	S 181.975 Axial†	10.6	-4.7	-20.521 µg/L	-20.521 ppb	14:57:03
3	Sb 206.836†	25.8	-2.2	-2.1813 µg/L	-2.1813 ppb	14:57:03
3	Se 196.026†	17.8	1.2	1.8776 µg/L	1.8776 ppb	14:57:03
3	SiO2†	1292.2	-12.3	-2.6550 µg/L	-2.6550 ppb	14:56:43
3	Si 251.611†	371.3	42.8	3.5163 µg/L	3.5163 ppb	14:57:03
3	Sn 189.927†	-2.0	-1.0	-0.4777 µg/L	-0.4777 ppb	14:57:03
3	Ti 334.940†	313.8	184.5	0.4438 µg/L	0.4438 ppb	14:56:43
3	Tl 190.801†	-24.1	1.2	1.6892 µg/L	1.6892 ppb	14:57:03
3	U 409.014†	-22.6	31.9	2.8863 µg/L	2.8863 ppb	14:56:43
3	V 292.402†	-34.6	11.0	0.1363 µg/L	0.1363 ppb	14:56:43
3	Zn 213.857†	532.5	34.5	0.8590 µg/L	0.8590 ppb	14:57:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1984399.6	103.90 %		0.456			0.44%
Sc RADIAL	56394.7	103 %		0.4			0.43%
Y 371.029	1360142.9	103.83 %		0.492			0.47%
Ag 328.068†	73.5	0.5881 µg/L		0.10050	0.5881 ppb	0.10050	17.09%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	42.3	31.542 µg/L		16.4016	31.542 ppb	16.4016	52.00%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	-0.1	-0.1319 µg/L		1.30928	-0.1319 ppb	1.30928	992.68%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	50.4	2.1851 µg/L		0.50501	2.1851 ppb	0.50501	23.11%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	28.1	0.7312 µg/L		0.01993	0.7312 ppb	0.01993	2.73%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	357.6	0.2334 µg/L		0.05362	0.2334 ppb	0.05362	22.97%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	37.7	35.543 µg/L		6.9088	35.543 ppb	6.9088	19.44%
QC value within limits for Ca 317.933Radial Recovery = Not calculated							
Cd 226.502†	22.1	0.6049 µg/L		0.24471	0.6049 ppb	0.24471	40.45%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.4	0.0207 µg/L		0.05597	0.0207 ppb	0.05597	270.39%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	56.0	1.2317 µg/L	0.03444 1.2317 ppb 0.03444 2.80%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	130.7	0.9184 µg/L	0.23134 0.9184 ppb 0.23134 25.19%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	4.6	39.296 µg/L	26.5417 39.296 ppb 26.5417 67.54%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	109.3	77.713 µg/L	6.6157 77.713 ppb 6.6157 8.51%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	4.3	40.297 µg/L	30.8602 40.297 ppb 30.8602 76.58%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	137.6	0.4800 µg/L	0.08402 0.4800 ppb 0.08402 17.50%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	9.7	1.0367 µg/L	0.32615 1.0367 ppb 0.32615 31.46%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	197.5	65.022 µg/L	6.2628 65.022 ppb 6.2628 9.63%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-4.6	-0.2531 µg/L	0.26755 -0.2531 ppb 0.26755 105.70%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-2.5	-5.4063 µg/L	13.25932 -5.4063 ppb 13.25932 245.25%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	15.9	4.2482 µg/L	2.04263 4.2482 ppb 2.04263 48.08%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-1.5	-6.4715 µg/L	13.04721 -6.4715 ppb 13.04721 201.61%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	0.8	0.8057 µg/L	3.21418 0.8057 ppb 3.21418 398.93%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-1.5	-2.2926 µg/L	7.04698 -2.2926 ppb 7.04698 307.37%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-26.4	-5.6898 µg/L	8.00142 -5.6898 ppb 8.00142 140.63%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	43.0	3.5375 µg/L	0.75475 3.5375 ppb 0.75475 21.34%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	5.0	2.3190 µg/L	2.42737 2.3190 ppb 2.42737 104.67%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	46.3	0.4804 µg/L	0.17278 0.4804 ppb 0.17278 35.96%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	146.3	0.3492 µg/L	0.09310 0.3492 ppb 0.09310 26.66%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	2.3	3.2523 µg/L	3.48319 3.2523 ppb 3.48319 107.10%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	8.7	0.7773 µg/L	4.64898 0.7773 ppb 4.64898 598.06%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	34.6	0.3845 µg/L	0.24848 0.3845 ppb 0.24848 64.62%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	39.7	0.9871 µg/L	0.11756 0.9871 ppb 0.11756 11.91%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

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Analysis Begun

Start Time: 2/11/2010 15:08:34

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optimal\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optimal\Results\Results.mdb
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Method Loaded

Method Name: Gen Eng fast_new Si

Method Last Saved: 2/11/2010 13:51:13

IEC File: 011510.iec

MSF File:

Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	No
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1

Autosampler Location: 113

Sample ID: LR1

Date Collected: 2/11/2010 15:08:34

Analyst: HSC

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
=====

Replicate Data: LR1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55775.1	55775.1	102 %		15:09:19
1	Al 396.153Radial†	-12.5	-2.1	-1.5477 µg/L	-1.5477 ppb	15:09:19
1	Ca 317.933Radial†	109.7	-71.8	-67.596 µg/L	-67.596 ppb	15:09:39
1	Fe 238.204 Radial†	12.5	-2.2	-18.859 µg/L	-18.859 ppb	15:09:39

1	K 766.490 Radial†	153.1	21.4	15.223 µg/L	15.223 ppb	15:09:19
1	Mg 279.077 IEC†	21.3	9.6	89.132 µg/L	89.132 ppb	15:09:39
1	Na 589.592 Radial†	561.6	7.7	2.5239 µg/L	2.5239 ppb	15:09:19
1	Sr 421.552†	60.6	19.8	0.2050 µg/L	0.2050 ppb	15:09:19
1	Sc 361.383	1979575.8	1979575.8	103.65 %		15:10:41
1	Y 371.029	1359463.7	1359463.7	103.78 %		15:10:41
1	Ag 328.068†	-475.7	105.6	0.7790 µg/L	0.7790 ppb	15:10:47
1	As 188.979†	3.5	2.2	4.2811 µg/L	4.2811 ppb	15:11:08
1	B 249.677†	236.6	-103.2	-4.4890 µg/L	-4.4890 ppb	15:10:47
1	Ba 233.527†	-43.0	-15.5	-0.4185 µg/L	-0.4185 ppb	15:11:08
1	Be 313.107†	-9167.3	-5403.9	-3.5311 µg/L	-3.5311 ppb	15:10:47
1	Cd 226.502†	-304.4	-151.6	-4.1785 µg/L	-4.1785 ppb	15:11:08
1	Co 228.616†	19.8	27.9	1.3617 µg/L	1.3617 ppb	15:11:08
1	Cr 267.716†	233.0	277.1	6.0903 µg/L	6.0903 ppb	15:10:47
1	Cu 324.752†	1310.7	-1221.6	-8.5355 µg/L	-8.5355 ppb	15:10:47
1	Mn 257.610†	14.0	257.6	0.8861 µg/L	0.8861 ppb	15:10:47
1	Mo 202.031†	-13.4	-5.4	-0.5763 µg/L	-0.5763 ppb	15:11:08
1	Ni 231.604†	324.2	10.6	0.5789 µg/L	0.5789 ppb	15:11:08
1	P 214.914†	39.4	10.4	23.307 µg/L	23.307 ppb	15:11:08
1	Pb 220.353†	132.9	31.0	-2.3589 µg/L	-2.3589 ppb	15:11:08
1	S 181.975 Axial†	17.0	1.6	6.9914 µg/L	6.9914 ppb	15:11:08
1	Sb 206.836†	24.0	-3.8	-3.8211 µg/L	-3.8211 ppb	15:11:08
1	Se 196.026†	11.2	-5.0	-7.7508 µg/L	-7.7508 ppb	15:11:08
1	SiO2†	1260.6	-33.8	-7.2860 µg/L	-7.2860 ppb	15:10:47
1	Si 251.611†	175.4	-143.6	-11.809 µg/L	-11.809 ppb	15:11:08
1	Sn 189.927†	6.2	6.9	3.1737 µg/L	3.1737 ppb	15:11:08
1	Ti 334.940†	2413.3	2212.1	5.3130 µg/L	5.3130 ppb	15:10:47
1	Tl 190.801†	-31.2	-5.9	4.3972 µg/L	4.3972 ppb	15:11:08
1	U 409.014†	117155.1	113081.6	10238 µg/L	10238 ppb	15:10:41
1	V 292.402†	-897.2	-821.4	1.8907 µg/L	1.8907 ppb	15:10:47
1	Zn 213.857†	499.8	6.6	0.1728 µg/L	0.1728 ppb	15:11:08
2	Sc RADIAL	55251.0	55251.0	101 %		15:09:44
2	Al 396.153Radial†	-27.7	-17.2	-12.820 µg/L	-12.820 ppb	15:09:44
2	Ca 317.933Radial†	107.7	-72.8	-68.561 µg/L	-68.561 ppb	15:10:05
2	Fe 238.204 Radial†	14.6	-0.1	-0.7560 µg/L	-0.7560 ppb	15:10:05
2	K 766.490 Radial†	163.9	33.5	23.798 µg/L	23.798 ppb	15:09:44
2	Mg 279.077 IEC†	21.5	10.0	92.921 µg/L	92.921 ppb	15:10:05
2	Na 589.592 Radial†	549.7	1.1	0.3683 µg/L	0.3683 ppb	15:09:44
2	Sr 421.552†	65.4	25.1	0.2600 µg/L	0.2600 ppb	15:09:44
2	Sc 361.383	1991488.7	1991488.7	104.28 %		15:11:14
2	Y 371.029	1367480.0	1367480.0	104.39 %		15:11:14
2	Ag 328.068†	-460.8	122.6	0.9153 µg/L	0.9153 ppb	15:11:20
2	As 188.979†	3.4	2.1	4.1976 µg/L	4.1976 ppb	15:11:40
2	B 249.677†	245.3	-96.3	-4.1987 µg/L	-4.1987 ppb	15:11:20
2	Ba 233.527†	-30.4	-3.2	-0.0984 µg/L	-0.0984 ppb	15:11:40
2	Be 313.107†	-9053.1	-5241.5	-3.4251 µg/L	-3.4251 ppb	15:11:20
2	Cd 226.502†	-307.5	-152.7	-4.2119 µg/L	-4.2119 ppb	15:11:40
2	Co 228.616†	2.2	10.9	0.5250 µg/L	0.5250 ppb	15:11:40
2	Cr 267.716†	184.1	229.0	5.0309 µg/L	5.0309 ppb	15:11:20
2	Cu 324.752†	1378.2	-1164.4	-8.1337 µg/L	-8.1337 ppb	15:11:20
2	Mn 257.610†	56.5	298.3	1.0291 µg/L	1.0291 ppb	15:11:20
2	Mo 202.031†	-9.4	-1.5	-0.1584 µg/L	-0.1584 ppb	15:11:40
2	Ni 231.604†	337.2	21.2	1.1562 µg/L	1.1562 ppb	15:11:40
2	P 214.914†	47.1	17.5	38.462 µg/L	38.462 ppb	15:11:40
2	Pb 220.353†	140.3	37.4	-0.6060 µg/L	-0.6060 ppb	15:11:40
2	S 181.975 Axial†	16.6	1.1	4.9128 µg/L	4.9128 ppb	15:11:40
2	Sb 206.836†	18.1	-9.6	-9.5490 µg/L	-9.5490 ppb	15:11:40
2	Se 196.026†	12.7	-3.7	-5.6705 µg/L	-5.6705 ppb	15:11:40
2	SiO2†	1277.1	-25.3	-5.4423 µg/L	-5.4423 ppb	15:11:20
2	Si 251.611†	186.7	-133.8	-10.999 µg/L	-10.999 ppb	15:11:40
2	Sn 189.927†	5.7	6.3	2.9120 µg/L	2.9120 ppb	15:11:40
2	Ti 334.940†	2507.4	2288.5	5.4964 µg/L	5.4964 ppb	15:11:20
2	Tl 190.801†	-28.7	-3.2	8.0207 µg/L	8.0207 ppb	15:11:40
2	U 409.014†	117240.7	112487.6	10184 µg/L	10184 ppb	15:11:14
2	V 292.402†	-895.5	-814.6	1.9102 µg/L	1.9102 ppb	15:11:20
2	Zn 213.857†	510.6	14.1	0.3551 µg/L	0.3551 ppb	15:11:40
3	Sc RADIAL	56112.5	56112.5	103 %		15:10:10
3	Al 396.153Radial†	-19.4	-8.8	-6.5548 µg/L	-6.5548 ppb	15:10:10
3	Ca 317.933Radial†	114.8	-67.5	-63.545 µg/L	-63.545 ppb	15:10:31
3	Fe 238.204 Radial†	16.7	1.7	14.838 µg/L	14.838 ppb	15:10:31
3	K 766.490 Radial†	156.5	23.8	16.907 µg/L	16.907 ppb	15:10:10

3	Mg 279.077 IEC†	18.3	6.5	60.273 µg/L	60.273 ppb	15:10:31
3	Na 589.592 Radial†	544.2	-12.6	-4.1463 µg/L	-4.1463 ppb	15:10:10
3	Sr 421.552†	60.1	18.9	0.1962 µg/L	0.1962 ppb	15:10:10
3	Sc 361.383	1998454.5	1998454.5	104.64 %		15:11:47
3	Y 371.029	1371253.2	1371253.2	104.68 %		15:11:47
3	Ag 328.068†	-504.4	82.5	0.6071 µg/L	0.6071 ppb	15:11:53
3	As 188.979†	2.1	0.9	1.6782 µg/L	1.6782 ppb	15:12:13
3	B 249.677†	284.2	-59.9	-2.6163 µg/L	-2.6163 ppb	15:11:53
3	Ba 233.527†	-15.1	11.6	0.2883 µg/L	0.2883 ppb	15:12:13
3	Be 313.107†	-8272.3	-4465.0	-2.9180 µg/L	-2.9180 ppb	15:11:53
3	Cd 226.502†	-264.9	-111.0	-3.0636 µg/L	-3.0636 ppb	15:12:13
3	Co 228.616†	14.5	22.7	1.1081 µg/L	1.1081 ppb	15:12:13
3	Cr 267.716†	231.8	273.9	6.0206 µg/L	6.0206 ppb	15:11:53
3	Cu 324.752†	1499.3	-1053.3	-7.3552 µg/L	-7.3552 ppb	15:11:53
3	Mn 257.610†	138.5	376.5	1.3032 µg/L	1.3032 ppb	15:11:53
3	Mo 202.031†	-2.6	5.1	0.5398 µg/L	0.5398 ppb	15:12:13
3	Ni 231.604†	337.9	20.7	1.1315 µg/L	1.1315 ppb	15:12:13
3	P 214.914†	49.3	19.5	42.611 µg/L	42.611 ppb	15:12:13
3	Pb 220.353†	138.7	35.4	-0.5823 µg/L	-0.5823 ppb	15:12:13
3	S 181.975 Axial†	15.8	0.3	1.1838 µg/L	1.1838 ppb	15:12:13
3	Sb 206.836†	21.8	-6.1	-6.0924 µg/L	-6.0924 ppb	15:12:13
3	Se 196.026†	12.8	-3.6	-5.5591 µg/L	-5.5591 ppb	15:12:13
3	SiO2†	1308.9	0.8	0.1805 µg/L	0.1805 ppb	15:11:53
3	Si 251.611†	268.0	-56.8	-4.6690 µg/L	-4.6690 ppb	15:12:13
3	Sn 189.927†	4.1	4.8	2.1976 µg/L	2.1976 ppb	15:12:13
3	Ti 334.940†	2521.6	2293.7	5.5115 µg/L	5.5115 ppb	15:11:53
3	Tl 190.801†	-25.5	-0.1	11.785 µg/L	11.785 ppb	15:12:13
3	U 409.014†	111497.5	106607.2	9651.9 µg/L	9651.9 ppb	15:11:47
3	V 292.402†	-762.7	-684.7	2.7514 µg/L	2.7514 ppb	15:11:53
3	Zn 213.857†	523.6	24.8	0.6223 µg/L	0.6223 ppb	15:12:13

Mean Data: LRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1989839.7	104.19 %		0.500			0.48%
Sc RADIAL	55712.9	102 %		0.8			0.78%
Y 371.029	1366065.6	104.29 %		0.460			0.44%
Ag 328.068†	103.5	0.7671 µg/L		0.15443	0.7671 ppb	0.15443	20.13%
Al 396.153Radial†	-9.4	-6.9743 µg/L		5.64801	-6.9743 ppb	5.64801	80.98%
As 188.979†	1.7	3.3856 µg/L		1.47930	3.3856 ppb	1.47930	43.69%
B 249.677†	-86.4	-3.7680 µg/L		1.00792	-3.7680 ppb	1.00792	26.75%
Ba 233.527†	-2.4	-0.0762 µg/L		0.35392	-0.0762 ppb	0.35392	464.36%
Be 313.107†	-5036.8	-3.2914 µg/L		0.32768	-3.2914 ppb	0.32768	9.96%
Ca 317.933Radial†	-70.7	-66.567 µg/L		2.6618	-66.567 ppb	2.6618	4.00%
Cd 226.502†	-138.4	-3.8180 µg/L		0.65352	-3.8180 ppb	0.65352	17.12%
Co 228.616†	20.5	0.9983 µg/L		0.42901	0.9983 ppb	0.42901	42.97%
Cr 267.716†	260.0	5.7139 µg/L		0.59254	5.7139 ppb	0.59254	10.37%
Cu 324.752†	-1146.4	-8.0081 µg/L		0.60007	-8.0081 ppb	0.60007	7.49%
Fe 238.204 Radial†	-0.2	-1.5922 µg/L		16.86410	-1.5922 ppb	16.86410	>999.9%
K 766.490 Radial†	26.2	18.643 µg/L		4.5435	18.643 ppb	4.5435	24.37%
Mg 279.077 IEC†	8.7	80.775 µg/L		17.8566	80.775 ppb	17.8566	22.11%
Mn 257.610†	310.8	1.0728 µg/L		0.21196	1.0728 ppb	0.21196	19.76%
Mo 202.031†	-0.6	-0.0649 µg/L		0.56388	-0.0649 ppb	0.56388	868.32%
Na 589.592 Radial†	-1.3	-0.4181 µg/L		3.40391	-0.4181 ppb	3.40391	814.20%
Ni 231.604†	17.5	0.9555 µg/L		0.32641	0.9555 ppb	0.32641	34.16%
P 214.914†	15.8	34.793 µg/L		10.1611	34.793 ppb	10.1611	29.20%
Pb 220.353†	34.6	-1.1824 µg/L		1.01895	-1.1824 ppb	1.01895	86.18%
S 181.975 Axial†	1.0	4.3627 µg/L		2.94264	4.3627 ppb	2.94264	67.45%
Sb 206.836†	-6.5	-6.4875 µg/L		2.88435	-6.4875 ppb	2.88435	44.46%
Se 196.026†	-4.1	-6.3268 µg/L		1.23447	-6.3268 ppb	1.23447	19.51%
SiO2†	-19.4	-4.1826 µg/L		3.88938	-4.1826 ppb	3.88938	92.99%
Si 251.611†	-111.4	-9.1588 µg/L		3.90936	-9.1588 ppb	3.90936	42.68%
Sn 189.927†	6.0	2.7611 µg/L		0.50522	2.7611 ppb	0.50522	18.30%
Sr 421.552†	21.3	0.2204 µg/L		0.03458	0.2204 ppb	0.03458	15.69%
Ti 334.940†	2264.8	5.4403 µg/L		0.11049	5.4403 ppb	0.11049	2.03%
Tl 190.801†	-3.0	8.0675 µg/L		3.69388	8.0675 ppb	3.69388	45.79%
U 409.014†	110725.5	10025 µg/L		324.0	10025 ppb	324.0	3.23%
V 292.402†	-773.6	2.1841 µg/L		0.49139	2.1841 ppb	0.49139	22.50%
Zn 213.857†	15.2	0.3834 µg/L		0.22607	0.3834 ppb	0.22607	58.97%

Sequence No.: 2

Sample ID: LR2

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 114

Date Collected: 2/11/2010 15:12:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	53713.3	53713.3	98.4 %		15:12:55
1	Al 396.153Radial†	-16.2	-6.3	-4.7161 µg/L	-4.7161 ppb	15:12:55
1	Ca 317.933Radial†	188.0	11.9	11.198 µg/L	11.198 ppb	15:13:15
1	Fe 238.204 Radial†	4.2	-10.3	23.498 µg/L	23.498 ppb	15:13:15
1	K 766.490 Radial†	165.7	39.9	28.393 µg/L	28.393 ppb	15:12:55
1	Mg 279.077 IEC†	10.1	-1.1	-9.7514 µg/L	-9.7514 ppb	15:13:15
1	Na 589.592 Radial†	614.8	82.8	27.252 µg/L	27.252 ppb	15:12:55
1	Sr 421.552†	64.3	25.8	0.2675 µg/L	0.2675 ppb	15:12:55
1	Sc 361.383	1941418.8	1941418.8	101.65 %		15:14:18
1	Y 371.029	1323859.1	1323859.1	101.06 %		15:14:18
1	Ag 328.068†	-525.2	47.9	0.3781 µg/L	0.3781 ppb	15:14:24
1	As 188.979†	-3.1	-4.2	-8.1869 µg/L	-8.1869 ppb	15:14:45
1	B 249.677†	750.9	407.3	17.845 µg/L	17.845 ppb	15:14:24
1	Ba 233.527†	-16.3	10.0	0.2610 µg/L	0.2610 ppb	15:14:45
1	Be 313.107†	-3458.2	38.5	0.0250 µg/L	0.0250 ppb	15:14:24
1	Cd 226.502†	-114.7	29.2	0.8189 µg/L	0.8189 ppb	15:14:45
1	Co 228.616†	107569.3	105828.5	5208.2 µg/L	5208.2 ppb	15:14:24
1	Cr 267.716†	-25.9	26.9	0.5925 µg/L	0.5925 ppb	15:14:45
1	Cu 324.752†	1814.1	-701.5	-4.9124 µg/L	-4.9124 ppb	15:14:24
1	Mn 257.610†	-161.2	85.5	0.2849 µg/L	0.2849 ppb	15:14:45
1	Mo 202.031†	-1.5	6.0	0.6418 µg/L	0.6418 ppb	15:14:45
1	Ni 231.604†	346.8	39.0	-4.0742 µg/L	-4.0742 ppb	15:14:45
1	P 214.914†	5345.7	5231.1	11233 µg/L	11233 ppb	15:14:24
1	Pb 220.353†	111.4	12.4	3.3090 µg/L	3.3090 ppb	15:14:45
1	S 181.975 Axial†	16.5	1.4	5.9830 µg/L	5.9830 ppb	15:14:45
1	Sb 206.836†	21.7	-5.6	-5.5036 µg/L	-5.5036 ppb	15:14:45
1	Se 196.026†	12.6	-3.4	-5.4894 µg/L	-5.4894 ppb	15:14:45
1	SiO2†	400045.4	392288.3	84482 µg/L	84482 ppb	15:14:18
1	Si 251.611†	483396.1	475220.4	39066 µg/L	39066 ppb	15:14:18
1	Sn 189.927†	3.3	4.1	1.8920 µg/L	1.8920 ppb	15:14:45
1	Ti 334.940†	305.9	184.8	0.4456 µg/L	0.4456 ppb	15:14:24
1	Tl 190.801†	-3.7	20.7	11.360 µg/L	11.360 ppb	15:14:45
1	U 409.014†	25.3	78.5	7.1194 µg/L	7.1194 ppb	15:14:24
1	V 292.402†	5.9	50.0	0.5361 µg/L	0.5361 ppb	15:14:24
1	Zn 213.857†	522.6	38.6	0.9665 µg/L	0.9665 ppb	15:14:45
2	Sc RADIAL	54832.8	54832.8	100 %		15:13:21
2	Al 396.153Radial†	1.7	11.8	8.7929 µg/L	8.7929 ppb	15:13:21
2	Ca 317.933Radial†	190.7	10.6	10.005 µg/L	10.005 ppb	15:13:42
2	Fe 238.204 Radial†	3.0	-11.5	14.135 µg/L	14.135 ppb	15:13:42
2	K 766.490 Radial†	204.4	75.0	53.328 µg/L	53.328 ppb	15:13:21
2	Mg 279.077 IEC†	11.2	-0.1	-0.6600 µg/L	-0.6600 ppb	15:13:42
2	Na 589.592 Radial†	630.7	85.9	28.272 µg/L	28.272 ppb	15:13:21
2	Sr 421.552†	34.5	-5.2	-0.0538 µg/L	-0.0538 ppb	15:13:21
2	Sc 361.383	1946646.9	1946646.9	101.93 %		15:14:51
2	Y 371.029	1327034.0	1327034.0	101.31 %		15:14:51
2	Ag 328.068†	-584.6	-9.0	-0.0733 µg/L	-0.0733 ppb	15:14:57
2	As 188.979†	-0.2	-1.3	-2.6409 µg/L	-2.6409 ppb	15:15:17
2	B 249.677†	783.8	437.5	19.174 µg/L	19.174 ppb	15:14:57
2	Ba 233.527†	-20.0	6.4	0.1666 µg/L	0.1666 ppb	15:15:17
2	Be 313.107†	-3481.4	24.9	0.0161 µg/L	0.0161 ppb	15:14:57
2	Cd 226.502†	-101.1	42.9	1.1972 µg/L	1.1972 ppb	15:15:17
2	Co 228.616†	108800.7	106752.3	5253.6 µg/L	5253.6 ppb	15:14:57
2	Cr 267.716†	-17.5	35.2	0.7745 µg/L	0.7745 ppb	15:15:17
2	Cu 324.752†	1718.5	-800.1	-5.6024 µg/L	-5.6024 ppb	15:14:57
2	Mn 257.610†	-163.9	83.3	0.2757 µg/L	0.2757 ppb	15:15:17
2	Mo 202.031†	-3.8	3.8	0.4036 µg/L	0.4036 ppb	15:15:17
2	Ni 231.604†	346.9	38.2	-4.1724 µg/L	-4.1724 ppb	15:15:17
2	P 214.914†	5358.7	5229.8	11230 µg/L	11230 ppb	15:14:57
2	Pb 220.353†	113.9	14.6	3.8918 µg/L	3.8918 ppb	15:15:17

2	S 181.975 Axial†	13.2	-1.8	-7.9889 µg/L	-7.9889 ppb	15:15:17
2	Sb 206.836†	30.6	3.1	3.0533 µg/L	3.0533 ppb	15:15:17
2	Se 196.026†	12.9	-3.2	-5.1244 µg/L	-5.1244 ppb	15:15:17
2	SiO2†	401576.7	392733.7	84577 µg/L	84577 ppb	15:14:51
2	Si 251.611†	485309.6	475820.6	39115 µg/L	39115 ppb	15:14:51
2	Sn 189.927†	3.1	3.9	1.7899 µg/L	1.7899 ppb	15:15:17
2	Ti 334.940†	323.3	201.1	0.4839 µg/L	0.4839 ppb	15:14:57
2	Tl 190.801†	-4.0	20.4	10.781 µg/L	10.781 ppb	15:15:17
2	U 409.014†	85.0	137.0	12.417 µg/L	12.417 ppb	15:14:57
2	V 292.402†	14.9	58.8	0.6334 µg/L	0.6334 ppb	15:14:57
2	Zn 213.857†	510.4	25.2	0.6333 µg/L	0.6333 ppb	15:15:17
3	Sc RADIAL	54620.7	54620.7	100 %		15:13:47
3	Al 396.153Radial†	15.7	25.8	19.227 µg/L	19.227 ppb	15:13:47
3	Ca 317.933Radial†	200.8	21.5	20.218 µg/L	20.218 ppb	15:14:07
3	Fe 238.204 Radial†	4.8	-9.7	21.721 µg/L	21.721 ppb	15:14:07
3	K 766.490 Radial†	161.9	33.3	23.669 µg/L	23.669 ppb	15:13:47
3	Mg 279.077 IEC†	10.5	-0.8	-6.9228 µg/L	-6.9228 ppb	15:14:07
3	Na 589.592 Radial†	616.0	73.6	24.220 µg/L	24.220 ppb	15:13:47
3	Sr 421.552†	73.7	34.1	0.3532 µg/L	0.3532 ppb	15:13:47
3	Sc 361.383	1935972.8	1935972.8	101.37 %		15:15:24
3	Y 371.029	1321116.1	1321116.1	100.85 %		15:15:24
3	Ag 328.068†	-522.4	49.2	0.3871 µg/L	0.3871 ppb	15:15:29
3	As 188.979†	-0.6	-1.7	-3.3886 µg/L	-3.3886 ppb	15:15:50
3	B 249.677†	727.0	385.8	16.903 µg/L	16.903 ppb	15:15:29
3	Ba 233.527†	-11.4	14.8	0.3862 µg/L	0.3862 ppb	15:15:50
3	Be 313.107†	-3553.1	-64.7	-0.0425 µg/L	-0.0425 ppb	15:15:29
3	Cd 226.502†	-114.3	29.4	0.8217 µg/L	0.8217 ppb	15:15:50
3	Co 228.616†	100765.6	99414.3	4892.5 µg/L	4892.5 ppb	15:15:29
3	Cr 267.716†	-15.7	36.9	0.8110 µg/L	0.8110 ppb	15:15:50
3	Cu 324.752†	1744.4	-765.3	-5.3569 µg/L	-5.3569 ppb	15:15:29
3	Mn 257.610†	-168.6	77.8	0.2588 µg/L	0.2588 ppb	15:15:50
3	Mo 202.031†	0.8	8.3	0.8836 µg/L	0.8836 ppb	15:15:50
3	Ni 231.604†	347.2	40.4	-3.6217 µg/L	-3.6217 ppb	15:15:50
3	P 214.914†	4995.9	4900.9	10524 µg/L	10524 ppb	15:15:29
3	Pb 220.353†	111.9	13.2	3.5300 µg/L	3.5300 ppb	15:15:50
3	S 181.975 Axial†	14.6	-0.4	-1.9121 µg/L	-1.9121 ppb	15:15:50
3	Sb 206.836†	26.4	-0.9	-0.9265 µg/L	-0.9265 ppb	15:15:50
3	Se 196.026†	6.2	-9.7	-15.059 µg/L	-15.059 ppb	15:15:50
3	SiO2†	389837.5	383325.3	82551 µg/L	82551 ppb	15:15:24
3	Si 251.611†	470845.5	464176.9	38158 µg/L	38158 ppb	15:15:24
3	Sn 189.927†	2.7	3.6	1.6476 µg/L	1.6476 ppb	15:15:50
3	Ti 334.940†	325.3	204.8	0.4935 µg/L	0.4935 ppb	15:15:29
3	Tl 190.801†	-3.6	20.7	12.467 µg/L	12.467 ppb	15:15:50
3	U 409.014†	27.1	80.3	7.2810 µg/L	7.2810 ppb	15:15:29
3	V 292.402†	-16.9	27.5	0.3000 µg/L	0.3000 ppb	15:15:29
3	Zn 213.857†	508.1	25.7	0.6443 µg/L	0.6443 ppb	15:15:50

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1941346.1	101.65 %	0.279			0.27%
Sc RADIAL	54388.9	99.7 %	1.09			1.09%
Y 371.029	1324003.1	101.08 %	0.226			0.22%
Ag 328.068†	29.4	0.2306 µg/L	0.26325	0.2306 ppb	0.26325	114.16%
Al 396.153Radial†	10.4	7.7681 µg/L	12.00458	7.7681 ppb	12.00458	154.54%
As 188.979†	-2.4	-4.7388 µg/L	3.00947	-4.7388 ppb	3.00947	63.51%
B 249.677†	410.2	17.974 µg/L	1.1410	17.974 ppb	1.1410	6.35%
Ba 233.527†	10.4	0.2713 µg/L	0.11018	0.2713 ppb	0.11018	40.61%
Be 313.107†	-0.4	-0.0005 µg/L	0.03663	-0.0005 ppb	0.03663	>999.9%
Ca 317.933Radial†	14.7	13.807 µg/L	5.5841	13.807 ppb	5.5841	40.44%
Cd 226.502†	33.8	0.9459 µg/L	0.21761	0.9459 ppb	0.21761	23.01%
Co 228.616†	103998.4	5118.1 µg/L	196.69	5118.1 ppb	196.69	3.84%
Cr 267.716†	33.0	0.7260 µg/L	0.11700	0.7260 ppb	0.11700	16.12%
Cu 324.752†	-755.6	-5.2906 µg/L	0.34975	-5.2906 ppb	0.34975	6.61%
Fe 238.204 Radial†	-10.5	19.785 µg/L	4.9725	19.785 ppb	4.9725	25.13%
K 766.490 Radial†	49.4	35.130 µg/L	15.9357	35.130 ppb	15.9357	45.36%
Mg 279.077 IEC†	-0.6	-5.7780 µg/L	4.65251	-5.7780 ppb	4.65251	80.52%
Mn 257.610†	82.2	0.2731 µg/L	0.01325	0.2731 ppb	0.01325	4.85%
Mo 202.031†	6.1	0.6430 µg/L	0.24004	0.6430 ppb	0.24004	37.33%
Na 589.592 Radial†	80.7	26.581 µg/L	2.1079	26.581 ppb	2.1079	7.93%

Ni 231.604†	39.2	-3.9561 µg/L	0.29375	-3.9561 ppb	0.29375	7.43%
P 214.914†	5120.6	10995 µg/L	408.6	10995 ppb	408.6	3.72%
Pb 220.353†	13.4	3.5769 µg/L	0.29424	3.5769 ppb	0.29424	8.23%
S 181.975 Axial†	-0.3	-1.3060 µg/L	7.00565	-1.3060 ppb	7.00565	536.41%
Sb 206.836†	-1.1	-1.1256 µg/L	4.28189	-1.1256 ppb	4.28189	380.41%
Se 196.026†	-5.5	-8.5576 µg/L	5.63334	-8.5576 ppb	5.63334	65.83%
SiO2†	389449.1	83870 µg/L	1143.1	83870 ppb	1143.1	1.36%
Si 251.611†	471739.3	38779 µg/L	538.9	38779 ppb	538.9	1.39%
Sn 189.927†	3.8	1.7765 µg/L	0.12277	1.7765 ppb	0.12277	6.91%
Sr 421.552†	18.2	0.1890 µg/L	0.21456	0.1890 ppb	0.21456	113.55%
Ti 334.940†	196.9	0.4743 µg/L	0.02534	0.4743 ppb	0.02534	5.34%
Tl 190.801†	20.6	11.536 µg/L	0.8566	11.536 ppb	0.8566	7.43%
U 409.014†	98.6	8.9390 µg/L	3.01276	8.9390 ppb	3.01276	33.70%
V 292.402†	45.5	0.4899 µg/L	0.17143	0.4899 ppb	0.17143	35.00%
Zn 213.857†	29.8	0.7480 µg/L	0.18929	0.7480 ppb	0.18929	25.31%

Sequence No.: 3

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 15:15:59

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	54231.5	54231.5	99.4 %		15:16:36
1	Al 396.153Radial†	7106.2	7161.2	5326.1 µg/L	5326.1 ppb	15:16:36
1	Ca 317.933Radial†	5688.9	5545.7	5221.6 µg/L	5221.6 ppb	15:16:56
1	Fe 238.204 Radial†	634.7	624.2	5302.1 µg/L	5302.1 ppb	15:16:56
1	K 766.490 Radial†	7456.0	7374.7	5241.9 µg/L	5241.9 ppb	15:16:36
1	Mg 279.077 IEC†	577.6	570.0	5308.0 µg/L	5308.0 ppb	15:16:56
1	Na 589.592 Radial†	32401.3	32064.3	10556 µg/L	10556 ppb	15:16:36
1	Sr 421.552†	50354.2	50633.0	524.87 µg/L	524.87 ppb	15:16:36
1	Sc 361.383	1899310.9	1899310.9	99.449 %		15:17:59
1	Y 371.029	1297484.4	1297484.4	99.051 %		15:17:59
1	Ag 328.068†	65095.3	66020.7	527.69 µg/L	527.69 ppb	15:18:05
1	As 188.979†	283.8	284.2	554.43 µg/L	554.43 ppb	15:18:26
1	B 249.677†	12153.8	11889.7	517.70 µg/L	517.70 ppb	15:18:05
1	Ba 233.527†	20078.6	20215.9	527.34 µg/L	527.34 ppb	15:18:05
1	Be 313.107†	797857.7	805721.3	525.98 µg/L	525.98 ppb	15:17:59
1	Cd 226.502†	18953.5	19200.7	529.65 µg/L	529.65 ppb	15:18:05
1	Co 228.616†	10779.9	10848.5	533.28 µg/L	533.28 ppb	15:18:05
1	Cr 267.716†	24091.2	24277.1	534.33 µg/L	534.33 ppb	15:18:05
1	Cu 324.752†	77848.6	75794.1	530.18 µg/L	530.18 ppb	15:18:05
1	Mn 257.610†	153606.0	154701.7	536.20 µg/L	536.20 ppb	15:17:59
1	Mo 202.031†	5175.2	5211.4	556.37 µg/L	556.37 ppb	15:18:26
1	Ni 231.604†	10008.1	9761.4	533.14 µg/L	533.14 ppb	15:18:05
1	P 214.914†	1295.2	1274.7	2686.7 µg/L	2686.7 ppb	15:18:26
1	Pb 220.353†	2124.5	2039.1	544.31 µg/L	544.31 ppb	15:18:26
1	S 181.975 Axial†	260.7	247.3	1083.6 µg/L	1083.6 ppb	15:18:26
1	Sb 206.836†	587.4	563.7	557.41 µg/L	557.41 ppb	15:18:26
1	Se 196.026†	370.9	357.1	552.71 µg/L	552.71 ppb	15:18:26
1	SiO2†	27461.3	26363.5	5677.5 µg/L	5677.5 ppb	15:18:05
1	Si 251.611†	32393.9	32260.7	2652.0 µg/L	2652.0 ppb	15:18:05
1	Sn 189.927†	1213.6	1221.2	561.69 µg/L	561.69 ppb	15:18:26
1	Ti 334.940†	219433.8	220534.1	530.14 µg/L	530.14 ppb	15:17:59
1	Tl 190.801†	358.1	384.4	542.92 µg/L	542.92 ppb	15:18:26
1	U 409.014†	5858.6	5944.7	537.16 µg/L	537.16 ppb	15:18:05
1	V 292.402†	49239.4	49556.6	534.84 µg/L	534.84 ppb	15:18:05
1	Zn 213.857†	21646.0	21290.4	527.88 µg/L	527.88 ppb	15:18:05
2	Sc RADIAL	54850.6	54850.6	101 %		15:17:02
2	Al 396.153Radial†	7137.6	7111.8	5289.4 µg/L	5289.4 ppb	15:17:02
2	Ca 317.933Radial†	5661.7	5454.1	5135.3 µg/L	5135.3 ppb	15:17:22
2	Fe 238.204 Radial†	627.5	609.8	5179.7 µg/L	5179.7 ppb	15:17:22
2	K 766.490 Radial†	7509.6	7343.3	5219.6 µg/L	5219.6 ppb	15:17:02
2	Mg 279.077 IEC†	583.7	569.5	5303.7 µg/L	5303.7 ppb	15:17:22
2	Na 589.592 Radial†	32499.9	31794.4	10467 µg/L	10467 ppb	15:17:02
2	Sr 421.552†	50507.4	50213.6	520.52 µg/L	520.52 ppb	15:17:02
2	Sc 361.383	1912998.8	1912998.8	100.17 %		15:18:33
2	Y 371.029	1306161.3	1306161.3	99.713 %		15:18:33
2	Ag 328.068†	65237.5	65694.3	525.07 µg/L	525.07 ppb	15:18:38
2	As 188.979†	280.6	279.0	544.24 µg/L	544.24 ppb	15:18:59
2	B 249.677†	12200.8	11849.2	515.98 µg/L	515.98 ppb	15:18:38
2	Ba 233.527†	20133.5	20126.3	525.01 µg/L	525.01 ppb	15:18:38
2	Be 313.107†	793302.5	795433.1	519.26 µg/L	519.26 ppb	15:18:33
2	Cd 226.502†	18921.4	19032.3	525.02 µg/L	525.02 ppb	15:18:38
2	Co 228.616†	10784.1	10775.1	529.68 µg/L	529.68 ppb	15:18:38
2	Cr 267.716†	24047.5	24060.2	529.56 µg/L	529.56 ppb	15:18:38
2	Cu 324.752†	77783.7	75169.2	525.79 µg/L	525.79 ppb	15:18:38
2	Mn 257.610†	152510.0	152502.3	528.57 µg/L	528.57 ppb	15:18:33
2	Mo 202.031†	5149.2	5148.2	549.62 µg/L	549.62 ppb	15:18:59
2	Ni 231.604†	10009.6	9690.9	529.28 µg/L	529.28 ppb	15:18:38
2	P 214.914†	1298.8	1269.0	2674.9 µg/L	2674.9 ppb	15:18:59
2	Pb 220.353†	2130.1	2029.4	541.73 µg/L	541.73 ppb	15:18:59

2	S 181.975 Axial†	263.5	248.2	1087.5 µg/L	1087.5 ppb	15:18:59
2	Sb 206.836†	579.7	551.8	545.70 µg/L	545.70 ppb	15:18:59
2	Se 196.026†	360.4	343.9	532.32 µg/L	532.32 ppb	15:18:59
2	SiO2†	27531.6	26236.1	5650.1 µg/L	5650.1 ppb	15:18:38
2	Si 251.611†	32505.0	32138.5	2641.9 µg/L	2641.9 ppb	15:18:38
2	Sn 189.927†	1205.3	1204.2	553.89 µg/L	553.89 ppb	15:18:59
2	Ti 334.940†	218053.7	217577.6	523.03 µg/L	523.03 ppb	15:18:33
2	Tl 190.801†	351.0	374.7	529.24 µg/L	529.24 ppb	15:18:59
2	U 409.014†	5767.6	5811.7	525.14 µg/L	525.14 ppb	15:18:38
2	V 292.402†	49305.2	49268.0	531.68 µg/L	531.68 ppb	15:18:38
2	Zn 213.857†	21685.0	21173.7	524.99 µg/L	524.99 ppb	15:18:38
3	Sc RADIAL	55041.7	55041.7	101 %		15:17:27
3	Al 396.153Radial†	7150.5	7100.0	5282.4 µg/L	5282.4 ppb	15:17:27
3	Ca 317.933Radial†	5679.0	5451.7	5133.1 µg/L	5133.1 ppb	15:17:48
3	Fe 238.204 Radial†	630.1	610.3	5182.9 µg/L	5182.9 ppb	15:17:48
3	K 766.490 Radial†	7530.7	7338.3	5216.0 µg/L	5216.0 ppb	15:17:27
3	Mg 279.077 IEC†	585.8	569.6	5302.7 µg/L	5302.7 ppb	15:17:48
3	Na 589.592 Radial†	32646.4	31827.3	10478 µg/L	10478 ppb	15:17:27
3	Sr 421.552†	50673.8	50204.0	520.42 µg/L	520.42 ppb	15:17:27
3	Sc 361.383	1908268.1	1908268.1	99.918 %		15:19:06
3	Y 371.029	1302480.0	1302480.0	99.432 %		15:19:06
3	Ag 328.068†	61722.8	62338.2	498.13 µg/L	498.13 ppb	15:19:11
3	As 188.979†	239.2	238.3	464.88 µg/L	464.88 ppb	15:19:32
3	B 249.677†	11534.0	11212.0	488.05 µg/L	488.05 ppb	15:19:11
3	Ba 233.527†	18616.9	18658.3	486.70 µg/L	486.70 ppb	15:19:11
3	Be 313.107†	758183.0	762248.0	497.60 µg/L	497.60 ppb	15:19:06
3	Cd 226.502†	17482.4	17638.9	486.53 µg/L	486.53 ppb	15:19:11
3	Co 228.616†	9936.5	9953.5	489.22 µg/L	489.22 ppb	15:19:11
3	Cr 267.716†	21502.9	21573.0	474.82 µg/L	474.82 ppb	15:19:11
3	Cu 324.752†	71603.1	69176.0	483.93 µg/L	483.93 ppb	15:19:11
3	Mn 257.610†	146044.9	146409.3	507.47 µg/L	507.47 ppb	15:19:06
3	Mo 202.031†	4268.9	4280.0	456.96 µg/L	456.96 ppb	15:19:32
3	Ni 231.604†	9195.7	8901.1	486.15 µg/L	486.15 ppb	15:19:11
3	P 214.914†	1105.2	1078.5	2268.7 µg/L	2268.7 ppb	15:19:32
3	Pb 220.353†	1828.3	1732.6	462.41 µg/L	462.41 ppb	15:19:32
3	S 181.975 Axial†	232.1	217.5	952.80 µg/L	952.80 ppb	15:19:32
3	Sb 206.836†	493.7	467.1	461.46 µg/L	461.46 ppb	15:19:32
3	Se 196.026†	316.9	301.3	467.33 µg/L	467.33 ppb	15:19:32
3	SiO2†	25842.8	24614.0	5300.8 µg/L	5300.8 ppb	15:19:11
3	Si 251.611†	30435.2	30147.4	2478.3 µg/L	2478.3 ppb	15:19:11
3	Sn 189.927†	977.2	978.9	450.28 µg/L	450.28 ppb	15:19:32
3	Ti 334.940†	207237.8	207292.4	498.29 µg/L	498.29 ppb	15:19:06
3	Tl 190.801†	318.0	342.6	484.22 µg/L	484.22 ppb	15:19:32
3	U 409.014†	5210.6	5268.5	475.96 µg/L	475.96 ppb	15:19:11
3	V 292.402†	44791.7	44872.9	483.94 µg/L	483.94 ppb	15:19:11
3	Zn 213.857†	19890.6	19431.5	481.75 µg/L	481.75 ppb	15:19:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1906859.3	99.844 %	0.3640			0.36%
Sc RADIAL	54707.9	100 %	0.8			0.77%
Y 371.029	1302041.9	99.399 %	0.3325			0.33%
Ag 328.068†	64684.4	516.97 µg/L	16.362	516.97 ppb	16.362	3.16%
QC value within limits for Ag 328.068 Recovery = 103.39%						
Al 396.153Radial†	7124.3	5299.3 µg/L	23.43	5299.3 ppb	23.43	0.44%
QC value within limits for Al 396.153Radial Recovery = 105.99%						
As 188.979†	267.2	521.18 µg/L	49.028	521.18 ppb	49.028	9.41%
QC value within limits for As 188.979 Recovery = 104.24%						
B 249.677†	11650.3	507.24 µg/L	16.645	507.24 ppb	16.645	3.28%
QC value within limits for B 249.677 Recovery = 101.45%						
Ba 233.527†	19666.8	513.02 µg/L	22.823	513.02 ppb	22.823	4.45%
QC value within limits for Ba 233.527 Recovery = 102.60%						
Be 313.107†	787800.8	514.28 µg/L	14.831	514.28 ppb	14.831	2.88%
QC value within limits for Be 313.107 Recovery = 102.86%						
Ca 317.933Radial†	5483.8	5163.4 µg/L	50.50	5163.4 ppb	50.50	0.98%
QC value within limits for Ca 317.933Radial Recovery = 103.27%						
Cd 226.502†	18623.9	513.73 µg/L	23.671	513.73 ppb	23.671	4.61%
QC value within limits for Cd 226.502 Recovery = 102.75%						
Co 228.616†	10525.7	517.39 µg/L	24.470	517.39 ppb	24.470	4.73%

QC value within limits for Co 228.616 Recovery = 103.48%							
Cr 267.716†	23303.5	512.91 µg/L	33.067	512.91 ppb	33.067	6.45%	
QC value within limits for Cr 267.716 Recovery = 102.58%							
Cu 324.752†	73379.7	513.30 µg/L	25.529	513.30 ppb	25.529	4.97%	
QC value within limits for Cu 324.752 Recovery = 102.66%							
Fe 238.204 Radial†	614.8	5221.6 µg/L	69.73	5221.6 ppb	69.73	1.34%	
QC value within limits for Fe 238.204 Radial Recovery = 104.43%							
K 766.490 Radial†	7352.1	5225.8 µg/L	14.03	5225.8 ppb	14.03	0.27%	
QC value within limits for K 766.490 Radial Recovery = 104.52%							
Mg 279.077 IEC†	569.7	5304.8 µg/L	2.78	5304.8 ppb	2.78	0.05%	
QC value within limits for Mg 279.077 IEC Recovery = 106.10%							
Mn 257.610†	151204.4	524.08 µg/L	14.882	524.08 ppb	14.882	2.84%	
QC value within limits for Mn 257.610 Recovery = 104.82%							
Mo 202.031†	4879.9	520.98 µg/L	55.549	520.98 ppb	55.549	10.66%	
QC value within limits for Mo 202.031 Recovery = 104.20%							
Na 589.592 Radial†	31895.3	10500 µg/L	48.5	10500 ppb	48.5	0.46%	
QC value within limits for Na 589.592 Radial Recovery = 105.00%							
Ni 231.604†	9451.1	516.19 µg/L	26.085	516.19 ppb	26.085	5.05%	
QC value within limits for Ni 231.604 Recovery = 103.24%							
P 214.914†	1207.4	2543.4 µg/L	237.97	2543.4 ppb	237.97	9.36%	
QC value within limits for P 214.914 Recovery = 101.74%							
Pb 220.353†	1933.7	516.15 µg/L	46.558	516.15 ppb	46.558	9.02%	
QC value within limits for Pb 220.353 Recovery = 103.23%							
S 181.975 Axial†	237.7	1041.3 µg/L	76.67	1041.3 ppb	76.67	7.36%	
QC value within limits for S 181.975 Axial Recovery = 104.13%							
Sb 206.836†	527.5	521.52 µg/L	52.346	521.52 ppb	52.346	10.04%	
QC value within limits for Sb 206.836 Recovery = 104.30%							
Se 196.026†	334.1	517.45 µg/L	44.586	517.45 ppb	44.586	8.62%	
QC value within limits for Se 196.026 Recovery = 103.49%							
SiO2†	25737.9	5542.8 µg/L	210.05	5542.8 ppb	210.05	3.79%	
QC value within limits for SiO2 Recovery = 103.65%							
Si 251.611†	31515.5	2590.7 µg/L	97.53	2590.7 ppb	97.53	3.76%	
QC value within limits for Si 251.611 Recovery = 103.63%							
Sn 189.927†	1134.8	521.95 µg/L	62.194	521.95 ppb	62.194	11.92%	
QC value within limits for Sn 189.927 Recovery = 104.39%							
Sr 421.552†	50350.2	521.94 µg/L	2.539	521.94 ppb	2.539	0.49%	
QC value within limits for Sr 421.552 Recovery = 104.39%							
Ti 334.940†	215134.7	517.15 µg/L	16.720	517.15 ppb	16.720	3.23%	
QC value within limits for Ti 334.940 Recovery = 103.43%							
Tl 190.801†	367.2	518.79 µg/L	30.715	518.79 ppb	30.715	5.92%	
QC value within limits for Tl 190.801 Recovery = 103.76%							
U 409.014†	5675.0	512.76 µg/L	32.426	512.76 ppb	32.426	6.32%	
QC value within limits for U 409.014 Recovery = 102.55%							
V 292.402†	47899.1	516.82 µg/L	28.516	516.82 ppb	28.516	5.52%	
QC value within limits for V 292.402 Recovery = 103.36%							
Zn 213.857†	20631.8	511.54 µg/L	25.841	511.54 ppb	25.841	5.05%	
QC value within limits for Zn 213.857 Recovery = 102.31%							
All analyte(s) passed QC.							

Sequence No.: 4

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 15:19:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	53966.4	53966.4	98.9 %		15:20:14
1	Al 396.153Radial†	-26.0	-16.1	-12.005 µg/L	-12.005 ppb	15:20:14
1	Ca 317.933Radial†	184.6	7.5	7.0536 µg/L	7.0536 ppb	15:20:34
1	Fe 238.204 Radial†	14.2	-0.1	-0.8468 µg/L	-0.8468 ppb	15:20:34
1	K 766.490 Radial†	181.9	55.5	39.479 µg/L	39.479 ppb	15:20:14
1	Mg 279.077 IEC†	12.1	1.0	9.1967 µg/L	9.1967 ppb	15:20:34
1	Na 589.592 Radial†	657.2	122.7	40.408 µg/L	40.408 ppb	15:20:14
1	Sr 421.552†	65.1	26.3	0.2722 µg/L	0.2722 ppb	15:20:14
1	Sc 361.383	1911106.6	1911106.6	100.07 %		15:21:36
1	Y 371.029	1309549.6	1309549.6	99.972 %		15:21:36
1	Ag 328.068†	-559.4	5.5	0.0442 µg/L	0.0442 ppb	15:21:42
1	As 188.979†	-3.0	-4.1	-8.0395 µg/L	-8.0395 ppb	15:22:02
1	B 249.677†	346.9	15.2	0.6669 µg/L	0.6669 ppb	15:22:02
1	Ba 233.527†	-26.7	-0.7	-0.0185 µg/L	-0.0185 ppb	15:22:02
1	Be 313.107†	-3454.2	-11.4	-0.0075 µg/L	-0.0075 ppb	15:21:42
1	Cd 226.502†	-139.0	3.2	0.0893 µg/L	0.0893 ppb	15:22:02
1	Co 228.616†	-9.2	-0.3	-0.0170 µg/L	-0.0170 ppb	15:22:02
1	Cr 267.716†	-37.5	14.9	0.3282 µg/L	0.3282 ppb	15:21:42
1	Cu 324.752†	2557.0	69.2	0.4835 µg/L	0.4835 ppb	15:21:42
1	Mn 257.610†	-212.1	32.2	0.1110 µg/L	0.1110 ppb	15:22:02
1	Mo 202.031†	-8.5	-0.9	-0.1000 µg/L	-0.1000 ppb	15:22:02
1	Ni 231.604†	310.7	8.3	0.4558 µg/L	0.4558 ppb	15:22:02
1	P 214.914†	28.4	0.8	1.6386 µg/L	1.6386 ppb	15:22:02
1	Pb 220.353†	104.0	6.7	1.8057 µg/L	1.8057 ppb	15:22:02
1	S 181.975 Axial†	16.5	1.7	7.4394 µg/L	7.4394 ppb	15:22:02
1	Sb 206.836†	29.0	2.0	1.9993 µg/L	1.9993 ppb	15:22:02
1	Se 196.026†	21.9	6.0	9.1749 µg/L	9.1749 ppb	15:22:02
1	SiO2†	1293.6	42.7	9.2028 µg/L	9.2028 ppb	15:21:42
1	Si 251.611†	353.1	40.0	3.2887 µg/L	3.2887 ppb	15:22:02
1	Sn 189.927†	4.9	5.8	2.6719 µg/L	2.6719 ppb	15:22:02
1	Ti 334.940†	159.7	43.4	0.1039 µg/L	0.1039 ppb	15:21:42
1	Tl 190.801†	-23.8	0.5	0.6768 µg/L	0.6768 ppb	15:22:02
1	U 409.014†	-184.4	-130.7	-11.830 µg/L	-11.830 ppb	15:21:42
1	V 292.402†	-35.9	8.3	0.0760 µg/L	0.0760 ppb	15:21:42
1	Zn 213.857†	494.3	18.4	0.4572 µg/L	0.4572 ppb	15:22:02
2	Sc RADIAL	54869.8	54869.8	101 %		15:20:40
2	Al 396.153Radial†	13.7	23.8	17.738 µg/L	17.738 ppb	15:20:40
2	Ca 317.933Radial†	187.7	7.5	7.0950 µg/L	7.0950 ppb	15:21:00
2	Fe 238.204 Radial†	15.7	1.1	9.3064 µg/L	9.3064 ppb	15:21:00
2	K 766.490 Radial†	257.4	127.6	90.719 µg/L	90.719 ppb	15:20:40
2	Mg 279.077 IEC†	16.3	4.9	45.809 µg/L	45.809 ppb	15:21:00
2	Na 589.592 Radial†	606.0	60.8	20.024 µg/L	20.024 ppb	15:20:40
2	Sr 421.552†	22.5	-17.2	-0.1781 µg/L	-0.1781 ppb	15:20:40
2	Sc 361.383	1897412.4	1897412.4	99.349 %		15:22:08
2	Y 371.029	1298760.9	1298760.9	99.148 %		15:22:08
2	Ag 328.068†	-542.2	18.8	0.1523 µg/L	0.1523 ppb	15:22:14
2	As 188.979†	-3.1	-4.3	-8.3435 µg/L	-8.3435 ppb	15:22:34
2	B 249.677†	336.8	7.5	0.3241 µg/L	0.3241 ppb	15:22:34
2	Ba 233.527†	-16.5	9.4	0.2467 µg/L	0.2467 ppb	15:22:34
2	Be 313.107†	-3415.0	3.0	0.0019 µg/L	0.0019 ppb	15:22:14
2	Cd 226.502†	-128.8	12.5	0.3432 µg/L	0.3432 ppb	15:22:34
2	Co 228.616†	-5.7	3.1	0.1511 µg/L	0.1511 ppb	15:22:34
2	Cr 267.716†	-15.6	36.7	0.8074 µg/L	0.8074 ppb	15:22:14
2	Cu 324.752†	2549.9	80.5	0.5637 µg/L	0.5637 ppb	15:22:14
2	Mn 257.610†	-177.5	65.4	0.2260 µg/L	0.2260 ppb	15:22:34
2	Mo 202.031†	-7.3	0.2	0.0178 µg/L	0.0178 ppb	15:22:34
2	Ni 231.604†	306.5	6.3	0.3468 µg/L	0.3468 ppb	15:22:34
2	P 214.914†	31.7	4.3	9.0650 µg/L	9.0650 ppb	15:22:34
2	Pb 220.353†	106.2	9.7	2.5827 µg/L	2.5827 ppb	15:22:34

2	S 181.975 Axial†	17.2	2.5	10.929 µg/L	10.929 ppb	15:22:34
2	Sb 206.836†	25.7	-1.1	-1.0721 µg/L	-1.0721 ppb	15:22:34
2	Se 196.026†	18.6	2.9	4.4089 µg/L	4.4089 ppb	15:22:34
2	SiO2†	1247.0	5.2	1.1103 µg/L	1.1103 ppb	15:22:14
2	Si 251.611†	359.1	48.5	3.9904 µg/L	3.9904 ppb	15:22:34
2	Sn 189.927†	-1.6	-0.8	-0.3440 µg/L	-0.3440 ppb	15:22:34
2	Ti 334.940†	171.3	56.3	0.1319 µg/L	0.1319 ppb	15:22:14
2	Tl 190.801†	-21.8	2.3	3.2311 µg/L	3.2311 ppb	15:22:34
2	U 409.014†	-98.3	-45.3	-4.1055 µg/L	-4.1055 ppb	15:22:14
2	V 292.402†	-5.8	38.4	0.4080 µg/L	0.4080 ppb	15:22:14
2	Zn 213.857†	499.6	27.3	0.6761 µg/L	0.6761 ppb	15:22:34
3	Sc RADIAL	54385.0	54385.0	99.7 %		15:21:06
3	Al 396.153Radial†	-13.7	-3.6	-2.7248 µg/L	-2.7248 ppb	15:21:06
3	Ca 317.933Radial†	185.2	6.7	6.3429 µg/L	6.3429 ppb	15:21:26
3	Fe 238.204 Radial†	16.3	1.8	15.415 µg/L	15.415 ppb	15:21:26
3	K 766.490 Radial†	182.4	54.6	38.797 µg/L	38.797 ppb	15:21:06
3	Mg 279.077 IEC†	9.2	-2.0	-18.753 µg/L	-18.753 ppb	15:21:26
3	Na 589.592 Radial†	592.4	52.6	17.324 µg/L	17.324 ppb	15:21:06
3	Sr 421.552†	-3.5	-43.1	-0.4464 µg/L	-0.4464 ppb	15:21:06
3	Sc 361.383	1884488.6	1884488.6	98.673 %		15:22:40
3	Y 371.029	1291927.9	1291927.9	98.627 %		15:22:40
3	Ag 328.068†	-522.7	34.8	0.2806 µg/L	0.2806 ppb	15:22:46
3	As 188.979†	2.4	1.3	2.4649 µg/L	2.4649 ppb	15:23:06
3	B 249.677†	335.7	8.8	0.3768 µg/L	0.3768 ppb	15:23:06
3	Ba 233.527†	-11.8	14.1	0.3676 µg/L	0.3676 ppb	15:23:06
3	Be 313.107†	-3127.8	270.6	0.1766 µg/L	0.1766 ppb	15:22:46
3	Cd 226.502†	-124.4	16.0	0.4414 µg/L	0.4414 ppb	15:23:06
3	Co 228.616†	7.6	16.5	0.8149 µg/L	0.8149 ppb	15:23:06
3	Cr 267.716†	-23.5	28.6	0.6295 µg/L	0.6295 ppb	15:22:46
3	Cu 324.752†	2622.5	171.7	1.2017 µg/L	1.2017 ppb	15:22:46
3	Mn 257.610†	-142.0	100.2	0.3497 µg/L	0.3497 ppb	15:23:06
3	Mo 202.031†	3.2	10.8	1.1512 µg/L	1.1512 ppb	15:23:06
3	Ni 231.604†	306.2	8.2	0.4462 µg/L	0.4462 ppb	15:23:06
3	P 214.914†	29.6	2.4	5.0144 µg/L	5.0144 ppb	15:23:06
3	Pb 220.353†	103.4	7.6	2.0339 µg/L	2.0339 ppb	15:23:06
3	S 181.975 Axial†	18.5	3.9	17.268 µg/L	17.268 ppb	15:23:06
3	Sb 206.836†	29.4	2.8	2.8126 µg/L	2.8126 ppb	15:23:06
3	Se 196.026†	10.8	-4.9	-7.3717 µg/L	-7.3717 ppb	15:23:06
3	SiO2†	1294.7	62.1	13.372 µg/L	13.372 ppb	15:22:46
3	Si 251.611†	373.7	65.9	5.4177 µg/L	5.4177 ppb	15:23:06
3	Sn 189.927†	0.7	1.6	0.7177 µg/L	0.7177 ppb	15:23:06
3	Ti 334.940†	234.9	122.0	0.2950 µg/L	0.2950 ppb	15:22:46
3	Tl 190.801†	-24.9	-0.9	-1.2684 µg/L	-1.2684 ppb	15:23:06
3	U 409.014†	-88.3	-35.9	-3.2543 µg/L	-3.2543 ppb	15:22:46
3	V 292.402†	2.7	46.9	0.5091 µg/L	0.5091 ppb	15:22:46
3	Zn 213.857†	512.3	43.6	1.0859 µg/L	1.0859 ppb	15:23:06

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1897669.2	99.363 %		0.6970				0.70%
Sc RADIAL	54407.1	99.7 %		0.83				0.83%
Y 371.029	1300079.5	99.249 %		0.6782				0.68%
Ag 328.068†	19.7	0.1590 µg/L		0.11838	0.1590 ppb		0.11838	74.44%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.4	1.0028 µg/L		15.21758	1.0028 ppb		15.21758	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.4	-4.6394 µg/L		6.15437	-4.6394 ppb		6.15437	132.66%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	10.5	0.4560 µg/L		0.18460	0.4560 ppb		0.18460	40.49%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.6	0.1986 µg/L		0.19747	0.1986 ppb		0.19747	99.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	87.4	0.0570 µg/L		0.10368	0.0570 ppb		0.10368	181.85%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	7.3	6.8305 µg/L		0.42277	6.8305 ppb		0.42277	6.19%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	10.6	0.2913 µg/L		0.18170	0.2913 ppb		0.18170	62.37%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	6.4	0.3163 µg/L		0.43987	0.3163 ppb		0.43987	139.05%

Cr	267.716†	26.7	0.5884 µg/L	0.24227	0.5884 ppb	0.24227	41.18%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	107.2	0.7496 µg/L	0.39354	0.7496 ppb	0.39354	52.50%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.9	7.9581 µg/L	8.21418	7.9581 ppb	8.21418	103.22%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	79.3	56.332 µg/L	29.7823	56.332 ppb	29.7823	52.87%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	1.3	12.084 µg/L	32.3776	12.084 ppb	32.3776	267.93%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	65.9	0.2289 µg/L	0.11938	0.2289 ppb	0.11938	52.15%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	3.3	0.3563 µg/L	0.69086	0.3563 ppb	0.69086	193.88%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	78.7	25.918 µg/L	12.6205	25.918 ppb	12.6205	48.69%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	7.6	0.4162 µg/L	0.06037	0.4162 ppb	0.06037	14.50%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	2.5	5.2393 µg/L	3.71831	5.2393 ppb	3.71831	70.97%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	8.0	2.1408 µg/L	0.39934	2.1408 ppb	0.39934	18.65%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	2.7	11.879 µg/L	4.9829	11.879 ppb	4.9829	41.95%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	1.3	1.2466 µg/L	2.04884	1.2466 ppb	2.04884	164.36%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	1.4	2.0707 µg/L	8.51747	2.0707 ppb	8.51747	411.33%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		36.7	7.8950 µg/L	6.23447	7.8950 ppb	6.23447	78.97%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	51.5	4.2323 µg/L	1.08494	4.2323 ppb	1.08494	25.63%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	2.2	1.0152 µg/L	1.52977	1.0152 ppb	1.52977	150.68%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-11.3	-0.1174 µg/L	0.36313	-0.1174 ppb	0.36313	309.29%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	73.9	0.1769 µg/L	0.10323	0.1769 ppb	0.10323	58.35%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	0.6	0.8799 µg/L	2.25661	0.8799 ppb	2.25661	256.47%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	-70.6	-6.3965 µg/L	4.72449	-6.3965 ppb	4.72449	73.86%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	31.2	0.3310 µg/L	0.22659	0.3310 ppb	0.22659	68.45%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	29.8	0.7397 µg/L	0.31916	0.7397 ppb	0.31916	43.15%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 15:57:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57410.8	57410.8	105 %		15:58:05
1	Al 396.153Radial†	6675.8	6356.1	4727.0 µg/L	4727.0 ppb	15:58:25
1	Ca 317.933Radial†	5505.2	5054.0	4758.7 µg/L	4758.7 ppb	15:58:25
1	Fe 238.204 Radial†	598.7	554.6	4711.3 µg/L	4711.3 ppb	15:58:25
1	K 766.490 Radial†	7251.0	6764.3	4808.0 µg/L	4808.0 ppb	15:58:05
1	Mg 279.077 IEC†	563.5	524.3	4883.2 µg/L	4883.2 ppb	15:58:25
1	Na 589.592 Radial†	31835.2	29720.5	9784.1 µg/L	9784.1 ppb	15:58:05
1	Sr 421.552†	47847.7	45444.2	471.08 µg/L	471.08 ppb	15:58:05
1	Sc 361.383	1983693.6	1983693.6	103.87 %		15:59:29
1	Y 371.029	1353410.2	1353410.2	103.32 %		15:59:29
1	Ag 328.068†	62797.6	61024.1	487.72 µg/L	487.72 ppb	15:59:34
1	As 188.979†	269.1	257.9	503.15 µg/L	503.15 ppb	15:59:55
1	B 249.677†	11717.3	10949.6	476.85 µg/L	476.85 ppb	15:59:34
1	Ba 233.527†	19343.1	18649.0	486.47 µg/L	486.47 ppb	15:59:34
1	Be 313.107†	754921.5	730256.0	476.72 µg/L	476.72 ppb	15:59:29
1	Cd 226.502†	18224.6	17688.2	487.95 µg/L	487.95 ppb	15:59:34
1	Co 228.616†	10367.0	9989.9	491.09 µg/L	491.09 ppb	15:59:34
1	Cr 267.716†	23052.3	22246.4	489.64 µg/L	489.64 ppb	15:59:34
1	Cu 324.752†	74680.1	69413.7	485.52 µg/L	485.52 ppb	15:59:34
1	Mn 257.610†	145483.3	140311.0	486.31 µg/L	486.31 ppb	15:59:29
1	Mo 202.031†	4926.8	4750.9	507.20 µg/L	507.20 ppb	15:59:55
1	Ni 231.604†	9598.3	8938.8	488.20 µg/L	488.20 ppb	15:59:34
1	P 214.914†	1237.2	1163.5	2452.0 µg/L	2452.0 ppb	15:59:55
1	Pb 220.353†	2038.1	1865.0	497.83 µg/L	497.83 ppb	15:59:55
1	S 181.975 Axial†	250.1	226.0	990.17 µg/L	990.17 ppb	15:59:55
1	Sb 206.836†	555.0	507.4	501.78 µg/L	501.78 ppb	15:59:55
1	Se 196.026†	350.7	321.8	497.82 µg/L	497.82 ppb	15:59:55
1	SiO2†	26261.5	24033.7	5175.8 µg/L	5175.8 ppb	15:59:34
1	Si 251.611†	31015.9	29548.3	2429.0 µg/L	2429.0 ppb	15:59:34
1	Sn 189.927†	1145.1	1103.3	507.48 µg/L	507.48 ppb	15:59:55
1	Ti 334.940†	207638.9	199792.4	480.28 µg/L	480.28 ppb	15:59:29
1	Tl 190.801†	339.0	350.7	495.21 µg/L	495.21 ppb	15:59:55
1	U 409.014†	5639.1	5482.7	495.44 µg/L	495.44 ppb	15:59:34
1	V 292.402†	47231.1	45516.9	491.19 µg/L	491.19 ppb	15:59:34
1	Zn 213.857†	20861.0	19608.8	486.21 µg/L	486.21 ppb	15:59:34
2	Sc RADIAL	56826.1	56826.1	104 %		15:58:31
2	Al 396.153Radial†	6645.2	6392.0	4754.0 µg/L	4754.0 ppb	15:58:51
2	Ca 317.933Radial†	5486.3	5089.8	4792.3 µg/L	4792.3 ppb	15:58:51
2	Fe 238.204 Radial†	599.8	561.5	4769.4 µg/L	4769.4 ppb	15:58:51
2	K 766.490 Radial†	7153.6	6741.7	4791.9 µg/L	4791.9 ppb	15:58:31
2	Mg 279.077 IEC†	560.2	526.7	4905.2 µg/L	4905.2 ppb	15:58:51
2	Na 589.592 Radial†	31532.3	29741.0	9790.8 µg/L	9790.8 ppb	15:58:31
2	Sr 421.552†	47455.8	45535.8	472.03 µg/L	472.03 ppb	15:58:31
2	Sc 361.383	1995410.5	1995410.5	104.48 %		16:00:02
2	Y 371.029	1361782.3	1361782.3	103.96 %		16:00:02
2	Ag 328.068†	62246.7	60141.9	480.68 µg/L	480.68 ppb	16:00:08
2	As 188.979†	257.7	245.5	478.82 µg/L	478.82 ppb	16:00:28
2	B 249.677†	11628.5	10798.3	470.20 µg/L	470.20 ppb	16:00:08
2	Ba 233.527†	19125.6	18331.5	478.19 µg/L	478.19 ppb	16:00:08
2	Be 313.107†	755807.0	726835.7	474.48 µg/L	474.48 ppb	16:00:02
2	Cd 226.502†	17996.1	17366.5	479.06 µg/L	479.06 ppb	16:00:08
2	Co 228.616†	10237.6	9807.4	482.11 µg/L	482.11 ppb	16:00:08
2	Cr 267.716†	22930.0	21999.0	484.19 µg/L	484.19 ppb	16:00:08
2	Cu 324.752†	74042.3	68381.0	478.32 µg/L	478.32 ppb	16:00:08
2	Mn 257.610†	145292.8	139306.3	482.84 µg/L	482.84 ppb	16:00:02
2	Mo 202.031†	4851.2	4650.7	496.51 µg/L	496.51 ppb	16:00:28
2	Ni 231.604†	9492.2	8782.9	479.69 µg/L	479.69 ppb	16:00:08
2	P 214.914†	1221.3	1141.3	2405.0 µg/L	2405.0 ppb	16:00:28
2	Pb 220.353†	1997.7	1814.9	484.45 µg/L	484.45 ppb	16:00:28

2	S 181.975 Axial†	253.2	227.5	996.93 µg/L	996.93 ppb	16:00:28
2	Sb 206.836†	551.9	501.3	495.60 µg/L	495.60 ppb	16:00:28
2	Se 196.026†	351.2	320.3	495.61 µg/L	495.61 ppb	16:00:28
2	SiO2†	26072.1	23704.0	5104.8 µg/L	5104.8 ppb	16:00:08
2	Si 251.611†	30669.0	29040.9	2387.3 µg/L	2387.3 ppb	16:00:08
2	Sn 189.927†	1132.5	1084.8	498.96 µg/L	498.96 ppb	16:00:28
2	Ti 334.940†	207816.1	198788.1	477.86 µg/L	477.86 ppb	16:00:02
2	Tl 190.801†	338.3	348.1	491.58 µg/L	491.58 ppb	16:00:28
2	U 409.014†	5511.6	5328.9	481.50 µg/L	481.50 ppb	16:00:08
2	V 292.402†	46887.0	44920.6	484.74 µg/L	484.74 ppb	16:00:08
2	Zn 213.857†	20639.1	19278.4	478.01 µg/L	478.01 ppb	16:00:08
3	Sc RADIAL	56910.2	56910.2	104 %		15:58:57
3	Al 396.153Radial†	6656.6	6393.5	4756.8 µg/L	4756.8 ppb	15:59:17
3	Ca 317.933Radial†	5495.6	5090.9	4793.4 µg/L	4793.4 ppb	15:59:17
3	Fe 238.204 Radial†	602.2	563.0	4781.1 µg/L	4781.1 ppb	15:59:17
3	K 766.490 Radial†	7220.2	6795.5	4830.2 µg/L	4830.2 ppb	15:58:57
3	Mg 279.077 IEC†	560.3	526.1	4897.6 µg/L	4897.6 ppb	15:59:17
3	Na 589.592 Radial†	31637.3	29796.9	9809.2 µg/L	9809.2 ppb	15:58:57
3	Sr 421.552†	47653.8	45658.4	473.30 µg/L	473.30 ppb	15:58:57
3	Sc 361.383	1998435.1	1998435.1	104.64 %		16:00:35
3	Y 371.029	1364968.8	1364968.8	104.20 %		16:00:35
3	Ag 328.068†	58612.3	56578.4	452.09 µg/L	452.09 ppb	16:00:41
3	As 188.979†	224.3	213.2	415.95 µg/L	415.95 ppb	16:01:01
3	B 249.677†	10895.6	10081.1	438.76 µg/L	438.76 ppb	16:00:41
3	Ba 233.527†	17588.9	16835.1	439.14 µg/L	439.14 ppb	16:00:41
3	Be 313.107†	714187.6	685966.5	447.80 µg/L	447.80 ppb	16:00:35
3	Cd 226.502†	16474.5	15886.3	438.17 µg/L	438.17 ppb	16:00:41
3	Co 228.616†	9303.8	8900.2	437.44 µg/L	437.44 ppb	16:00:41
3	Cr 267.716†	20256.0	19410.4	427.22 µg/L	427.22 ppb	16:00:41
3	Cu 324.752†	67621.8	62137.9	434.71 µg/L	434.71 ppb	16:00:41
3	Mn 257.610†	137721.9	131860.5	457.05 µg/L	457.05 ppb	16:00:35
3	Mo 202.031†	4037.0	3865.6	412.72 µg/L	412.72 ppb	16:01:01
3	Ni 231.604†	8629.5	7944.8	433.92 µg/L	433.92 ppb	16:00:41
3	P 214.914†	1036.7	963.1	2025.7 µg/L	2025.7 ppb	16:01:01
3	Pb 220.353†	1739.6	1565.3	417.74 µg/L	417.74 ppb	16:01:01
3	S 181.975 Axial†	221.7	197.0	863.32 µg/L	863.32 ppb	16:01:01
3	Sb 206.836†	474.2	426.2	421.04 µg/L	421.04 ppb	16:01:01
3	Se 196.026†	306.7	277.3	430.08 µg/L	430.08 ppb	16:01:01
3	SiO2†	24196.5	21873.8	4710.6 µg/L	4710.6 ppb	16:00:41
3	Si 251.611†	28513.0	26936.1	2214.3 µg/L	2214.3 ppb	16:00:41
3	Sn 189.927†	924.9	884.8	406.97 µg/L	406.97 ppb	16:01:01
3	Ti 334.940†	195303.4	186529.0	448.37 µg/L	448.37 ppb	16:00:35
3	Tl 190.801†	301.0	311.9	440.85 µg/L	440.85 ppb	16:01:01
3	U 409.014†	4905.4	4741.6	428.33 µg/L	428.33 ppb	16:00:41
3	V 292.402†	42233.7	40405.6	435.79 µg/L	435.79 ppb	16:00:41
3	Zn 213.857†	18819.8	17509.9	434.12 µg/L	434.12 ppb	16:00:41

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1992513.1	104.33 %	0.408			0.39%
Sc RADIAL	57049.0	105 %	0.6			0.55%
Y 371.029	1360053.7	103.83 %	0.456			0.44%
Ag 328.068†	59248.1	473.50 µg/L	18.871	473.50 ppb	18.871	3.99%
QC value within limits for Ag 328.068 Recovery = 94.70%						
Al 396.153Radial†	6380.5	4745.9 µg/L	16.44	4745.9 ppb	16.44	0.35%
QC value within limits for Al 396.153Radial Recovery = 94.92%						
As 188.979†	238.9	465.97 µg/L	44.997	465.97 ppb	44.997	9.66%
QC value within limits for As 188.979 Recovery = 93.19%						
B 249.677†	10609.7	461.94 µg/L	20.345	461.94 ppb	20.345	4.40%
QC value within limits for B 249.677 Recovery = 92.39%						
Ba 233.527†	17938.5	467.93 µg/L	25.276	467.93 ppb	25.276	5.40%
QC value within limits for Ba 233.527 Recovery = 93.59%						
Be 313.107†	714352.7	466.33 µg/L	16.086	466.33 ppb	16.086	3.45%
QC value within limits for Be 313.107 Recovery = 93.27%						
Ca 317.933Radial†	5078.2	4781.5 µg/L	19.75	4781.5 ppb	19.75	0.41%
QC value within limits for Ca 317.933Radial Recovery = 95.63%						
Cd 226.502†	16980.3	468.39 µg/L	26.545	468.39 ppb	26.545	5.67%
QC value within limits for Cd 226.502 Recovery = 93.68%						
Co 228.616†	9565.8	470.21 µg/L	28.733	470.21 ppb	28.733	6.11%

Cr	267.716†	21218.6	467.02 µg/L	34.571	467.02 ppb	34.571	7.40%
QC value within limits for Cr 267.716 Recovery = 93.40%							
Cu	324.752†	66644.2	466.19 µg/L	27.494	466.19 ppb	27.494	5.90%
QC value within limits for Cu 324.752 Recovery = 93.24%							
Fe	238.204 Radial†	559.7	4753.9 µg/L	37.39	4753.9 ppb	37.39	0.79%
QC value within limits for Fe 238.204 Radial Recovery = 95.08%							
K	766.490 Radial†	6767.2	4810.1 µg/L	19.19	4810.1 ppb	19.19	0.40%
QC value within limits for K 766.490 Radial Recovery = 96.20%							
Mg	279.077 IEC†	525.7	4895.3 µg/L	11.18	4895.3 ppb	11.18	0.23%
QC value within limits for Mg 279.077 IEC Recovery = 97.91%							
Mn	257.610†	137159.3	475.40 µg/L	15.982	475.40 ppb	15.982	3.36%
QC value within limits for Mn 257.610 Recovery = 95.08%							
Mo	202.031†	4422.4	472.14 µg/L	51.737	472.14 ppb	51.737	10.96%
QC value within limits for Mo 202.031 Recovery = 94.43%							
Na	589.592 Radial†	29752.8	9794.7 µg/L	13.02	9794.7 ppb	13.02	0.13%
QC value within limits for Na 589.592 Radial Recovery = 97.95%							
Ni	231.604†	8555.5	467.27 µg/L	29.194	467.27 ppb	29.194	6.25%
QC value within limits for Ni 231.604 Recovery = 93.45%							
P	214.914†	1089.3	2294.2 µg/L	233.77	2294.2 ppb	233.77	10.19%
QC value within limits for P 214.914 Recovery = 91.77%							
Pb	220.353†	1748.4	466.67 µg/L	42.900	466.67 ppb	42.900	9.19%
QC value within limits for Pb 220.353 Recovery = 93.33%							
S	181.975 Axial†	216.9	950.14 µg/L	75.264	950.14 ppb	75.264	7.92%
QC value within limits for S 181.975 Axial Recovery = 95.01%							
Sb	206.836†	478.3	472.81 µg/L	44.937	472.81 ppb	44.937	9.50%
QC value within limits for Sb 206.836 Recovery = 94.56%							
Se	196.026†	306.5	474.50 µg/L	38.486	474.50 ppb	38.486	8.11%
QC value within limits for Se 196.026 Recovery = 94.90%							
SiO2†		23203.8	4997.1 µg/L	250.58	4997.1 ppb	250.58	5.01%
QC value within limits for SiO2 Recovery = 93.45%							
Si	251.611†	28508.4	2343.5 µg/L	113.86	2343.5 ppb	113.86	4.86%
QC value within limits for Si 251.611 Recovery = 93.74%							
Sn	189.927†	1024.3	471.14 µg/L	55.734	471.14 ppb	55.734	11.83%
QC value within limits for Sn 189.927 Recovery = 94.23%							
Sr	421.552†	45546.1	472.14 µg/L	1.114	472.14 ppb	1.114	0.24%
QC value within limits for Sr 421.552 Recovery = 94.43%							
Ti	334.940†	195036.5	468.84 µg/L	17.764	468.84 ppb	17.764	3.79%
QC value within limits for Ti 334.940 Recovery = 93.77%							
Tl	190.801†	336.9	475.88 µg/L	30.390	475.88 ppb	30.390	6.39%
QC value within limits for Tl 190.801 Recovery = 95.18%							
U	409.014†	5184.4	468.43 µg/L	35.417	468.43 ppb	35.417	7.56%
QC value within limits for U 409.014 Recovery = 93.69%							
V	292.402†	43614.3	470.57 µg/L	30.297	470.57 ppb	30.297	6.44%
QC value within limits for V 292.402 Recovery = 94.11%							
Zn	213.857†	18799.0	466.11 µg/L	28.010	466.11 ppb	28.010	6.01%
QC value within limits for Zn 213.857 Recovery = 93.22%							

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 16:01:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55658.0	55658.0	102 %		16:01:44
1	Al 396.153Radial†	-23.0	-12.4	-9.2620 µg/L	-9.2620 ppb	16:01:44
1	Ca 317.933Radial†	208.0	24.8	23.363 µg/L	23.363 ppb	16:02:05
1	Fe 238.204 Radial†	15.4	0.6	5.4204 µg/L	5.4204 ppb	16:02:05
1	K 766.490 Radial†	204.3	71.9	51.110 µg/L	51.110 ppb	16:01:44
1	Mg 279.077 IEC†	10.5	-1.0	-9.0434 µg/L	-9.0434 ppb	16:02:05
1	Na 589.592 Radial†	1039.6	477.5	157.20 µg/L	157.20 ppb	16:01:44
1	Sr 421.552†	56.9	16.2	0.1684 µg/L	0.1684 ppb	16:01:44
1	Sc 361.383	1982189.6	1982189.6	103.79 %		16:03:07
1	Y 371.029	1359337.0	1359337.0	103.77 %		16:03:07
1	Ag 328.068†	-578.1	7.5	0.0622 µg/L	0.0622 ppb	16:03:12
1	As 188.979†	-1.3	-2.4	-4.6084 µg/L	-4.6084 ppb	16:03:33
1	B 249.677†	325.8	-17.5	-0.7693 µg/L	-0.7693 ppb	16:03:33
1	Ba 233.527†	-23.3	3.6	0.0946 µg/L	0.0946 ppb	16:03:33
1	Be 313.107†	-3422.1	143.2	0.0935 µg/L	0.0935 ppb	16:03:12
1	Cd 226.502†	-146.3	1.2	0.0321 µg/L	0.0321 ppb	16:03:33
1	Co 228.616†	-12.7	-3.4	-0.1679 µg/L	-0.1679 ppb	16:03:33
1	Cr 267.716†	-41.9	12.0	0.2649 µg/L	0.2649 ppb	16:03:33
1	Cu 324.752†	2411.8	-162.3	-1.1332 µg/L	-1.1332 ppb	16:03:12
1	Mn 257.610†	-218.3	33.8	0.1180 µg/L	0.1180 ppb	16:03:33
1	Mo 202.031†	-10.7	-2.7	-0.2926 µg/L	-0.2926 ppb	16:03:33
1	Ni 231.604†	299.4	-13.7	-0.7472 µg/L	-0.7472 ppb	16:03:33
1	P 214.914†	42.9	13.7	29.528 µg/L	29.528 ppb	16:03:33
1	Pb 220.353†	92.5	-8.1	-2.1696 µg/L	-2.1696 ppb	16:03:33
1	S 181.975 Axial†	17.6	2.1	9.2574 µg/L	9.2574 ppb	16:03:33
1	Sb 206.836†	23.2	-4.6	-4.4961 µg/L	-4.4961 ppb	16:03:33
1	Se 196.026†	12.0	-4.3	-6.4748 µg/L	-6.4748 ppb	16:03:33
1	SiO2†	1238.2	-57.1	-12.288 µg/L	-12.288 ppb	16:03:12
1	Si 251.611†	320.8	-3.8	-0.3112 µg/L	-0.3112 ppb	16:03:33
1	Sn 189.927†	0.5	1.4	0.6395 µg/L	0.6395 ppb	16:03:33
1	Ti 334.940†	134.1	13.1	0.0325 µg/L	0.0325 ppb	16:03:12
1	Tl 190.801†	-24.9	0.3	0.4630 µg/L	0.4630 ppb	16:03:33
1	U 409.014†	-12.1	41.9	3.7948 µg/L	3.7948 ppb	16:03:12
1	V 292.402†	-10.2	34.4	0.3695 µg/L	0.3695 ppb	16:03:12
1	Zn 213.857†	479.7	-13.4	-0.3280 µg/L	-0.3280 ppb	16:03:33
2	Sc RADIAL	55313.8	55313.8	101 %		16:02:10
2	Al 396.153Radial†	-3.9	6.3	4.7164 µg/L	4.7164 ppb	16:02:10
2	Ca 317.933Radial†	201.6	19.8	18.599 µg/L	18.599 ppb	16:02:30
2	Fe 238.204 Radial†	15.1	0.4	3.5581 µg/L	3.5581 ppb	16:02:30
2	K 766.490 Radial†	165.7	35.0	24.913 µg/L	24.913 ppb	16:02:10
2	Mg 279.077 IEC†	9.2	-2.2	-20.801 µg/L	-20.801 ppb	16:02:30
2	Na 589.592 Radial†	1009.9	454.5	149.64 µg/L	149.64 ppb	16:02:10
2	Sr 421.552†	43.0	2.9	0.0298 µg/L	0.0298 ppb	16:02:10
2	Sc 361.383	2000056.5	2000056.5	104.72 %		16:03:39
2	Y 371.029	1371413.4	1371413.4	104.69 %		16:03:39
2	Ag 328.068†	-539.4	49.5	0.3929 µg/L	0.3929 ppb	16:03:44
2	As 188.979†	2.0	0.8	1.5259 µg/L	1.5259 ppb	16:04:05
2	B 249.677†	333.1	-13.4	-0.5861 µg/L	-0.5861 ppb	16:04:05
2	Ba 233.527†	-19.7	7.2	0.1863 µg/L	0.1863 ppb	16:04:05
2	Be 313.107†	-3284.4	304.2	0.1986 µg/L	0.1986 ppb	16:03:44
2	Cd 226.502†	-141.7	6.9	0.1883 µg/L	0.1883 ppb	16:04:05
2	Co 228.616†	-14.8	-5.3	-0.2603 µg/L	-0.2603 ppb	16:04:05
2	Cr 267.716†	-34.1	19.8	0.4350 µg/L	0.4350 ppb	16:04:05
2	Cu 324.752†	2452.1	-144.6	-1.0097 µg/L	-1.0097 ppb	16:03:44
2	Mn 257.610†	-201.5	51.7	0.1804 µg/L	0.1804 ppb	16:04:05
2	Mo 202.031†	-5.9	1.9	0.2060 µg/L	0.2060 ppb	16:04:05
2	Ni 231.604†	302.4	-13.4	-0.7317 µg/L	-0.7317 ppb	16:04:05
2	P 214.914†	22.4	-6.2	-13.288 µg/L	-13.288 ppb	16:04:05
2	Pb 220.353†	100.3	-1.4	-0.3652 µg/L	-0.3652 ppb	16:04:05

2	S 181.975 Axial†	18.4	2.7	12.047 µg/L	12.047 ppb	16:04:05
2	Sb 206.836†	25.7	-2.4	-2.3521 µg/L	-2.3521 ppb	16:04:05
2	Se 196.026†	11.2	-5.1	-7.8216 µg/L	-7.8216 ppb	16:04:05
2	SiO2†	1221.5	-83.6	-18.000 µg/L	-18.000 ppb	16:03:44
2	Si 251.611†	319.3	-8.0	-0.6538 µg/L	-0.6538 ppb	16:04:05
2	Sn 189.927†	1.8	2.6	1.1983 µg/L	1.1983 ppb	16:04:05
2	Ti 334.940†	170.3	46.5	0.1138 µg/L	0.1138 ppb	16:03:44
2	Tl 190.801†	-24.1	1.2	1.7367 µg/L	1.7367 ppb	16:04:05
2	U 409.014†	-68.4	-11.7	-1.0610 µg/L	-1.0610 ppb	16:03:44
2	V 292.402†	-47.0	-0.7	-0.0056 µg/L	-0.0056 ppb	16:03:44
2	Zn 213.857†	481.8	-15.5	-0.3808 µg/L	-0.3808 ppb	16:04:05
3	Sc RADIAL	56238.4	56238.4	103 %		16:02:36
3	Al 396.153Radial†	-4.5	5.7	4.2549 µg/L	4.2549 ppb	16:02:36
3	Ca 317.933Radial†	217.1	31.6	29.725 µg/L	29.725 ppb	16:02:56
3	Fe 238.204 Radial†	15.6	0.7	5.5166 µg/L	5.5166 ppb	16:02:56
3	K 766.490 Radial†	152.3	19.4	13.755 µg/L	13.755 ppb	16:02:36
3	Mg 279.077 IEC†	9.8	-1.7	-16.008 µg/L	-16.008 ppb	16:02:56
3	Na 589.592 Radial†	1347.3	765.5	252.01 µg/L	252.01 ppb	16:02:36
3	Sr 421.552†	41.3	0.5	0.0055 µg/L	0.0055 ppb	16:02:36
3	Sc 361.383	1997138.2	1997138.2	104.57 %		16:04:11
3	Y 371.029	1369234.6	1369234.6	104.53 %		16:04:11
3	Ag 328.068†	-498.6	87.7	0.6980 µg/L	0.6980 ppb	16:04:16
3	As 188.979†	2.9	1.6	3.1103 µg/L	3.1103 ppb	16:04:37
3	B 249.677†	327.9	-17.9	-0.7818 µg/L	-0.7818 ppb	16:04:37
3	Ba 233.527†	-15.6	11.1	0.2887 µg/L	0.2887 ppb	16:04:37
3	Be 313.107†	-3097.4	478.5	0.3124 µg/L	0.3124 ppb	16:04:16
3	Cd 226.502†	-131.7	16.2	0.4453 µg/L	0.4453 ppb	16:04:37
3	Co 228.616†	-2.6	6.4	0.3136 µg/L	0.3136 ppb	16:04:37
3	Cr 267.716†	-14.7	38.4	0.8440 µg/L	0.8440 ppb	16:04:37
3	Cu 324.752†	2433.5	-159.0	-1.1099 µg/L	-1.1099 ppb	16:04:16
3	Mn 257.610†	-172.9	78.8	0.2743 µg/L	0.2743 ppb	16:04:37
3	Mo 202.031†	-1.7	5.9	0.6314 µg/L	0.6314 ppb	16:04:37
3	Ni 231.604†	302.9	-12.6	-0.6873 µg/L	-0.6873 ppb	16:04:37
3	P 214.914†	28.9	0.0	0.1351 µg/L	0.1351 ppb	16:04:37
3	Pb 220.353†	98.8	-2.7	-0.7118 µg/L	-0.7118 ppb	16:04:37
3	S 181.975 Axial†	19.3	3.6	15.780 µg/L	15.780 ppb	16:04:37
3	Sb 206.836†	32.5	4.1	4.0170 µg/L	4.0170 ppb	16:04:37
3	Se 196.026†	15.5	-1.0	-1.5777 µg/L	-1.5777 ppb	16:04:37
3	SiO2†	1280.0	-25.9	-5.5874 µg/L	-5.5874 ppb	16:04:16
3	Si 251.611†	323.6	-3.4	-0.2805 µg/L	-0.2805 ppb	16:04:37
3	Sn 189.927†	1.4	2.2	1.0236 µg/L	1.0236 ppb	16:04:37
3	Ti 334.940†	204.8	79.7	0.1935 µg/L	0.1935 ppb	16:04:16
3	Tl 190.801†	-25.7	-0.3	-0.3909 µg/L	-0.3909 ppb	16:04:37
3	U 409.014†	-62.9	-6.5	-0.5917 µg/L	-0.5917 ppb	16:04:16
3	V 292.402†	-21.9	23.3	0.2547 µg/L	0.2547 ppb	16:04:16
3	Zn 213.857†	484.0	-12.7	-0.3127 µg/L	-0.3127 ppb	16:04:37

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1993128.1	104.36 %	0.502			0.48%
Sc RADIAL	55736.7	102 %	0.9			0.84%
Y 371.029	1366661.7	104.33 %	0.491			0.47%
Ag 328.068†	48.2	0.3844 µg/L	0.31802	0.3844 ppb	0.31802	82.74%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-0.1	-0.0969 µg/L	7.94054	-0.0969 ppb	7.94054	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	0.0	0.0093 µg/L	4.07671	0.0093 ppb	4.07671	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-16.3	-0.7124 µg/L	0.10959	-0.7124 ppb	0.10959	15.38%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.3	0.1899 µg/L	0.09711	0.1899 ppb	0.09711	51.15%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	308.6	0.2015 µg/L	0.10946	0.2015 ppb	0.10946	54.32%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	25.4	23.896 µg/L	5.5823	23.896 ppb	5.5823	23.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.1	0.2219 µg/L	0.20862	0.2219 ppb	0.20862	94.02%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-0.8	-0.0382 µg/L	0.30817	-0.0382 ppb	0.30817	806.94%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	23.4 0.5146 µg/L	0.29767	0.5146 ppb 0.29767 57.84%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-155.3 -1.0843 µg/L	0.06563	-1.0843 ppb 0.06563 6.05%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.6 4.8317 µg/L	1.10403	4.8317 ppb 1.10403 22.85%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	42.1 29.926 µg/L	19.1758	29.926 ppb 19.1758 64.08%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-1.6 -15.284 µg/L	5.9121	-15.284 ppb 5.9121 38.68%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	54.8 0.1909 µg/L	0.07866	0.1909 ppb 0.07866 41.20%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	1.7 0.1816 µg/L	0.46249	0.1816 ppb 0.46249 254.69%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	565.9 186.28 µg/L	57.047	186.28 ppb 57.047 30.62%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-13.2 -0.7220 µg/L	0.03109	-0.7220 ppb 0.03109 4.31%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	2.5 5.4583 µg/L	21.89861	5.4583 ppb 21.89861 401.20%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-4.1 -1.0822 µg/L	0.95750	-1.0822 ppb 0.95750 88.48%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	2.8 12.362 µg/L	3.2727	12.362 ppb 3.2727 26.48%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-1.0 -0.9437 µg/L	4.42784	-0.9437 ppb 4.42784 469.19%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.5 -5.2914 µg/L	3.28586	-5.2914 ppb 3.28586 62.10%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-55.5 -11.958 µg/L	6.2126	-11.958 ppb 6.2126 51.95%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	-5.1 -0.4151 µg/L	0.20723	-0.4151 ppb 0.20723 49.92%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	2.1 0.9538 µg/L	0.28585	0.9538 ppb 0.28585 29.97%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	6.6 0.0679 µg/L	0.08784	0.0679 ppb 0.08784 129.36%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	46.4 0.1133 µg/L	0.08046	0.1133 ppb 0.08046 71.03%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	0.4 0.6030 µg/L	1.07067	0.6030 ppb 1.07067 177.57%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	7.9 0.7140 µg/L	2.67833	0.7140 ppb 2.67833 375.09%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	19.0 0.2062 µg/L	0.19224	0.2062 ppb 0.19224 93.23%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-13.9 -0.3405 µg/L	0.03570	-0.3405 ppb 0.03570 10.49%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 16:37:49

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57270.5	57270.5	105 %			16:38:25
1	Al 396.153Radial†	6958.1	6640.6	4939.3 µg/L	4939.3 ppb	4939.3 ppb	16:38:25
1	Ca 317.933Radial†	5712.0	5263.9	4956.3 µg/L	4956.3 ppb	4956.3 ppb	16:38:46
1	Fe 238.204 Radial†	619.2	575.5	4888.0 µg/L	4888.0 ppb	4888.0 ppb	16:38:46
1	K 766.490 Radial†	7274.3	6803.4	4835.8 µg/L	4835.8 ppb	4835.8 ppb	16:38:25
1	Mg 279.077 IEC†	580.4	541.8	5044.9 µg/L	5044.9 ppb	5044.9 ppb	16:38:46
1	Na 589.592 Radial†	31721.9	29686.7	9772.9 µg/L	9772.9 ppb	9772.9 ppb	16:38:25
1	Sr 421.552†	48411.5	46092.9	477.81 µg/L	477.81 ppb	477.81 ppb	16:38:25
1	Sc 361.383	2050041.7	2050041.7	107.34 %			16:39:49
1	Y 371.029	1400914.7	1400914.7	106.95 %			16:39:49
1	Ag 328.068†	63102.9	59351.9	474.38 µg/L	474.38 ppb	474.38 ppb	16:39:55
1	As 188.979†	273.7	253.8	495.14 µg/L	495.14 ppb	495.14 ppb	16:40:15
1	B 249.677†	11802.0	10663.4	464.23 µg/L	464.23 ppb	464.23 ppb	16:39:55
1	Ba 233.527†	19451.3	18147.1	473.37 µg/L	473.37 ppb	473.37 ppb	16:39:55
1	Be 313.107†	769937.6	720722.3	470.49 µg/L	470.49 ppb	470.49 ppb	16:39:49
1	Cd 226.502†	18413.9	17296.7	477.11 µg/L	477.11 ppb	477.11 ppb	16:39:55
1	Co 228.616†	10377.6	9676.7	475.69 µg/L	475.69 ppb	475.69 ppb	16:39:55
1	Cr 267.716†	23222.4	21686.6	477.32 µg/L	477.32 ppb	477.32 ppb	16:39:55
1	Cu 324.752†	74708.1	67112.7	469.48 µg/L	469.48 ppb	469.48 ppb	16:39:55
1	Mn 257.610†	148224.3	138331.4	479.47 µg/L	479.47 ppb	479.47 ppb	16:39:49
1	Mo 202.031†	4976.6	4643.8	495.78 µg/L	495.78 ppb	495.78 ppb	16:40:15
1	Ni 231.604†	9664.7	8701.5	475.25 µg/L	475.25 ppb	475.25 ppb	16:39:55
1	P 214.914†	1251.0	1137.8	2398.4 µg/L	2398.4 ppb	2398.4 ppb	16:40:15
1	Pb 220.353†	2064.6	1826.2	487.49 µg/L	487.49 ppb	487.49 ppb	16:40:15
1	S 181.975 Axial†	253.0	220.8	967.55 µg/L	967.55 ppb	967.55 ppb	16:40:15
1	Sb 206.836†	561.9	496.5	490.97 µg/L	490.97 ppb	490.97 ppb	16:40:15
1	Se 196.026†	348.6	308.9	478.47 µg/L	478.47 ppb	478.47 ppb	16:40:15
1	SiO2†	26407.2	23351.2	5028.8 µg/L	5028.8 ppb	5028.8 ppb	16:39:55
1	Si 251.611†	31109.3	28668.8	2356.7 µg/L	2356.7 ppb	2356.7 ppb	16:39:55
1	Sn 189.927†	1168.8	1089.7	501.23 µg/L	501.23 ppb	501.23 ppb	16:40:15
1	Ti 334.940†	210704.4	196178.3	471.57 µg/L	471.57 ppb	471.57 ppb	16:39:49
1	Tl 190.801†	345.6	346.3	489.05 µg/L	489.05 ppb	489.05 ppb	16:40:15
1	U 409.014†	5635.8	5304.0	479.22 µg/L	479.22 ppb	479.22 ppb	16:39:55
1	V 292.402†	47452.9	44251.8	477.60 µg/L	477.60 ppb	477.60 ppb	16:39:55
1	Zn 213.857†	20929.0	19022.1	471.63 µg/L	471.63 ppb	471.63 ppb	16:39:55
2	Sc RADIAL	57824.5	57824.5	106 %			16:38:51
2	Al 396.153Radial†	6951.6	6571.0	4887.5 µg/L	4887.5 ppb	4887.5 ppb	16:38:51
2	Ca 317.933Radial†	5692.9	5193.8	4890.3 µg/L	4890.3 ppb	4890.3 ppb	16:39:12
2	Fe 238.204 Radial†	614.8	565.7	4804.8 µg/L	4804.8 ppb	4804.8 ppb	16:39:12
2	K 766.490 Radial†	7297.3	6758.7	4804.0 µg/L	4804.0 ppb	4804.0 ppb	16:38:51
2	Mg 279.077 IEC†	578.6	534.8	4980.5 µg/L	4980.5 ppb	4980.5 ppb	16:39:12
2	Na 589.592 Radial†	31791.5	29462.7	9699.2 µg/L	9699.2 ppb	9699.2 ppb	16:38:51
2	Sr 421.552†	48548.0	45779.7	474.56 µg/L	474.56 ppb	474.56 ppb	16:38:51
2	Sc 361.383	2050967.6	2050967.6	107.39 %			16:40:22
2	Y 371.029	1401478.7	1401478.7	106.99 %			16:40:22
2	Ag 328.068†	63066.7	59291.5	473.89 µg/L	473.89 ppb	473.89 ppb	16:40:28
2	As 188.979†	260.8	241.7	471.43 µg/L	471.43 ppb	471.43 ppb	16:40:49
2	B 249.677†	11773.8	10632.2	462.91 µg/L	462.91 ppb	462.91 ppb	16:40:28
2	Ba 233.527†	19468.8	18155.2	473.58 µg/L	473.58 ppb	473.58 ppb	16:40:28
2	Be 313.107†	769423.9	719920.1	469.97 µg/L	469.97 ppb	469.97 ppb	16:40:22
2	Cd 226.502†	18369.5	17247.6	475.77 µg/L	475.77 ppb	475.77 ppb	16:40:28
2	Co 228.616†	10387.8	9681.8	475.93 µg/L	475.93 ppb	475.93 ppb	16:40:28
2	Cr 267.716†	23230.7	21684.6	477.27 µg/L	477.27 ppb	477.27 ppb	16:40:28
2	Cu 324.752†	74607.6	66987.7	468.59 µg/L	468.59 ppb	468.59 ppb	16:40:28
2	Mn 257.610†	147653.6	137737.6	477.41 µg/L	477.41 ppb	477.41 ppb	16:40:22
2	Mo 202.031†	4936.1	4604.0	491.53 µg/L	491.53 ppb	491.53 ppb	16:40:49
2	Ni 231.604†	9650.2	8684.0	474.29 µg/L	474.29 ppb	474.29 ppb	16:40:28
2	P 214.914†	1239.1	1126.2	2373.7 µg/L	2373.7 ppb	2373.7 ppb	16:40:49
2	Pb 220.353†	2036.6	1799.3	480.30 µg/L	480.30 ppb	480.30 ppb	16:40:49

2	S 181.975 Axial†	251.7	219.6	962.01 µg/L	962.01 ppb	16:40:49
2	Sb 206.836†	560.6	495.1	489.53 µg/L	489.53 ppb	16:40:49
2	Se 196.026†	352.8	312.7	484.04 µg/L	484.04 ppb	16:40:49
2	SiO2†	26423.9	23355.6	5029.8 µg/L	5029.8 ppb	16:40:28
2	Si 251.611†	31116.7	28662.7	2356.2 µg/L	2356.2 ppb	16:40:28
2	Sn 189.927†	1158.0	1079.2	496.40 µg/L	496.40 ppb	16:40:49
2	Ti 334.940†	210552.3	195948.0	471.02 µg/L	471.02 ppb	16:40:22
2	Tl 190.801†	346.0	346.5	489.25 µg/L	489.25 ppb	16:40:49
2	U 409.014†	5584.5	5253.8	474.70 µg/L	474.70 ppb	16:40:28
2	V 292.402†	47503.1	44278.6	477.84 µg/L	477.84 ppb	16:40:28
2	Zn 213.857†	20951.2	19034.0	471.94 µg/L	471.94 ppb	16:40:28
3	Sc RADIAL	57919.3	57919.3	106 %		16:39:17
3	Al 396.153Radial†	6873.3	6486.5	4826.1 µg/L	4826.1 ppb	16:39:17
3	Ca 317.933Radial†	5675.3	5168.4	4866.3 µg/L	4866.3 ppb	16:39:38
3	Fe 238.204 Radial†	612.6	562.7	4778.5 µg/L	4778.5 ppb	16:39:38
3	K 766.490 Radial†	7223.5	6677.9	4746.6 µg/L	4746.6 ppb	16:39:17
3	Mg 279.077 IEC†	577.0	532.4	4956.6 µg/L	4956.6 ppb	16:39:38
3	Na 589.592 Radial†	31537.3	29174.1	9604.2 µg/L	9604.2 ppb	16:39:17
3	Sr 421.552†	47945.0	45136.6	467.89 µg/L	467.89 ppb	16:39:17
3	Sc 361.383	2047169.0	2047169.0	107.19 %		16:40:56
3	Y 371.029	1398213.9	1398213.9	106.74 %		16:40:56
3	Ag 328.068†	59282.1	55869.9	446.44 µg/L	446.44 ppb	16:41:01
3	As 188.979†	231.4	214.7	418.91 µg/L	418.91 ppb	16:41:22
3	B 249.677†	11101.6	10025.4	436.32 µg/L	436.32 ppb	16:41:01
3	Ba 233.527†	17825.1	16655.3	434.45 µg/L	434.45 ppb	16:41:01
3	Be 313.107†	720453.0	675563.8	441.01 µg/L	441.01 ppb	16:40:56
3	Cd 226.502†	16836.0	15848.7	437.13 µg/L	437.13 ppb	16:41:01
3	Co 228.616†	9439.7	8815.3	433.29 µg/L	433.29 ppb	16:41:01
3	Cr 267.716†	20551.5	19225.2	423.15 µg/L	423.15 ppb	16:41:01
3	Cu 324.752†	68186.1	61125.9	427.64 µg/L	427.64 ppb	16:41:01
3	Mn 257.610†	138984.9	129905.6	450.28 µg/L	450.28 ppb	16:40:56
3	Mo 202.031†	4143.4	3873.0	413.51 µg/L	413.51 ppb	16:41:22
3	Ni 231.604†	8808.1	7915.1	432.30 µg/L	432.30 ppb	16:41:01
3	P 214.914†	1067.2	968.0	2036.9 µg/L	2036.9 ppb	16:41:22
3	Pb 220.353†	1797.4	1579.7	421.60 µg/L	421.60 ppb	16:41:22
3	S 181.975 Axial†	226.2	196.2	859.46 µg/L	859.46 ppb	16:41:22
3	Sb 206.836†	485.7	426.1	420.98 µg/L	420.98 ppb	16:41:22
3	Se 196.026†	307.9	271.4	421.09 µg/L	421.09 ppb	16:41:22
3	SiO2†	24533.6	21637.8	4659.8 µg/L	4659.8 ppb	16:41:01
3	Si 251.611†	28891.7	26640.7	2190.0 µg/L	2190.0 ppb	16:41:01
3	Sn 189.927†	954.7	891.5	410.08 µg/L	410.08 ppb	16:41:22
3	Ti 334.940†	196335.7	183048.9	440.00 µg/L	440.00 ppb	16:40:56
3	Tl 190.801†	308.7	312.2	441.18 µg/L	441.18 ppb	16:41:22
3	U 409.014†	5011.7	4729.1	427.20 µg/L	427.20 ppb	16:41:01
3	V 292.402†	42781.7	39956.1	430.99 µg/L	430.99 ppb	16:41:01
3	Zn 213.857†	19123.4	17365.0	430.51 µg/L	430.51 ppb	16:41:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2049392.8	107.31 %	0.104			0.10%
Sc RADIAL	57671.4	106 %	0.6			0.61%
Y 371.029	1400202.5	106.89 %	0.133			0.12%
Ag 328.068†	58171.1	464.90 µg/L	15.993	464.90 ppb	15.993	3.44%
QC value within limits for Ag 328.068 Recovery = 92.98%						
Al 396.153Radial†	6566.1	4884.3 µg/L	56.67	4884.3 ppb	56.67	1.16%
QC value within limits for Al 396.153Radial Recovery = 97.69%						
As 188.979†	236.7	461.83 µg/L	39.012	461.83 ppb	39.012	8.45%
QC value within limits for As 188.979 Recovery = 92.37%						
B 249.677†	10440.3	454.49 µg/L	15.747	454.49 ppb	15.747	3.46%
QC value within limits for B 249.677 Recovery = 90.90%						
Ba 233.527†	17652.5	460.47 µg/L	22.535	460.47 ppb	22.535	4.89%
QC value within limits for Ba 233.527 Recovery = 92.09%						
Be 313.107†	705402.1	460.49 µg/L	16.871	460.49 ppb	16.871	3.66%
QC value within limits for Be 313.107 Recovery = 92.10%						
Ca 317.933Radial†	5208.7	4904.3 µg/L	46.59	4904.3 ppb	46.59	0.95%
QC value within limits for Ca 317.933Radial Recovery = 98.09%						
Cd 226.502†	16797.7	463.34 µg/L	22.703	463.34 ppb	22.703	4.90%
QC value within limits for Cd 226.502 Recovery = 92.67%						
Co 228.616†	9391.3	461.63 µg/L	24.552	461.63 ppb	24.552	5.32%

Cr	267.716†	20865.4	459.24 µg/L	31.262	459.24 ppb	31.262	6.81%
Cu	324.752†	65075.5	455.24 µg/L	23.902	455.24 ppb	23.902	5.25%
Fe	238.204 Radial†	568.0	4823.8 µg/L	57.17	4823.8 ppb	57.17	1.19%
K	766.490 Radial†	6746.7	4795.5 µg/L	45.22	4795.5 ppb	45.22	0.94%
Mg	279.077 IEC†	536.3	4994.0 µg/L	45.66	4994.0 ppb	45.66	0.91%
Mn	257.610†	135324.9	469.05 µg/L	16.289	469.05 ppb	16.289	3.47%
Mo	202.031†	4373.6	466.94 µg/L	46.322	466.94 ppb	46.322	9.92%
Na	589.592 Radial†	29441.2	9692.1 µg/L	84.60	9692.1 ppb	84.60	0.87%
Ni	231.604†	8433.5	460.62 µg/L	24.525	460.62 ppb	24.525	5.32%
P	214.914†	1077.3	2269.6 µg/L	201.96	2269.6 ppb	201.96	8.90%
Pb	220.353†	1735.0	463.13 µg/L	36.146	463.13 ppb	36.146	7.80%
S	181.975 Axial†	212.2	929.67 µg/L	60.871	929.67 ppb	60.871	6.55%
Sb	206.836†	472.6	467.16 µg/L	39.999	467.16 ppb	39.999	8.56%
Se	196.026†	297.7	461.20 µg/L	34.847	461.20 ppb	34.847	7.56%
SiO2†		22781.6	4906.1 µg/L	213.31	4906.1 ppb	213.31	4.35%
Si	251.611†	27990.8	2301.0 µg/L	96.11	2301.0 ppb	96.11	4.18%
Sn	189.927†	1020.1	469.24 µg/L	51.288	469.24 ppb	51.288	10.93%
Sr	421.552†	45669.7	473.42 µg/L	5.054	473.42 ppb	5.054	1.07%
Ti	334.940†	191725.1	460.86 µg/L	18.074	460.86 ppb	18.074	3.92%
Tl	190.801†	335.0	473.16 µg/L	27.695	473.16 ppb	27.695	5.85%
U	409.014†	5095.6	460.37 µg/L	28.818	460.37 ppb	28.818	6.26%
V	292.402†	42828.8	462.14 µg/L	26.978	462.14 ppb	26.978	5.84%
Zn	213.857†	18473.7	458.03 µg/L	23.826	458.03 ppb	23.826	5.20%

QC value within limits for Co 228.616 Recovery = 92.33%

QC value within limits for Cr 267.716 Recovery = 91.85%

QC value within limits for Cu 324.752 Recovery = 91.05%

QC value within limits for Fe 238.204 Radial Recovery = 96.48%

QC value within limits for K 766.490 Radial Recovery = 95.91%

QC value within limits for Mg 279.077 IEC Recovery = 99.88%

QC value within limits for Mn 257.610 Recovery = 93.81%

QC value within limits for Mo 202.031 Recovery = 93.39%

QC value within limits for Na 589.592 Radial Recovery = 96.92%

QC value within limits for Ni 231.604 Recovery = 92.12%

QC value within limits for P 214.914 Recovery = 90.79%

QC value within limits for Pb 220.353 Recovery = 92.63%

QC value within limits for S 181.975 Axial Recovery = 92.97%

QC value within limits for Sb 206.836 Recovery = 93.43%

QC value within limits for Se 196.026 Recovery = 92.24%

QC value within limits for SiO2 Recovery = 91.75%

QC value within limits for Si 251.611 Recovery = 92.04%

QC value within limits for Sn 189.927 Recovery = 93.85%

QC value within limits for Sr 421.552 Recovery = 94.68%

QC value within limits for Ti 334.940 Recovery = 92.17%

QC value within limits for Tl 190.801 Recovery = 94.63%

QC value within limits for U 409.014 Recovery = 92.07%

QC value within limits for V 292.402 Recovery = 92.43%

QC value within limits for Zn 213.857 Recovery = 91.61%

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 16:41:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58584.5	58584.5	107 %		16:42:04
1	Al 396.153Radial†	51.2	57.8	43.068 µg/L	43.068 ppb	16:42:04
1	Ca 317.933Radial†	241.7	46.0	43.344 µg/L	43.344 ppb	16:42:24
1	Fe 238.204 Radial†	14.5	-1.0	-8.1938 µg/L	-8.1938 ppb	16:42:24
1	K 766.490 Radial†	158.2	19.0	13.495 µg/L	13.495 ppb	16:42:04
1	Mg 279.077 IEC†	19.4	6.8	63.641 µg/L	63.641 ppb	16:42:24
1	Na 589.592 Radial†	1003.5	392.9	129.35 µg/L	129.35 ppb	16:42:04
1	Sr 421.552†	45.5	2.9	0.0298 µg/L	0.0298 ppb	16:42:04
1	Sc 361.383	2059865.1	2059865.1	107.86 %		16:43:26
1	Y 371.029	1412010.5	1412010.5	107.79 %		16:43:26
1	Ag 328.068†	-580.2	26.6	0.2127 µg/L	0.2127 ppb	16:43:32
1	As 188.979†	-2.2	-3.1	-6.1457 µg/L	-6.1457 ppb	16:43:52
1	B 249.677†	314.7	-39.7	-1.7298 µg/L	-1.7298 ppb	16:43:52
1	Ba 233.527†	-34.6	-6.1	-0.1574 µg/L	-0.1574 ppb	16:43:52
1	Be 313.107†	-3476.5	217.1	0.1418 µg/L	0.1418 ppb	16:43:32
1	Cd 226.502†	-142.5	10.0	0.2771 µg/L	0.2771 ppb	16:43:52
1	Co 228.616†	-11.6	-1.9	-0.0950 µg/L	-0.0950 ppb	16:43:52
1	Cr 267.716†	-40.1	15.2	0.3343 µg/L	0.3343 ppb	16:43:32
1	Cu 324.752†	2513.6	-155.6	-1.0878 µg/L	-1.0878 ppb	16:43:32
1	Mn 257.610†	-238.3	23.1	0.0765 µg/L	0.0765 ppb	16:43:52
1	Mo 202.031†	-4.7	3.2	0.3434 µg/L	0.3434 ppb	16:43:52
1	Ni 231.604†	310.9	-14.0	-0.7640 µg/L	-0.7640 ppb	16:43:52
1	P 214.914†	32.2	2.3	4.9663 µg/L	4.9663 ppb	16:43:52
1	Pb 220.353†	102.0	-2.6	-0.7002 µg/L	-0.7002 ppb	16:43:52
1	S 181.975 Axial†	19.3	3.1	13.368 µg/L	13.368 ppb	16:43:52
1	Sb 206.836†	23.2	-5.4	-5.3618 µg/L	-5.3618 ppb	16:43:52
1	Se 196.026†	20.8	3.4	5.1089 µg/L	5.1089 ppb	16:43:52
1	SiO2†	1256.8	-84.7	-18.250 µg/L	-18.250 ppb	16:43:32
1	Si 251.611†	299.6	-35.1	-2.8840 µg/L	-2.8840 ppb	16:43:52
1	Sn 189.927†	-1.9	-0.9	-0.4213 µg/L	-0.4213 ppb	16:43:52
1	Ti 334.940†	103.7	-20.0	-0.0524 µg/L	-0.0524 ppb	16:43:32
1	Tl 190.801†	-18.7	7.0	9.7650 µg/L	9.7650 ppb	16:43:52
1	U 409.014†	8.9	61.9	5.6031 µg/L	5.6031 ppb	16:43:32
1	V 292.402†	-13.8	31.5	0.3435 µg/L	0.3435 ppb	16:43:32
1	Zn 213.857†	488.8	-22.3	-0.5552 µg/L	-0.5552 ppb	16:43:52
2	Sc RADIAL	57826.0	57826.0	106 %		16:42:30
2	Al 396.153Radial†	36.0	44.1	32.860 µg/L	32.860 ppb	16:42:30
2	Ca 317.933Radial†	243.6	50.8	47.787 µg/L	47.787 ppb	16:42:50
2	Fe 238.204 Radial†	18.8	3.3	27.831 µg/L	27.831 ppb	16:42:50
2	K 766.490 Radial†	189.0	49.9	35.479 µg/L	35.479 ppb	16:42:30
2	Mg 279.077 IEC†	19.0	6.7	61.954 µg/L	61.954 ppb	16:42:50
2	Na 589.592 Radial†	991.6	394.0	129.71 µg/L	129.71 ppb	16:42:30
2	Sr 421.552†	62.3	19.3	0.1997 µg/L	0.1997 ppb	16:42:30
2	Sc 361.383	2019733.9	2019733.9	105.75 %		16:43:58
2	Y 371.029	1384706.2	1384706.2	105.71 %		16:43:58
2	Ag 328.068†	-558.4	36.5	0.2916 µg/L	0.2916 ppb	16:44:04
2	As 188.979†	-1.6	-2.7	-5.2610 µg/L	-5.2610 ppb	16:44:24
2	B 249.677†	316.8	-31.9	-1.4069 µg/L	-1.4069 ppb	16:44:24
2	Ba 233.527†	-28.3	-0.8	-0.0199 µg/L	-0.0199 ppb	16:44:24
2	Be 313.107†	-3437.1	190.3	0.1243 µg/L	0.1243 ppb	16:44:04
2	Cd 226.502†	-144.6	5.4	0.1447 µg/L	0.1447 ppb	16:44:24
2	Co 228.616†	-10.6	-1.2	-0.0595 µg/L	-0.0595 ppb	16:44:24
2	Cr 267.716†	-44.1	10.7	0.2350 µg/L	0.2350 ppb	16:44:04
2	Cu 324.752†	2441.7	-177.3	-1.2343 µg/L	-1.2343 ppb	16:44:04
2	Mn 257.610†	-221.2	34.9	0.1222 µg/L	0.1222 ppb	16:44:24
2	Mo 202.031†	-2.8	4.9	0.5203 µg/L	0.5203 ppb	16:44:24
2	Ni 231.604†	305.8	-13.1	-0.7134 µg/L	-0.7134 ppb	16:44:24
2	P 214.914†	32.5	3.1	6.8494 µg/L	6.8494 ppb	16:44:24
2	Pb 220.353†	110.5	7.3	1.9444 µg/L	1.9444 ppb	16:44:24

2	S 181.975 Axial†	18.0	2.2	9.5789 µg/L	9.5789 ppb	16:44:24
2	Sb 206.836†	26.9	-1.5	-1.5033 µg/L	-1.5033 ppb	16:44:24
2	Se 196.026†	9.1	-7.3	-11.082 µg/L	-11.082 ppb	16:44:24
2	SiO2†	1234.9	-82.3	-17.728 µg/L	-17.728 ppb	16:44:04
2	Si 251.611†	315.8	-14.3	-1.1723 µg/L	-1.1723 ppb	16:44:24
2	Sn 189.927†	-0.9	0.0	0.0122 µg/L	0.0122 ppb	16:44:24
2	Ti 334.940†	107.0	-14.9	-0.0400 µg/L	-0.0400 ppb	16:44:04
2	Tl 190.801†	-22.2	3.3	4.6398 µg/L	4.6398 ppb	16:44:24
2	U 409.014†	11.6	64.6	5.8396 µg/L	5.8396 ppb	16:44:04
2	V 292.402†	-47.1	-0.3	0.0106 µg/L	0.0106 ppb	16:44:04
2	Zn 213.857†	485.9	-16.1	-0.4022 µg/L	-0.4022 ppb	16:44:24
3	Sc RADIAL	58203.8	58203.8	107 %		16:42:56
3	Al 396.153Radial†	16.5	25.6	19.057 µg/L	19.057 ppb	16:42:56
3	Ca 317.933Radial†	234.3	40.6	38.198 µg/L	38.198 ppb	16:43:16
3	Fe 238.204 Radial†	16.0	0.5	4.0830 µg/L	4.0830 ppb	16:43:16
3	K 766.490 Radial†	180.9	41.2	29.300 µg/L	29.300 ppb	16:42:56
3	Mg 279.077 IEC†	18.0	5.6	52.283 µg/L	52.283 ppb	16:43:16
3	Na 589.592 Radial†	920.7	321.4	105.80 µg/L	105.80 ppb	16:42:56
3	Sr 421.552†	52.3	9.5	0.0985 µg/L	0.0985 ppb	16:42:56
3	Sc 361.383	1997484.6	1997484.6	104.59 %		16:44:31
3	Y 371.029	1369124.4	1369124.4	104.52 %		16:44:31
3	Ag 328.068†	-544.9	43.6	0.3481 µg/L	0.3481 ppb	16:44:36
3	As 188.979†	3.1	1.8	3.4746 µg/L	3.4746 ppb	16:44:57
3	B 249.677†	317.2	-28.2	-1.2336 µg/L	-1.2336 ppb	16:44:57
3	Ba 233.527†	-26.0	1.1	0.0301 µg/L	0.0301 ppb	16:44:57
3	Be 313.107†	-3380.0	208.8	0.1363 µg/L	0.1363 ppb	16:44:36
3	Cd 226.502†	-138.7	9.5	0.2617 µg/L	0.2617 ppb	16:44:57
3	Co 228.616†	-17.3	-7.7	-0.3772 µg/L	-0.3772 ppb	16:44:57
3	Cr 267.716†	-57.1	-2.2	-0.0487 µg/L	-0.0487 ppb	16:44:36
3	Cu 324.752†	2481.2	-113.8	-0.7943 µg/L	-0.7943 ppb	16:44:36
3	Mn 257.610†	-222.0	31.9	0.1088 µg/L	0.1088 ppb	16:44:57
3	Mo 202.031†	-5.2	2.6	0.2766 µg/L	0.2766 ppb	16:44:57
3	Ni 231.604†	300.3	-15.1	-0.8254 µg/L	-0.8254 ppb	16:44:57
3	P 214.914†	30.5	1.5	3.4004 µg/L	3.4004 ppb	16:44:57
3	Pb 220.353†	108.4	6.5	1.7342 µg/L	1.7342 ppb	16:44:57
3	S 181.975 Axial†	15.4	-0.1	-0.3301 µg/L	-0.3301 ppb	16:44:57
3	Sb 206.836†	27.4	-0.8	-0.7588 µg/L	-0.7588 ppb	16:44:57
3	Se 196.026†	19.0	2.4	3.5402 µg/L	3.5402 ppb	16:44:57
3	SiO2†	1246.0	-58.7	-12.639 µg/L	-12.639 ppb	16:44:36
3	Si 251.611†	309.0	-17.4	-1.4306 µg/L	-1.4306 ppb	16:44:57
3	Sn 189.927†	-0.1	0.8	0.3816 µg/L	0.3816 ppb	16:44:57
3	Ti 334.940†	122.3	0.8	-0.0015 µg/L	-0.0015 ppb	16:44:36
3	Tl 190.801†	-19.4	5.7	7.9510 µg/L	7.9510 ppb	16:44:57
3	U 409.014†	-119.0	-60.2	-5.4508 µg/L	-5.4508 ppb	16:44:36
3	V 292.402†	-13.3	31.5	0.3324 µg/L	0.3324 ppb	16:44:36
3	Zn 213.857†	491.8	-5.3	-0.1315 µg/L	-0.1315 ppb	16:44:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2025694.5	106.07 %	1.655			1.56%
Sc RADIAL	58204.8	107 %	0.7			0.65%
Y 371.029	1388613.7	106.01 %	1.657			1.56%
Ag 328.068†	35.6	0.2841 µg/L	0.06799	0.2841 ppb	0.06799	23.93%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	42.5	31.661 µg/L	12.0501	31.661 ppb	12.0501	38.06%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.4	-2.6440 µg/L	5.31733	-2.6440 ppb	5.31733	201.11%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-33.2	-1.4568 µg/L	0.25185	-1.4568 ppb	0.25185	17.29%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-1.9	-0.0491 µg/L	0.09709	-0.0491 ppb	0.09709	197.73%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	205.4	0.1341 µg/L	0.00896	0.1341 ppb	0.00896	6.68%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	45.8	43.110 µg/L	4.7990	43.110 ppb	4.7990	11.13%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	8.3	0.2278 µg/L	0.07242	0.2278 ppb	0.07242	31.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.6	-0.1772 µg/L	0.17409	-0.1772 ppb	0.17409	98.23%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	7.9	0.1735 µg/L	0.19876 0.1735 ppb 0.19876 114.54%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-148.9	-1.0388 µg/L	0.22407 -1.0388 ppb 0.22407 21.57%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.9	7.9067 µg/L	18.31420 7.9067 ppb 18.31420 231.63%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	36.7	26.091 µg/L	11.3376 26.091 ppb 11.3376 43.45%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	6.4	59.293 µg/L	6.1293 59.293 ppb 6.1293 10.34%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	30.0	0.1025 µg/L	0.02350 0.1025 ppb 0.02350 22.92%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	3.6	0.3801 µg/L	0.12595 0.3801 ppb 0.12595 33.13%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	369.4	121.62 µg/L	13.704 121.62 ppb 13.704 11.27%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-14.0	-0.7676 µg/L	0.05609 -0.7676 ppb 0.05609 7.31%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	2.3	5.0720 µg/L	1.72695 5.0720 ppb 1.72695 34.05%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	3.7	0.9928 µg/L	1.46997 0.9928 ppb 1.46997 148.06%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.7	7.5391 µg/L	7.07334 7.5391 ppb 7.07334 93.82%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-2.6	-2.5413 µg/L	2.47086 -2.5413 ppb 2.47086 97.23%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-0.5	-0.8111 µg/L	8.92964 -0.8111 ppb 8.92964 >999.9%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-75.3	-16.206 µg/L	3.0998 -16.206 ppb 3.0998 19.13%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	-22.2	-1.8290 µg/L	0.92279 -1.8290 ppb 0.92279 50.45%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-0.0	-0.0092 µg/L	0.40185 -0.0092 ppb 0.40185 >999.9%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	10.5	0.1093 µg/L	0.08548 0.1093 ppb 0.08548 78.18%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	-11.4	-0.0313 µg/L	0.02652 -0.0313 ppb 0.02652 84.74%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	5.3	7.4520 µg/L	2.59879 7.4520 ppb 2.59879 34.87%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	22.1	1.9973 µg/L	6.45136 1.9973 ppb 6.45136 323.00%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	20.9	0.2288 µg/L	0.18906 0.2288 ppb 0.18906 82.63%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-14.6	-0.3630 µg/L	0.21454 -0.3630 ppb 0.21454 59.11%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

=====
Analysis Begun

Start Time: 2/11/2010 16:58:42

Plasma On Time: 2/8/2010 03:37:33

Logged In Analyst: optima

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030502 Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\021110.sif

Batch ID:

Results Data Set: 021110B

Results Library: c:\pe\optima1\Results\Results.mdb

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: CCV

Date Collected: 2/11/2010 16:58:44

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	58304.7	58304.7	107 %		16:59:20
1	Al 396.153Radial†	6786.5	6362.5	4732.0 µg/L	4732.0 ppb	16:59:20
1	Ca 317.933Radial†	5536.9	5003.5	4711.1 µg/L	4711.1 ppb	16:59:40
1	Fe 238.204 Radial†	610.2	556.6	4728.2 µg/L	4728.2 ppb	16:59:40
1	K 766.490 Radial†	7283.7	6689.2	4754.7 µg/L	4754.7 ppb	16:59:20
1	Mg 279.077 IEC†	569.3	521.6	4857.3 µg/L	4857.3 ppb	16:59:40
1	Na 589.592 Radial†	31197.2	28659.4	9434.8 µg/L	9434.8 ppb	16:59:20
1	Sr 421.552†	48428.4	45290.4	469.49 µg/L	469.49 ppb	16:59:20
1	Sc 361.383	2048192.0	2048192.0	107.24 %		17:00:43
1	Y 371.029	1396873.4	1396873.4	106.64 %		17:00:43
1	Ag 328.068†	62792.0	59115.0	472.54 µg/L	472.54 ppb	17:00:49
1	As 188.979†	276.2	256.4	500.17 µg/L	500.17 ppb	17:01:09
1	B 249.677†	11976.6	10836.1	471.87 µg/L	471.87 ppb	17:00:49
1	Ba 233.527†	19779.6	18469.6	481.79 µg/L	481.79 ppb	17:00:49
1	Be 313.107†	782023.1	732639.2	478.28 µg/L	478.28 ppb	17:00:43
1	Cd 226.502†	18757.9	17632.9	486.42 µg/L	486.42 ppb	17:00:49
1	Co 228.616†	10618.7	9910.3	487.18 µg/L	487.18 ppb	17:00:49
1	Cr 267.716†	23605.9	22063.7	485.62 µg/L	485.62 ppb	17:00:49
1	Cu 324.752†	75656.1	68059.5	476.07 µg/L	476.07 ppb	17:00:49
1	Mn 257.610†	150274.2	140367.5	486.51 µg/L	486.51 ppb	17:00:43
1	Mo 202.031†	4970.8	4642.6	495.64 µg/L	495.64 ppb	17:01:09
1	Ni 231.604†	9869.6	8900.8	486.13 µg/L	486.13 ppb	17:00:49
1	P 214.914†	1275.8	1162.0	2449.8 µg/L	2449.8 ppb	17:01:09
1	Pb 220.353†	2092.9	1854.3	494.97 µg/L	494.97 ppb	17:01:09
1	S 181.975 Axial†	258.0	225.7	989.09 µg/L	989.09 ppb	17:01:09
1	Sb 206.836†	558.6	493.9	488.34 µg/L	488.34 ppb	17:01:09
1	Se 196.026†	360.2	320.1	495.20 µg/L	495.20 ppb	17:01:09
1	SiO2†	26598.5	23551.8	5072.0 µg/L	5072.0 ppb	17:00:49
1	Si 251.611†	31394.2	28960.7	2380.7 µg/L	2380.7 ppb	17:00:49
1	Sn 189.927†	1171.7	1093.4	502.93 µg/L	502.93 ppb	17:01:09
1	Ti 334.940†	209687.5	195407.3	469.73 µg/L	469.73 ppb	17:00:43
1	Tl 190.801†	351.0	351.5	496.34 µg/L	496.34 ppb	17:01:09
1	U 409.014†	5705.8	5374.0	485.60 µg/L	485.60 ppb	17:00:49
1	V 292.402†	48262.6	45046.7	486.08 µg/L	486.08 ppb	17:00:49
1	Zn 213.857†	21405.2	19483.8	483.11 µg/L	483.11 ppb	17:00:49
2	Sc RADIAL	57809.4	57809.4	106 %		16:59:45
2	Al 396.153Radial†	6713.1	6347.6	4720.4 µg/L	4720.4 ppb	16:59:45
2	Ca 317.933Radial†	5573.2	5082.2	4785.2 µg/L	4785.2 ppb	17:00:06
2	Fe 238.204 Radial†	613.9	565.0	4800.0 µg/L	4800.0 ppb	17:00:06
2	K 766.490 Radial†	7246.0	6712.1	4770.9 µg/L	4770.9 ppb	16:59:45
2	Mg 279.077 IEC†	566.2	523.3	4873.4 µg/L	4873.4 ppb	17:00:06
2	Na 589.592 Radial†	31072.8	28792.1	9478.5 µg/L	9478.5 ppb	16:59:45
2	Sr 421.552†	48008.7	45282.6	469.41 µg/L	469.41 ppb	16:59:45
2	Sc 361.383	1951160.7	1951160.7	102.16 %		17:01:16
2	Y 371.029	1331856.8	1331856.8	101.67 %		17:01:16
2	Ag 328.068†	64120.5	63327.2	506.22 µg/L	506.22 ppb	17:01:22
2	As 188.979†	277.7	270.7	528.08 µg/L	528.08 ppb	17:01:43

2	B 249.677†	12297.9	11706.0	509.91 µg/L	509.91 ppb	17:01:22
2	Ba 233.527†	20306.8	19902.8	519.17 µg/L	519.17 ppb	17:01:22
2	Be 313.107†	802212.2	788663.9	514.85 µg/L	514.85 ppb	17:01:16
2	Cd 226.502†	19256.8	18991.1	523.92 µg/L	523.92 ppb	17:01:22
2	Co 228.616†	10882.2	10660.6	524.05 µg/L	524.05 ppb	17:01:22
2	Cr 267.716†	24198.0	23738.0	522.47 µg/L	522.47 ppb	17:01:22
2	Cu 324.752†	77364.3	73239.8	512.26 µg/L	512.26 ppb	17:01:22
2	Mn 257.610†	154462.4	151435.4	524.84 µg/L	524.84 ppb	17:01:16
2	Mo 202.031†	4974.0	4876.2	520.57 µg/L	520.57 ppb	17:01:43
2	Ni 231.604†	10143.4	9626.4	525.76 µg/L	525.76 ppb	17:01:22
2	P 214.914†	1278.9	1224.2	2579.9 µg/L	2579.9 ppb	17:01:43
2	Pb 220.353†	2103.7	1962.0	523.68 µg/L	523.68 ppb	17:01:43
2	S 181.975 Axial†	261.1	240.7	1054.7 µg/L	1054.7 ppb	17:01:43
2	Sb 206.836†	565.0	526.1	520.02 µg/L	520.02 ppb	17:01:43
2	Se 196.026†	363.5	340.0	525.72 µg/L	525.72 ppb	17:01:43
2	SiO2†	27321.6	25493.0	5490.1 µg/L	5490.1 ppb	17:01:22
2	Si 251.611†	32162.6	31168.6	2562.2 µg/L	2562.2 ppb	17:01:22
2	Sn 189.927†	1172.7	1148.8	528.40 µg/L	528.40 ppb	17:01:43
2	Ti 334.940†	216025.0	211334.0	508.04 µg/L	508.04 ppb	17:01:16
2	Tl 190.801†	350.8	367.7	519.30 µg/L	519.30 ppb	17:01:43
2	U 409.014†	5846.6	5776.4	522.02 µg/L	522.02 ppb	17:01:22
2	V 292.402†	49557.7	48552.4	523.76 µg/L	523.76 ppb	17:01:22
2	Zn 213.857†	21845.1	20906.9	518.41 µg/L	518.41 ppb	17:01:22
3	Sc RADIAL	58043.7	58043.7	106 %		17:00:11
3	Al 396.153Radial†	6748.6	6355.4	4728.2 µg/L	4728.2 ppb	17:00:11
3	Ca 317.933Radial†	5566.3	5054.5	4759.1 µg/L	4759.1 ppb	17:00:32
3	Fe 238.204 Radial†	616.6	565.2	4800.6 µg/L	4800.6 ppb	17:00:32
3	K 766.490 Radial†	7187.1	6629.1	4711.9 µg/L	4711.9 ppb	17:00:11
3	Mg 279.077 IEC†	562.5	517.6	4819.1 µg/L	4819.1 ppb	17:00:32
3	Na 589.592 Radial†	31179.2	28773.8	9472.4 µg/L	9472.4 ppb	17:00:11
3	Sr 421.552†	48277.8	45352.7	470.13 µg/L	470.13 ppb	17:00:11
3	Sc 361.383	2003631.8	2003631.8	104.91 %		17:01:50
3	Y 371.029	1367447.8	1367447.8	104.39 %		17:01:50
3	Ag 328.068†	59826.0	57590.0	460.26 µg/L	460.26 ppb	17:01:56
3	As 188.979†	236.7	224.5	438.03 µg/L	438.03 ppb	17:02:16
3	B 249.677†	11388.2	10523.6	458.12 µg/L	458.12 ppb	17:01:56
3	Ba 233.527†	18491.5	17651.9	460.45 µg/L	460.45 ppb	17:01:56
3	Be 313.107†	746381.1	714882.8	466.69 µg/L	466.69 ppb	17:01:50
3	Cd 226.502†	17452.2	16777.4	462.78 µg/L	462.78 ppb	17:01:56
3	Co 228.616†	9792.8	9343.2	459.24 µg/L	459.24 ppb	17:01:56
3	Cr 267.716†	21341.5	20394.9	448.89 µg/L	448.89 ppb	17:01:56
3	Cu 324.752†	70171.6	64400.7	450.52 µg/L	450.52 ppb	17:01:56
3	Mn 257.610†	143677.7	137196.1	475.54 µg/L	475.54 ppb	17:01:50
3	Mo 202.031†	4142.0	3955.7	422.34 µg/L	422.34 ppb	17:02:16
3	Ni 231.604†	9135.9	8406.0	459.11 µg/L	459.11 ppb	17:01:56
3	P 214.914†	1088.5	1009.9	2124.6 µg/L	2124.6 ppb	17:02:16
3	Pb 220.353†	1832.8	1649.8	440.26 µg/L	440.26 ppb	17:02:16
3	S 181.975 Axial†	227.5	202.0	885.22 µg/L	885.22 ppb	17:02:16
3	Sb 206.836†	480.8	431.3	425.93 µg/L	425.93 ppb	17:02:16
3	Se 196.026†	317.8	287.1	445.21 µg/L	445.21 ppb	17:02:16
3	SiO2†	25159.1	22731.4	4895.3 µg/L	4895.3 ppb	17:01:56
3	Si 251.611†	29597.8	27899.4	2293.5 µg/L	2293.5 ppb	17:01:56
3	Sn 189.927†	953.9	910.2	418.64 µg/L	418.64 ppb	17:02:16
3	Ti 334.940†	199390.2	189940.4	456.58 µg/L	456.58 ppb	17:01:50
3	Tl 190.801†	316.4	325.9	460.38 µg/L	460.38 ppb	17:02:16
3	U 409.014†	5187.8	4998.6	451.60 µg/L	451.60 ppb	17:01:56
3	V 292.402†	44415.7	42380.8	456.99 µg/L	456.99 ppb	17:01:56
3	Zn 213.857†	19887.4	18480.9	458.23 µg/L	458.23 ppb	17:01:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2000994.9	104.77 %	2.543			2.43%
Sc RADIAL	58052.6	106 %	0.5			0.43%
Y 371.029	1365392.6	104.23 %	2.485			2.38%
Ag 328.068†	60010.7	479.67 µg/L	23.794	479.67 ppb	23.794	4.96%
QC value within limits for Ag 328.068 Recovery = 95.93%						
Al 396.153Radial†	6355.1	4726.8 µg/L	5.90	4726.8 ppb	5.90	0.12%
QC value within limits for Al 396.153Radial Recovery = 94.54%						
As 188.979†	250.5	488.76 µg/L	46.092	488.76 ppb	46.092	9.43%

QC value within limits for As 188.979 Recovery = 97.75%						
B 249.677†	11021.9	479.97 µg/L	26.827	479.97 ppb	26.827	5.59%
QC value within limits for B 249.677 Recovery = 95.99%						
Ba 233.527†	18674.8	487.13 µg/L	29.727	487.13 ppb	29.727	6.10%
QC value within limits for Ba 233.527 Recovery = 97.43%						
Be 313.107†	745395.3	486.60 µg/L	25.138	486.60 ppb	25.138	5.17%
QC value within limits for Be 313.107 Recovery = 97.32%						
Ca 317.933Radial†	5046.7	4751.8 µg/L	37.61	4751.8 ppb	37.61	0.79%
QC value within limits for Ca 317.933Radial Recovery = 95.04%						
Cd 226.502†	17800.5	491.04 µg/L	30.831	491.04 ppb	30.831	6.28%
QC value within limits for Cd 226.502 Recovery = 98.21%						
Co 228.616†	9971.4	490.16 µg/L	32.508	490.16 ppb	32.508	6.63%
QC value within limits for Co 228.616 Recovery = 98.03%						
Cr 267.716†	22065.5	485.66 µg/L	36.788	485.66 ppb	36.788	7.57%
QC value within limits for Cr 267.716 Recovery = 97.13%						
Cu 324.752†	68566.7	479.62 µg/L	31.024	479.62 ppb	31.024	6.47%
QC value within limits for Cu 324.752 Recovery = 95.92%						
Fe 238.204 Radial†	562.3	4776.3 µg/L	41.61	4776.3 ppb	41.61	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 95.53%						
K 766.490 Radial†	6676.8	4745.8 µg/L	30.47	4745.8 ppb	30.47	0.64%
QC value within limits for K 766.490 Radial Recovery = 94.92%						
Mg 279.077 IEC†	520.8	4849.9 µg/L	27.89	4849.9 ppb	27.89	0.57%
QC value within limits for Mg 279.077 IEC Recovery = 97.00%						
Mn 257.610†	142999.7	495.63 µg/L	25.888	495.63 ppb	25.888	5.22%
QC value within limits for Mn 257.610 Recovery = 99.13%						
Mo 202.031†	4491.5	479.52 µg/L	51.064	479.52 ppb	51.064	10.65%
QC value within limits for Mo 202.031 Recovery = 95.90%						
Na 589.592 Radial†	28741.7	9461.9 µg/L	23.68	9461.9 ppb	23.68	0.25%
QC value within limits for Na 589.592 Radial Recovery = 94.62%						
Ni 231.604†	8977.7	490.33 µg/L	33.521	490.33 ppb	33.521	6.84%
QC value within limits for Ni 231.604 Recovery = 98.07%						
P 214.914†	1132.0	2384.7 µg/L	234.53	2384.7 ppb	234.53	9.83%
QC value within limits for P 214.914 Recovery = 95.39%						
Pb 220.353†	1822.0	486.30 µg/L	42.376	486.30 ppb	42.376	8.71%
QC value within limits for Pb 220.353 Recovery = 97.26%						
S 181.975 Axial†	222.8	976.34 µg/L	85.462	976.34 ppb	85.462	8.75%
QC value within limits for S 181.975 Axial Recovery = 97.63%						
Sb 206.836†	483.8	478.10 µg/L	47.873	478.10 ppb	47.873	10.01%
QC value within limits for Sb 206.836 Recovery = 95.62%						
Se 196.026†	315.7	488.71 µg/L	40.646	488.71 ppb	40.646	8.32%
QC value within limits for Se 196.026 Recovery = 97.74%						
SiO2†	23925.4	5152.5 µg/L	305.42	5152.5 ppb	305.42	5.93%
QC value within limits for SiO2 Recovery = 96.35%						
Si 251.611†	29342.9	2412.1 µg/L	137.10	2412.1 ppb	137.10	5.68%
QC value within limits for Si 251.611 Recovery = 96.49%						
Sn 189.927†	1050.8	483.32 µg/L	57.445	483.32 ppb	57.445	11.89%
QC value within limits for Sn 189.927 Recovery = 96.66%						
Sr 421.552†	45308.6	469.68 µg/L	0.398	469.68 ppb	0.398	0.08%
QC value within limits for Sr 421.552 Recovery = 93.94%						
Ti 334.940†	198893.9	478.12 µg/L	26.734	478.12 ppb	26.734	5.59%
QC value within limits for Ti 334.940 Recovery = 95.62%						
Tl 190.801†	348.4	492.01 µg/L	29.696	492.01 ppb	29.696	6.04%
QC value within limits for Tl 190.801 Recovery = 98.40%						
U 409.014†	5383.0	486.40 µg/L	35.218	486.40 ppb	35.218	7.24%
QC value within limits for U 409.014 Recovery = 97.28%						
V 292.402†	45326.6	488.94 µg/L	33.478	488.94 ppb	33.478	6.85%
QC value within limits for V 292.402 Recovery = 97.79%						
Zn 213.857†	19623.9	486.59 µg/L	30.241	486.59 ppb	30.241	6.21%
QC value within limits for Zn 213.857 Recovery = 97.32%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 17:02:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56368.9	56368.9	103 %		17:03:01
1	Al 396.153Radial†	-30.7	-19.6	-14.585 µg/L	-14.585 ppb	17:03:01
1	Ca 317.933Radial†	198.1	12.6	11.864 µg/L	11.864 ppb	17:03:21
1	Fe 238.204 Radial†	17.2	2.2	18.515 µg/L	18.515 ppb	17:03:21
1	K 766.490 Radial†	209.8	74.8	53.133 µg/L	53.133 ppb	17:03:01
1	Mg 279.077 IEC†	16.1	4.3	39.936 µg/L	39.936 ppb	17:03:21
1	Na 589.592 Radial†	774.1	207.6	68.329 µg/L	68.329 ppb	17:03:01
1	Sr 421.552†	33.0	-7.6	-0.0789 µg/L	-0.0789 ppb	17:03:01
1	Sc 361.383	2029236.5	2029236.5	106.25 %		17:04:24
1	Y 371.029	1388942.8	1388942.8	106.03 %		17:04:24
1	Ag 328.068†	-592.1	7.2	0.0607 µg/L	0.0607 ppb	17:04:29
1	As 188.979†	-0.6	-1.7	-3.3695 µg/L	-3.3695 ppb	17:04:50
1	B 249.677†	324.7	-25.9	-1.1417 µg/L	-1.1417 ppb	17:04:50
1	Ba 233.527†	-22.4	4.9	0.1278 µg/L	0.1278 ppb	17:04:50
1	Be 313.107†	-3566.1	84.2	0.0549 µg/L	0.0549 ppb	17:04:29
1	Cd 226.502†	-151.8	-0.8	-0.0243 µg/L	-0.0243 ppb	17:04:50
1	Co 228.616†	-13.1	-3.5	-0.1727 µg/L	-0.1727 ppb	17:04:50
1	Cr 267.716†	-46.3	8.8	0.1931 µg/L	0.1931 ppb	17:04:50
1	Cu 324.752†	2496.7	-136.3	-0.9495 µg/L	-0.9495 ppb	17:04:29
1	Mn 257.610†	-248.9	9.9	0.0351 µg/L	0.0351 ppb	17:04:50
1	Mo 202.031†	-5.8	2.1	0.2273 µg/L	0.2273 ppb	17:04:50
1	Ni 231.604†	303.7	-16.3	-0.8932 µg/L	-0.8932 ppb	17:04:50
1	P 214.914†	32.7	3.2	6.8843 µg/L	6.8843 ppb	17:04:50
1	Pb 220.353†	96.4	-6.5	-1.7203 µg/L	-1.7203 ppb	17:04:50
1	S 181.975 Axial†	20.6	4.6	20.049 µg/L	20.049 ppb	17:04:50
1	Sb 206.836†	26.8	-1.7	-1.7124 µg/L	-1.7124 ppb	17:04:50
1	Se 196.026†	16.1	-0.6	-0.9715 µg/L	-0.9715 ppb	17:04:50
1	SiO2†	1235.6	-87.2	-18.769 µg/L	-18.769 ppb	17:04:29
1	Si 251.611†	286.6	-43.1	-3.5447 µg/L	-3.5447 ppb	17:04:50
1	Sn 189.927†	-4.0	-2.9	-1.3291 µg/L	-1.3291 ppb	17:04:50
1	Ti 334.940†	152.5	27.4	0.0631 µg/L	0.0631 ppb	17:04:29
1	Tl 190.801†	-22.1	3.5	4.9105 µg/L	4.9105 ppb	17:04:50
1	U 409.014†	-71.0	-13.2	-1.1992 µg/L	-1.1992 ppb	17:04:29
1	V 292.402†	-14.4	30.7	0.3301 µg/L	0.3301 ppb	17:04:29
1	Zn 213.857†	481.1	-22.7	-0.5654 µg/L	-0.5654 ppb	17:04:50
2	Sc RADIAL	56481.9	56481.9	103 %		17:03:27
2	Al 396.153Radial†	9.3	19.1	14.233 µg/L	14.233 ppb	17:03:27
2	Ca 317.933Radial†	192.6	6.9	6.5217 µg/L	6.5217 ppb	17:03:47
2	Fe 238.204 Radial†	14.6	-0.3	-2.9604 µg/L	-2.9604 ppb	17:03:47
2	K 766.490 Radial†	162.5	28.6	20.329 µg/L	20.329 ppb	17:03:27
2	Mg 279.077 IEC†	13.0	1.3	11.979 µg/L	11.979 ppb	17:03:47
2	Na 589.592 Radial†	797.1	228.3	75.169 µg/L	75.169 ppb	17:03:27
2	Sr 421.552†	46.5	5.4	0.0561 µg/L	0.0561 ppb	17:03:27
2	Sc 361.383	2012770.6	2012770.6	105.39 %		17:04:56
2	Y 371.029	1377597.1	1377597.1	105.17 %		17:04:56
2	Ag 328.068†	-578.5	15.6	0.1231 µg/L	0.1231 ppb	17:05:01
2	As 188.979†	2.2	1.0	1.9088 µg/L	1.9088 ppb	17:05:22
2	B 249.677†	310.5	-36.9	-1.6105 µg/L	-1.6105 ppb	17:05:22
2	Ba 233.527†	-26.6	0.8	0.0202 µg/L	0.0202 ppb	17:05:22
2	Be 313.107†	-3607.4	17.5	0.0114 µg/L	0.0114 ppb	17:05:01
2	Cd 226.502†	-140.3	9.0	0.2482 µg/L	0.2482 ppb	17:05:22
2	Co 228.616†	-20.8	-10.9	-0.5380 µg/L	-0.5380 ppb	17:05:22
2	Cr 267.716†	-50.1	4.9	0.1067 µg/L	0.1067 ppb	17:05:22
2	Cu 324.752†	2459.5	-152.4	-1.0650 µg/L	-1.0650 ppb	17:05:01
2	Mn 257.610†	-250.9	6.1	0.0201 µg/L	0.0201 ppb	17:05:22
2	Mo 202.031†	-3.2	4.5	0.4823 µg/L	0.4823 ppb	17:05:22
2	Ni 231.604†	300.2	-17.4	-0.9488 µg/L	-0.9488 ppb	17:05:22
2	P 214.914†	25.9	-3.0	-6.3600 µg/L	-6.3600 ppb	17:05:22
2	Pb 220.353†	99.5	-2.8	-0.7298 µg/L	-0.7298 ppb	17:05:22

2	S 181.975 Axial†	20.2	4.3	19.053 µg/L	19.053 ppb	17:05:22
2	Sb 206.836†	24.6	-3.6	-3.5810 µg/L	-3.5810 ppb	17:05:22
2	Se 196.026†	10.7	-5.7	-8.7427 µg/L	-8.7427 ppb	17:05:22
2	SiO2†	1253.5	-60.7	-13.065 µg/L	-13.065 ppb	17:05:01
2	Si 251.611†	291.0	-36.8	-3.0237 µg/L	-3.0237 ppb	17:05:22
2	Sn 189.927†	-0.9	-0.0	-0.0009 µg/L	-0.0009 ppb	17:05:22
2	Ti 334.940†	142.1	18.7	0.0441 µg/L	0.0441 ppb	17:05:01
2	Tl 190.801†	-21.2	4.2	5.8568 µg/L	5.8568 ppb	17:05:22
2	U 409.014†	-66.1	-9.1	-0.8270 µg/L	-0.8270 ppb	17:05:01
2	V 292.402†	-52.0	-5.1	-0.0519 µg/L	-0.0519 ppb	17:05:01
2	Zn 213.857†	477.8	-22.2	-0.5493 µg/L	-0.5493 ppb	17:05:22
3	Sc RADIAL	56062.3	56062.3	103 %		17:03:53
3	Al 396.153Radial†	-13.3	-2.8	-2.1100 µg/L	-2.1100 ppb	17:03:53
3	Ca 317.933Radial†	193.5	9.2	8.6834 µg/L	8.6834 ppb	17:04:13
3	Fe 238.204 Radial†	13.9	-1.0	-8.5236 µg/L	-8.5236 ppb	17:04:13
3	K 766.490 Radial†	145.6	13.3	9.4734 µg/L	9.4734 ppb	17:03:53
3	Mg 279.077 IEC†	12.4	0.8	7.7063 µg/L	7.7063 ppb	17:04:13
3	Na 589.592 Radial†	762.5	200.4	65.960 µg/L	65.960 ppb	17:03:53
3	Sr 421.552†	41.6	1.0	0.0099 µg/L	0.0099 ppb	17:03:53
3	Sc 361.383	1996457.8	1996457.8	104.54 %		17:05:28
3	Y 371.029	1367454.7	1367454.7	104.39 %		17:05:28
3	Ag 328.068†	-552.2	36.3	0.2878 µg/L	0.2878 ppb	17:05:33
3	As 188.979†	-1.4	-2.4	-4.7806 µg/L	-4.7806 ppb	17:05:54
3	B 249.677†	316.6	-28.6	-1.2466 µg/L	-1.2466 ppb	17:05:54
3	Ba 233.527†	-26.5	0.6	0.0163 µg/L	0.0163 ppb	17:05:54
3	Be 313.107†	-3498.2	94.1	0.0615 µg/L	0.0615 ppb	17:05:33
3	Cd 226.502†	-139.5	8.7	0.2407 µg/L	0.2407 ppb	17:05:54
3	Co 228.616†	-2.0	6.9	0.3417 µg/L	0.3417 ppb	17:05:54
3	Cr 267.716†	-37.2	16.7	0.3684 µg/L	0.3684 ppb	17:05:54
3	Cu 324.752†	2465.1	-128.0	-0.8950 µg/L	-0.8950 ppb	17:05:33
3	Mn 257.610†	-235.5	18.8	0.0637 µg/L	0.0637 ppb	17:05:54
3	Mo 202.031†	0.7	8.2	0.8795 µg/L	0.8795 ppb	17:05:54
3	Ni 231.604†	298.8	-16.4	-0.8963 µg/L	-0.8963 ppb	17:05:54
3	P 214.914†	31.0	2.0	4.4888 µg/L	4.4888 ppb	17:05:54
3	Pb 220.353†	112.9	10.8	2.8917 µg/L	2.8917 ppb	17:05:54
3	S 181.975 Axial†	16.6	1.1	4.7192 µg/L	4.7192 ppb	17:05:54
3	Sb 206.836†	24.2	-3.9	-3.7807 µg/L	-3.7807 ppb	17:05:54
3	Se 196.026†	10.9	-5.4	-8.2970 µg/L	-8.2970 ppb	17:05:54
3	SiO2†	1240.9	-63.0	-13.561 µg/L	-13.561 ppb	17:05:33
3	Si 251.611†	299.0	-26.9	-2.2074 µg/L	-2.2074 ppb	17:05:54
3	Sn 189.927†	0.3	1.1	0.5288 µg/L	0.5288 ppb	17:05:54
3	Ti 334.940†	59.1	-59.6	-0.1438 µg/L	-0.1438 ppb	17:05:33
3	Tl 190.801†	-24.5	0.9	1.2389 µg/L	1.2389 ppb	17:05:54
3	U 409.014†	-14.3	40.0	3.6190 µg/L	3.6190 ppb	17:05:33
3	V 292.402†	-38.2	7.6	0.0916 µg/L	0.0916 ppb	17:05:33
3	Zn 213.857†	475.0	-21.1	-0.5227 µg/L	-0.5227 ppb	17:05:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2012821.6	105.39 %	0.858			0.81%
Sc RADIAL	56304.4	103 %	0.4			0.39%
Y 371.029	1377998.2	105.20 %	0.821			0.78%
Ag 328.068†	19.7	0.1572 µg/L	0.11730	0.1572 ppb	0.11730	74.62%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-1.1	-0.8207 µg/L	14.45235	-0.8207 ppb	14.45235	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.1	-2.0804 µg/L	3.52609	-2.0804 ppb	3.52609	169.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-30.5	-1.3329 µg/L	0.24603	-1.3329 ppb	0.24603	18.46%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.1	0.0547 µg/L	0.06331	0.0547 ppb	0.06331	115.64%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	65.3	0.0426 µg/L	0.02720	0.0426 ppb	0.02720	63.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.6	9.0232 µg/L	2.68752	9.0232 ppb	2.68752	29.78%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	5.7	0.1549 µg/L	0.15521	0.1549 ppb	0.15521	100.22%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.5	-0.1230 µg/L	0.44196	-0.1230 ppb	0.44196	359.31%

Cr	267.716†	10.1	0.2228 µg/L	0.13336	0.2228 ppb	0.13336	59.87%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-138.9	-0.9698 µg/L	0.08678	-0.9698 ppb	0.08678	8.95%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	0.3	2.3437 µg/L	14.27846	2.3437 ppb	14.27846	609.22%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	38.9	27.645 µg/L	22.7308	27.645 ppb	22.7308	82.22%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	2.1	19.874 µg/L	17.5054	19.874 ppb	17.5054	88.08%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	11.6	0.0396 µg/L	0.02217	0.0396 ppb	0.02217	55.91%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	5.0	0.5297 µg/L	0.32865	0.5297 ppb	0.32865	62.05%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	212.1	69.819 µg/L	4.7822	69.819 ppb	4.7822	6.85%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-16.7	-0.9128 µg/L	0.03120	-0.9128 ppb	0.03120	3.42%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	0.7	1.6710 µg/L	7.05748	1.6710 ppb	7.05748	422.34%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	0.5	0.1472 µg/L	2.42781	0.1472 ppb	2.42781	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	3.3	14.607 µg/L	8.5775	14.607 ppb	8.5775	58.72%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-3.1	-3.0247 µg/L	1.14085	-3.0247 ppb	1.14085	37.72%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-3.9	-6.0037 µg/L	4.36372	-6.0037 ppb	4.36372	72.68%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-70.3	-15.131 µg/L	3.1599	-15.131 ppb	3.1599	20.88%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	-35.6	-2.9252 µg/L	0.67407	-2.9252 ppb	0.67407	23.04%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-0.6	-0.2671 µg/L	0.95712	-0.2671 ppb	0.95712	358.38%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-0.4	-0.0043 µg/L	0.06861	-0.0043 ppb	0.06861	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-4.5	-0.0122 µg/L	0.11438	-0.0122 ppb	0.11438	935.94%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	2.9	4.0021 µg/L	2.43930	4.0021 ppb	2.43930	60.95%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	5.9	0.5309 µg/L	2.68081	0.5309 ppb	2.68081	504.91%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	11.1	0.1233 µg/L	0.19295	0.1233 ppb	0.19295	156.48%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-22.0	-0.5458 µg/L	0.02154	-0.5458 ppb	0.02154	3.95%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 2/11/2010 17:27:43
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	59035.7	59035.7	108 %		17:28:20
1	Al 396.153Radial†	6783.5	6281.0	4671.2 µg/L	4671.2 ppb	17:28:41
1	Ca 317.933Radial†	5601.2	4998.8	4706.7 µg/L	4706.7 ppb	17:28:41
1	Fe 238.204 Radial†	616.0	555.0	4714.2 µg/L	4714.2 ppb	17:28:41
1	K 766.490 Radial†	7145.2	6476.8	4603.7 µg/L	4603.7 ppb	17:28:20
1	Mg 279.077 IEC†	569.6	515.2	4798.3 µg/L	4798.3 ppb	17:28:41
1	Na 589.592 Radial†	30872.0	27997.1	9216.7 µg/L	9216.7 ppb	17:28:20
1	Sr 421.552†	47604.8	43967.8	455.78 µg/L	455.78 ppb	17:28:20
1	Sc 361.383	2041194.6	2041194.6	106.88 %		17:29:44
1	Y 371.029	1394791.7	1394791.7	106.48 %		17:29:44
1	Ag 328.068†	63072.7	59578.4	476.23 µg/L	476.23 ppb	17:29:50
1	As 188.979†	267.6	249.3	486.27 µg/L	486.27 ppb	17:30:10
1	B 249.677†	11989.2	10886.2	474.07 µg/L	474.07 ppb	17:29:50
1	Ba 233.527†	19747.0	18502.3	482.64 µg/L	482.64 ppb	17:29:50
1	Be 313.107†	767703.3	721740.7	471.16 µg/L	471.16 ppb	17:29:44
1	Cd 226.502†	18704.8	17643.2	486.70 µg/L	486.70 ppb	17:29:50
1	Co 228.616†	10605.3	9931.7	488.25 µg/L	488.25 ppb	17:29:50
1	Cr 267.716†	23632.0	22163.6	487.82 µg/L	487.82 ppb	17:29:50
1	Cu 324.752†	76228.6	68837.1	481.50 µg/L	481.50 ppb	17:29:50
1	Mn 257.610†	148178.1	138886.7	481.38 µg/L	481.38 ppb	17:29:44
1	Mo 202.031†	4955.0	4643.6	495.75 µg/L	495.75 ppb	17:30:10
1	Ni 231.604†	9868.1	8930.9	487.78 µg/L	487.78 ppb	17:29:50
1	P 214.914†	1270.5	1161.1	2447.3 µg/L	2447.3 ppb	17:30:10
1	Pb 220.353†	2082.6	1851.4	494.18 µg/L	494.18 ppb	17:30:10
1	S 181.975 Axial†	249.9	219.0	959.68 µg/L	959.68 ppb	17:30:10
1	Sb 206.836†	563.4	500.2	494.49 µg/L	494.49 ppb	17:30:10
1	Se 196.026†	362.5	323.3	500.24 µg/L	500.24 ppb	17:30:10
1	SiO2†	26645.9	23681.2	5099.9 µg/L	5099.9 ppb	17:29:50
1	Si 251.611†	31439.9	29103.8	2392.5 µg/L	2392.5 ppb	17:29:50
1	Sn 189.927†	1158.8	1085.1	499.11 µg/L	499.11 ppb	17:30:10
1	Ti 334.940†	206788.8	193365.5	464.82 µg/L	464.82 ppb	17:29:44
1	Tl 190.801†	353.5	355.1	501.20 µg/L	501.20 ppb	17:30:10
1	U 409.014†	5796.1	5476.7	494.90 µg/L	494.90 ppb	17:29:50
1	V 292.402†	48354.5	45287.0	488.65 µg/L	488.65 ppb	17:29:50
1	Zn 213.857†	21383.2	19531.6	484.30 µg/L	484.30 ppb	17:29:50
2	Sc RADIAL	57479.6	57479.6	105 %		17:28:46
2	Al 396.153Radial†	6775.5	6443.2	4792.2 µg/L	4792.2 ppb	17:29:07
2	Ca 317.933Radial†	5568.2	5107.6	4809.2 µg/L	4809.2 ppb	17:29:07
2	Fe 238.204 Radial†	613.4	567.9	4823.2 µg/L	4823.2 ppb	17:29:07
2	K 766.490 Radial†	7368.3	6867.5	4881.4 µg/L	4881.4 ppb	17:28:46
2	Mg 279.077 IEC†	569.1	529.1	4927.1 µg/L	4927.1 ppb	17:29:07
2	Na 589.592 Radial†	31686.3	29543.0	9725.6 µg/L	9725.6 ppb	17:28:46
2	Sr 421.552†	49060.1	46540.9	482.45 µg/L	482.45 ppb	17:28:46
2	Sc 361.383	2046028.0	2046028.0	107.13 %		17:30:18
2	Y 371.029	1397859.6	1397859.6	106.71 %		17:30:18
2	Ag 328.068†	62181.8	58607.4	468.48 µg/L	468.48 ppb	17:30:23
2	As 188.979†	270.5	251.3	490.33 µg/L	490.33 ppb	17:30:44
2	B 249.677†	11883.0	10760.6	468.51 µg/L	468.51 ppb	17:30:23
2	Ba 233.527†	19447.6	18179.1	474.21 µg/L	474.21 ppb	17:30:23
2	Be 313.107†	766991.4	719379.3	469.62 µg/L	469.62 ppb	17:30:18
2	Cd 226.502†	18417.3	17333.6	478.14 µg/L	478.14 ppb	17:30:23
2	Co 228.616†	10411.2	9727.0	478.18 µg/L	478.18 ppb	17:30:23
2	Cr 267.716†	23232.1	21738.1	478.45 µg/L	478.45 ppb	17:30:23
2	Cu 324.752†	75095.1	67610.5	472.94 µg/L	472.94 ppb	17:30:23
2	Mn 257.610†	147694.9	138108.1	478.69 µg/L	478.69 ppb	17:30:18
2	Mo 202.031†	4924.2	4604.0	491.52 µg/L	491.52 ppb	17:30:44
2	Ni 231.604†	9689.5	8742.4	477.48 µg/L	477.48 ppb	17:30:23
2	P 214.914†	1255.9	1144.7	2412.6 µg/L	2412.6 ppb	17:30:44
2	Pb 220.353†	2059.1	1824.8	487.10 µg/L	487.10 ppb	17:30:44

2	S 181.975 Axial†	252.0	220.4	965.86 µg/L	965.86 ppb	17:30:44
2	Sb 206.836†	552.5	488.7	483.25 µg/L	483.25 ppb	17:30:44
2	Se 196.026†	360.1	320.3	495.71 µg/L	495.71 ppb	17:30:44
2	SiO2†	26270.0	23271.4	5011.6 µg/L	5011.6 ppb	17:30:23
2	Si 251.611†	31001.1	28624.7	2353.1 µg/L	2353.1 ppb	17:30:23
2	Sn 189.927†	1147.6	1072.1	493.14 µg/L	493.14 ppb	17:30:44
2	Ti 334.940†	206329.6	192479.8	462.68 µg/L	462.68 ppb	17:30:18
2	Tl 190.801†	343.3	344.8	486.80 µg/L	486.80 ppb	17:30:44
2	U 409.014†	5690.4	5365.3	484.79 µg/L	484.79 ppb	17:30:23
2	V 292.402†	47623.9	44498.2	480.19 µg/L	480.19 ppb	17:30:23
2	Zn 213.857†	21043.3	19167.1	475.24 µg/L	475.24 ppb	17:30:23
3	Sc RADIAL	58545.2	58545.2	107 %		17:29:12
3	Al 396.153Radial†	6838.5	6384.8	4750.3 µg/L	4750.3 ppb	17:29:33
3	Ca 317.933Radial†	5643.2	5081.3	4784.4 µg/L	4784.4 ppb	17:29:33
3	Fe 238.204 Radial†	621.5	564.8	4796.6 µg/L	4796.6 ppb	17:29:33
3	K 766.490 Radial†	7265.1	6643.9	4722.5 µg/L	4722.5 ppb	17:29:12
3	Mg 279.077 IEC†	574.9	524.6	4884.3 µg/L	4884.3 ppb	17:29:33
3	Na 589.592 Radial†	31113.3	28461.2	9369.5 µg/L	9369.5 ppb	17:29:12
3	Sr 421.552†	48089.7	44788.5	464.29 µg/L	464.29 ppb	17:29:12
3	Sc 361.383	2017377.3	2017377.3	105.63 %		17:30:51
3	Y 371.029	1378304.1	1378304.1	105.22 %		17:30:51
3	Ag 328.068†	59471.1	56865.5	454.46 µg/L	454.46 ppb	17:30:57
3	As 188.979†	229.9	216.5	422.47 µg/L	422.47 ppb	17:31:17
3	B 249.677†	11339.4	10403.4	452.85 µg/L	452.85 ppb	17:30:57
3	Ba 233.527†	18247.7	17301.0	451.29 µg/L	451.29 ppb	17:30:57
3	Be 313.107†	738207.7	702297.7	458.47 µg/L	458.47 ppb	17:30:51
3	Cd 226.502†	17185.8	16411.8	452.68 µg/L	452.68 ppb	17:30:57
3	Co 228.616†	9649.4	9143.9	449.43 µg/L	449.43 ppb	17:30:57
3	Cr 267.716†	20989.9	19923.4	438.52 µg/L	438.52 ppb	17:30:57
3	Cu 324.752†	69862.4	63652.3	445.29 µg/L	445.29 ppb	17:30:57
3	Mn 257.610†	142669.2	135308.3	469.00 µg/L	469.00 ppb	17:30:51
3	Mo 202.031†	4082.7	3872.6	413.47 µg/L	413.47 ppb	17:31:17
3	Ni 231.604†	8980.8	8199.9	447.86 µg/L	447.86 ppb	17:30:57
3	P 214.914†	1067.7	983.2	2067.7 µg/L	2067.7 ppb	17:31:17
3	Pb 220.353†	1798.7	1605.6	428.46 µg/L	428.46 ppb	17:31:17
3	S 181.975 Axial†	223.6	196.9	862.47 µg/L	862.47 ppb	17:31:17
3	Sb 206.836†	480.2	427.6	422.29 µg/L	422.29 ppb	17:31:17
3	Se 196.026†	311.3	278.8	432.49 µg/L	432.49 ppb	17:31:17
3	SiO2†	24862.0	22286.7	4799.6 µg/L	4799.6 ppb	17:30:57
3	Si 251.611†	29262.2	27389.5	2251.6 µg/L	2251.6 ppb	17:30:57
3	Sn 189.927†	942.0	892.7	410.61 µg/L	410.61 ppb	17:31:17
3	Ti 334.940†	197920.3	187254.0	450.12 µg/L	450.12 ppb	17:30:51
3	Tl 190.801†	315.4	322.9	456.18 µg/L	456.18 ppb	17:31:17
3	U 409.014†	5127.6	4907.9	443.39 µg/L	443.39 ppb	17:30:57
3	V 292.402†	43917.4	41620.5	448.79 µg/L	448.79 ppb	17:30:57
3	Zn 213.857†	19595.2	18075.2	448.15 µg/L	448.15 ppb	17:30:57

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2034866.6	106.55 %	0.803			0.75%
Sc RADIAL	58353.5	107 %	1.5			1.36%
Y 371.029	1390318.5	106.14 %	0.803			0.76%
Ag 328.068†	58350.4	466.39 µg/L	11.039	466.39 ppb	11.039	2.37%
QC value within limits for Ag 328.068 Recovery = 93.28%						
Al 396.153Radial†	6369.7	4737.9 µg/L	61.46	4737.9 ppb	61.46	1.30%
QC value within limits for Al 396.153Radial Recovery = 94.76%						
As 188.979†	239.1	466.36 µg/L	38.059	466.36 ppb	38.059	8.16%
QC value within limits for As 188.979 Recovery = 93.27%						
B 249.677†	10683.4	465.15 µg/L	11.003	465.15 ppb	11.003	2.37%
QC value within limits for B 249.677 Recovery = 93.03%						
Ba 233.527†	17994.1	469.38 µg/L	16.223	469.38 ppb	16.223	3.46%
QC value within limits for Ba 233.527 Recovery = 93.88%						
Be 313.107†	714472.6	466.42 µg/L	6.926	466.42 ppb	6.926	1.48%
QC value within limits for Be 313.107 Recovery = 93.28%						
Ca 317.933Radial†	5062.6	4766.7 µg/L	53.48	4766.7 ppb	53.48	1.12%
QC value within limits for Ca 317.933Radial Recovery = 95.33%						
Cd 226.502†	17129.5	472.51 µg/L	17.696	472.51 ppb	17.696	3.75%
QC value within limits for Cd 226.502 Recovery = 94.50%						
Co 228.616†	9600.9	471.95 µg/L	20.142	471.95 ppb	20.142	4.27%

QC value within limits for Co 228.616 Recovery = 94.39%						
Cr 267.716†	21275.0	468.26 µg/L	26.182	468.26 ppb	26.182	5.59%
QC value within limits for Cr 267.716 Recovery = 93.65%						
Cu 324.752†	66699.9	466.58 µg/L	18.924	466.58 ppb	18.924	4.06%
QC value within limits for Cu 324.752 Recovery = 93.32%						
Fe 238.204 Radial†	562.6	4778.0 µg/L	56.85	4778.0 ppb	56.85	1.19%
QC value within limits for Fe 238.204 Radial Recovery = 95.56%						
K 766.490 Radial†	6662.7	4735.8 µg/L	139.33	4735.8 ppb	139.33	2.94%
QC value within limits for K 766.490 Radial Recovery = 94.72%						
Mg 279.077 IEC†	523.0	4869.9 µg/L	65.60	4869.9 ppb	65.60	1.35%
QC value within limits for Mg 279.077 IEC Recovery = 97.40%						
Mn 257.610†	137434.4	476.36 µg/L	6.514	476.36 ppb	6.514	1.37%
QC value within limits for Mn 257.610 Recovery = 95.27%						
Mo 202.031†	4373.4	466.91 µg/L	46.335	466.91 ppb	46.335	9.92%
QC value within limits for Mo 202.031 Recovery = 93.38%						
Na 589.592 Radial†	28667.1	9437.3 µg/L	261.13	9437.3 ppb	261.13	2.77%
QC value within limits for Na 589.592 Radial Recovery = 94.37%						
Ni 231.604†	8624.4	471.04 µg/L	20.725	471.04 ppb	20.725	4.40%
QC value within limits for Ni 231.604 Recovery = 94.21%						
P 214.914†	1096.3	2309.2 µg/L	209.89	2309.2 ppb	209.89	9.09%
QC value within limits for P 214.914 Recovery = 92.37%						
Pb 220.353†	1760.6	469.91 µg/L	36.070	469.91 ppb	36.070	7.68%
QC value within limits for Pb 220.353 Recovery = 93.98%						
S 181.975 Axial†	212.1	929.34 µg/L	57.991	929.34 ppb	57.991	6.24%
QC value within limits for S 181.975 Axial Recovery = 92.93%						
Sb 206.836†	472.2	466.68 µg/L	38.846	466.68 ppb	38.846	8.32%
QC value within limits for Sb 206.836 Recovery = 93.34%						
Se 196.026†	307.5	476.15 µg/L	37.872	476.15 ppb	37.872	7.95%
QC value within limits for Se 196.026 Recovery = 95.23%						
SiO2†	23079.8	4970.4 µg/L	154.36	4970.4 ppb	154.36	3.11%
QC value within limits for SiO2 Recovery = 92.95%						
Si 251.611†	28372.7	2332.4 µg/L	72.71	2332.4 ppb	72.71	3.12%
QC value within limits for Si 251.611 Recovery = 93.30%						
Sn 189.927†	1016.6	467.62 µg/L	49.463	467.62 ppb	49.463	10.58%
QC value within limits for Sn 189.927 Recovery = 93.52%						
Sr 421.552†	45099.0	467.50 µg/L	13.625	467.50 ppb	13.625	2.91%
QC value within limits for Sr 421.552 Recovery = 93.50%						
Ti 334.940†	191033.1	459.21 µg/L	7.946	459.21 ppb	7.946	1.73%
QC value within limits for Ti 334.940 Recovery = 91.84%						
Tl 190.801†	340.9	481.40 µg/L	22.992	481.40 ppb	22.992	4.78%
QC value within limits for Tl 190.801 Recovery = 96.28%						
U 409.014†	5250.0	474.36 µg/L	27.295	474.36 ppb	27.295	5.75%
QC value within limits for U 409.014 Recovery = 94.87%						
V 292.402†	43801.9	472.54 µg/L	21.006	472.54 ppb	21.006	4.45%
QC value within limits for V 292.402 Recovery = 94.51%						
Zn 213.857†	18924.6	469.23 µg/L	18.806	469.23 ppb	18.806	4.01%
QC value within limits for Zn 213.857 Recovery = 93.85%						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 17:31:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57249.4	57249.4	105 %		17:32:01
1	Al 396.153Radial†	-19.1	-8.1	-6.0314 µg/L	-6.0314 ppb	17:32:01
1	Ca 317.933Radial†	186.6	-1.3	-1.1941 µg/L	-1.1941 ppb	17:32:21
1	Fe 238.204 Radial†	16.2	0.9	8.0275 µg/L	8.0275 ppb	17:32:21
1	K 766.490 Radial†	205.8	67.8	48.166 µg/L	48.166 ppb	17:32:01
1	Mg 279.077 IEC†	11.8	-0.0	-0.3578 µg/L	-0.3578 ppb	17:32:21
1	Na 589.592 Radial†	713.1	137.9	45.390 µg/L	45.390 ppb	17:32:01
1	Sr 421.552†	47.1	5.3	0.0553 µg/L	0.0553 ppb	17:32:01
1	Sc 361.383	2021263.0	2021263.0	105.83 %		17:33:23
1	Y 371.029	1385458.4	1385458.4	105.77 %		17:33:23
1	Ag 328.068†	-548.3	46.5	0.3696 µg/L	0.3696 ppb	17:33:29
1	As 188.979†	-3.1	-4.1	-8.0437 µg/L	-8.0437 ppb	17:33:50
1	B 249.677†	328.8	-20.8	-0.9109 µg/L	-0.9109 ppb	17:33:50
1	Ba 233.527†	-23.9	3.4	0.0895 µg/L	0.0895 ppb	17:33:50
1	Be 313.107†	-3534.2	101.1	0.0660 µg/L	0.0660 ppb	17:33:29
1	Cd 226.502†	-135.6	14.0	0.3833 µg/L	0.3833 ppb	17:33:50
1	Co 228.616†	-7.8	1.5	0.0715 µg/L	0.0715 ppb	17:33:50
1	Cr 267.716†	-39.7	14.9	0.3275 µg/L	0.3275 ppb	17:33:29
1	Cu 324.752†	2441.6	-179.0	-1.2495 µg/L	-1.2495 ppb	17:33:29
1	Mn 257.610†	-227.7	28.9	0.1013 µg/L	0.1013 ppb	17:33:50
1	Mo 202.031†	-11.3	-3.1	-0.3352 µg/L	-0.3352 ppb	17:33:50
1	Ni 231.604†	297.1	-21.4	-1.1721 µg/L	-1.1721 ppb	17:33:50
1	P 214.914†	29.1	-0.1	-0.1206 µg/L	-0.1206 ppb	17:33:50
1	Pb 220.353†	93.1	-9.2	-2.4716 µg/L	-2.4716 ppb	17:33:50
1	S 181.975 Axial†	17.0	1.2	5.2600 µg/L	5.2600 ppb	17:33:50
1	Sb 206.836†	21.2	-7.0	-6.8579 µg/L	-6.8579 ppb	17:33:50
1	Se 196.026†	17.1	0.4	0.5587 µg/L	0.5587 ppb	17:33:50
1	SiO2†	1257.7	-61.7	-13.286 µg/L	-13.286 ppb	17:33:29
1	Si 251.611†	315.2	-15.0	-1.2350 µg/L	-1.2350 ppb	17:33:50
1	Sn 189.927†	-0.7	0.2	0.0875 µg/L	0.0875 ppb	17:33:50
1	Ti 334.940†	99.4	-22.2	-0.0533 µg/L	-0.0533 ppb	17:33:29
1	Tl 190.801†	-25.0	0.6	0.8769 µg/L	0.8769 ppb	17:33:50
1	U 409.014†	-2.8	50.9	4.6107 µg/L	4.6107 ppb	17:33:29
1	V 292.402†	-42.3	4.3	0.0496 µg/L	0.0496 ppb	17:33:29
1	Zn 213.857†	478.9	-23.0	-0.5682 µg/L	-0.5682 ppb	17:33:50
2	Sc RADIAL	57058.0	57058.0	105 %		17:32:27
2	Al 396.153Radial†	-2.2	8.1	5.9887 µg/L	5.9887 ppb	17:32:27
2	Ca 317.933Radial†	185.4	-1.8	-1.6973 µg/L	-1.6973 ppb	17:32:47
2	Fe 238.204 Radial†	16.9	1.6	13.808 µg/L	13.808 ppb	17:32:47
2	K 766.490 Radial†	159.2	23.8	16.947 µg/L	16.947 ppb	17:32:27
2	Mg 279.077 IEC†	16.4	4.4	41.355 µg/L	41.355 ppb	17:32:47
2	Na 589.592 Radial†	724.2	150.8	49.634 µg/L	49.634 ppb	17:32:27
2	Sr 421.552†	-4.4	-43.8	-0.4540 µg/L	-0.4540 ppb	17:32:27
2	Sc 361.383	2001081.9	2001081.9	104.78 %		17:33:56
2	Y 371.029	1372125.9	1372125.9	104.75 %		17:33:56
2	Ag 328.068†	-553.2	36.5	0.2946 µg/L	0.2946 ppb	17:34:01
2	As 188.979†	-0.6	-1.7	-3.3761 µg/L	-3.3761 ppb	17:34:22
2	B 249.677†	320.5	-25.5	-1.1231 µg/L	-1.1231 ppb	17:34:22
2	Ba 233.527†	-11.0	15.5	0.4048 µg/L	0.4048 ppb	17:34:22
2	Be 313.107†	-3526.3	74.9	0.0489 µg/L	0.0489 ppb	17:34:01
2	Cd 226.502†	-133.8	14.4	0.3950 µg/L	0.3950 ppb	17:34:22
2	Co 228.616†	-11.0	-1.6	-0.0801 µg/L	-0.0801 ppb	17:34:22
2	Cr 267.716†	-44.3	10.1	0.2231 µg/L	0.2231 ppb	17:34:01
2	Cu 324.752†	2455.1	-143.0	-0.9967 µg/L	-0.9967 ppb	17:34:01
2	Mn 257.610†	-230.3	24.3	0.0842 µg/L	0.0842 ppb	17:34:22
2	Mo 202.031†	-2.3	5.3	0.5710 µg/L	0.5710 ppb	17:34:22
2	Ni 231.604†	304.4	-11.7	-0.6402 µg/L	-0.6402 ppb	17:34:22
2	P 214.914†	29.3	0.4	0.8548 µg/L	0.8548 ppb	17:34:22
2	Pb 220.353†	101.4	-0.5	-0.1165 µg/L	-0.1165 ppb	17:34:22

2	S 181.975 Axial†	19.4	3.7	16.024 µg/L	16.024 ppb	17:34:22
2	Sb 206.836†	27.6	-0.6	-0.5726 µg/L	-0.5726 ppb	17:34:22
2	Se 196.026†	16.9	0.3	0.5139 µg/L	0.5139 ppb	17:34:22
2	SiO2†	1231.1	-75.1	-16.163 µg/L	-16.163 ppb	17:34:01
2	Si 251.611†	308.3	-18.6	-1.5330 µg/L	-1.5330 ppb	17:34:22
2	Sn 189.927†	-2.5	-1.5	-0.6783 µg/L	-0.6783 ppb	17:34:22
2	Ti 334.940†	155.7	32.5	0.0749 µg/L	0.0749 ppb	17:34:01
2	Tl 190.801†	-24.6	0.8	1.0677 µg/L	1.0677 ppb	17:34:22
2	U 409.014†	-70.7	-13.8	-1.2553 µg/L	-1.2553 ppb	17:34:01
2	V 292.402†	13.1	56.7	0.6099 µg/L	0.6099 ppb	17:34:01
2	Zn 213.857†	482.3	-15.3	-0.3800 µg/L	-0.3800 ppb	17:34:22
3	Sc RADIAL	57391.7	57391.7	105 %		17:32:53
3	Al 396.153Radial†	-24.1	-12.7	-9.5161 µg/L	-9.5161 ppb	17:32:53
3	Ca 317.933Radial†	189.2	0.7	0.6854 µg/L	0.6854 ppb	17:33:13
3	Fe 238.204 Radial†	14.2	-1.0	-8.3318 µg/L	-8.3318 ppb	17:33:13
3	K 766.490 Radial†	170.0	33.2	23.601 µg/L	23.601 ppb	17:32:53
3	Mg 279.077 IEC†	13.6	1.6	15.113 µg/L	15.113 ppb	17:33:13
3	Na 589.592 Radial†	706.7	130.1	42.833 µg/L	42.833 ppb	17:32:53
3	Sr 421.552†	21.4	-19.2	-0.1993 µg/L	-0.1993 ppb	17:32:53
3	Sc 361.383	2035877.5	2035877.5	106.60 %		17:34:28
3	Y 371.029	1396783.1	1396783.1	106.63 %		17:34:28
3	Ag 328.068†	-558.0	41.1	0.3273 µg/L	0.3273 ppb	17:34:33
3	As 188.979†	-5.7	-6.5	-12.714 µg/L	-12.714 ppb	17:34:54
3	B 249.677†	310.2	-40.5	-1.7628 µg/L	-1.7628 ppb	17:34:54
3	Ba 233.527†	-23.8	3.7	0.0975 µg/L	0.0975 ppb	17:34:54
3	Be 313.107†	-3295.5	348.9	0.2278 µg/L	0.2278 ppb	17:34:33
3	Cd 226.502†	-134.4	16.1	0.4439 µg/L	0.4439 ppb	17:34:54
3	Co 228.616†	-16.8	-6.9	-0.3385 µg/L	-0.3385 ppb	17:34:54
3	Cr 267.716†	-31.9	22.4	0.4933 µg/L	0.4933 ppb	17:34:33
3	Cu 324.752†	2431.1	-205.5	-1.4364 µg/L	-1.4364 ppb	17:34:33
3	Mn 257.610†	-224.1	33.9	0.1156 µg/L	0.1156 ppb	17:34:54
3	Mo 202.031†	2.2	9.6	1.0266 µg/L	1.0266 ppb	17:34:54
3	Ni 231.604†	311.7	-9.8	-0.5337 µg/L	-0.5337 ppb	17:34:54
3	P 214.914†	26.4	-2.8	-5.9346 µg/L	-5.9346 ppb	17:34:54
3	Pb 220.353†	98.3	-5.0	-1.3370 µg/L	-1.3370 ppb	17:34:54
3	S 181.975 Axial†	14.7	-1.0	-4.4979 µg/L	-4.4979 ppb	17:34:54
3	Sb 206.836†	25.7	-2.9	-2.8125 µg/L	-2.8125 ppb	17:34:54
3	Se 196.026†	12.1	-4.5	-6.8217 µg/L	-6.8217 ppb	17:34:54
3	SiO2†	1207.8	-117.0	-25.202 µg/L	-25.202 ppb	17:34:33
3	Si 251.611†	320.7	-12.0	-0.9854 µg/L	-0.9854 ppb	17:34:54
3	Sn 189.927†	3.6	4.2	1.9540 µg/L	1.9540 ppb	17:34:54
3	Ti 334.940†	152.2	26.6	0.0629 µg/L	0.0629 ppb	17:34:33
3	Tl 190.801†	-31.1	-4.8	-6.7573 µg/L	-6.7573 ppb	17:34:54
3	U 409.014†	18.4	70.9	6.4223 µg/L	6.4223 ppb	17:34:33
3	V 292.402†	-21.9	23.7	0.2672 µg/L	0.2672 ppb	17:34:33
3	Zn 213.857†	481.8	-23.6	-0.5847 µg/L	-0.5847 ppb	17:34:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2019407.5	105.74 %	0.915			0.87%
Sc RADIAL	57233.0	105 %	0.3			0.29%
Y 371.029	1384789.1	105.72 %	0.942			0.89%
Ag 328.068†	41.4	0.3305 µg/L	0.03757	0.3305 ppb	0.03757	11.37%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.3	-3.1863 µg/L	8.13450	-3.1863 ppb	8.13450	255.30%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-4.1	-8.0447 µg/L	4.66908	-8.0447 ppb	4.66908	58.04%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-28.9	-1.2656 µg/L	0.44348	-1.2656 ppb	0.44348	35.04%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.6	0.1973 µg/L	0.17977	0.1973 ppb	0.17977	91.14%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	175.0	0.1143 µg/L	0.09874	0.1143 ppb	0.09874	86.42%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-0.8	-0.7353 µg/L	1.25585	-0.7353 ppb	1.25585	170.79%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	14.8	0.4074 µg/L	0.03216	0.4074 ppb	0.03216	7.89%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.4	-0.1157 µg/L	0.20732	-0.1157 ppb	0.20732	179.23%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	15.8 0.3480 µg/L	0.13629 0.3480 ppb	0.13629 39.17%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-175.8 -1.2276 µg/L	0.22068 -1.2276 ppb	0.22068 17.98%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.5 4.5012 µg/L	11.48343 4.5012 ppb	11.48343 255.12%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	41.6 29.571 µg/L	16.4438 29.571 ppb	16.4438 55.61%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	2.0 18.703 µg/L	21.0870 18.703 ppb	21.0870 112.74%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	29.0 0.1004 µg/L	0.01570 0.1004 ppb	0.01570 15.64%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	3.9 0.4208 µg/L	0.69318 0.4208 ppb	0.69318 164.72%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	139.6 45.952 µg/L	3.4354 45.952 ppb	3.4354 7.48%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-14.3 -0.7820 µg/L	0.34199 -0.7820 ppb	0.34199 43.73%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-0.9 -1.7335 µg/L	3.67082 -1.7335 ppb	3.67082 211.76%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-4.9 -1.3084 µg/L	1.17784 -1.3084 ppb	1.17784 90.02%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.3 5.5955 µg/L	10.26528 5.5955 ppb	10.26528 183.46%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-3.5 -3.4143 µg/L	3.18555 -3.4143 ppb	3.18555 93.30%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-1.3 -1.9164 µg/L	4.24816 -1.9164 ppb	4.24816 221.68%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-84.6 -18.217 µg/L	6.2180 -18.217 ppb	6.2180 34.13%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	-15.2 -1.2511 µg/L	0.27411 -1.2511 ppb	0.27411 21.91%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	1.0 0.4544 µg/L	1.35398 0.4544 ppb	1.35398 297.95%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-19.2 -0.1993 µg/L	0.25463 -0.1993 ppb	0.25463 127.74%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	12.3 0.0282 µg/L	0.07081 0.0282 ppb	0.07081 251.28%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-1.2 -1.6042 µg/L	4.46370 -1.6042 ppb	4.46370 278.25%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	36.0 3.2592 µg/L	4.01326 3.2592 ppb	4.01326 123.13%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	28.2 0.3089 µg/L	0.28245 0.3089 ppb	0.28245 91.44%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-20.6 -0.5110 µg/L	0.11370 -0.5110 ppb	0.11370 22.25%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 18:03:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	57726.1	57726.1	106 %		18:04:22
1	Al 396.153Radial†	6766.7	6407.4	4765.2 µg/L	4765.2 ppb	18:04:22
1	Ca 317.933Radial†	5597.5	5112.8	4814.0 µg/L	4814.0 ppb	18:04:43
1	Fe 238.204 Radial†	618.0	569.7	4839.6 µg/L	4839.6 ppb	18:04:43
1	K 766.490 Radial†	7228.2	6705.1	4766.0 µg/L	4766.0 ppb	18:04:22
1	Mg 279.077 IEC†	567.3	525.0	4889.6 µg/L	4889.6 ppb	18:04:43
1	Na 589.592 Radial†	31079.1	28840.4	9494.4 µg/L	9494.4 ppb	18:04:22
1	Sr 421.552†	47930.5	45274.1	469.32 µg/L	469.32 ppb	18:04:22
1	Sc 361.383	1995865.2	1995865.2	104.50 %		18:05:46
1	Y 371.029	1362757.5	1362757.5	104.03 %		18:05:46
1	Ag 328.068†	63483.9	61312.1	490.10 µg/L	490.10 ppb	18:05:52
1	As 188.979†	273.1	260.2	507.53 µg/L	507.53 ppb	18:06:12
1	B 249.677†	12082.3	11230.0	489.06 µg/L	489.06 ppb	18:05:52
1	Ba 233.527†	19988.9	19153.3	499.62 µg/L	499.62 ppb	18:05:52
1	Be 313.107†	781981.3	751717.1	490.73 µg/L	490.73 ppb	18:05:46
1	Cd 226.502†	18909.7	18236.8	503.08 µg/L	503.08 ppb	18:05:52
1	Co 228.616†	10693.9	10241.8	503.48 µg/L	503.48 ppb	18:05:52
1	Cr 267.716†	23838.7	22863.6	503.22 µg/L	503.22 ppb	18:05:52
1	Cu 324.752†	76544.4	70759.2	494.94 µg/L	494.94 ppb	18:05:52
1	Mn 257.610†	150825.0	144568.3	501.07 µg/L	501.07 ppb	18:05:46
1	Mo 202.031†	4977.2	4770.3	509.27 µg/L	509.27 ppb	18:06:12
1	Ni 231.604†	9935.5	9205.0	502.75 µg/L	502.75 ppb	18:05:52
1	P 214.914†	1265.8	1183.6	2494.1 µg/L	2494.1 ppb	18:06:12
1	Pb 220.353†	2092.9	1905.5	508.60 µg/L	508.60 ppb	18:06:12
1	S 181.975 Axial†	254.0	228.2	999.80 µg/L	999.80 ppb	18:06:12
1	Sb 206.836†	555.5	504.6	498.91 µg/L	498.91 ppb	18:06:12
1	Se 196.026†	366.1	334.5	517.42 µg/L	517.42 ppb	18:06:12
1	SiO2†	26867.3	24459.3	5267.4 µg/L	5267.4 ppb	18:05:52
1	Si 251.611†	31625.0	29949.0	2462.0 µg/L	2462.0 ppb	18:05:52
1	Sn 189.927†	1151.3	1102.5	507.11 µg/L	507.11 ppb	18:06:12
1	Ti 334.940†	210462.3	201274.9	483.84 µg/L	483.84 ppb	18:05:46
1	Tl 190.801†	351.8	360.9	509.62 µg/L	509.62 ppb	18:06:12
1	U 409.014†	5780.2	5584.7	504.65 µg/L	504.65 ppb	18:05:52
1	V 292.402†	48773.6	46715.6	504.04 µg/L	504.04 ppb	18:05:52
1	Zn 213.857†	21610.6	20203.6	500.98 µg/L	500.98 ppb	18:05:52
2	Sc RADIAL	58137.3	58137.3	107 %		18:04:48
2	Al 396.153Radial†	6794.0	6387.8	4750.7 µg/L	4750.7 ppb	18:04:48
2	Ca 317.933Radial†	5592.3	5070.5	4774.2 µg/L	4774.2 ppb	18:05:09
2	Fe 238.204 Radial†	618.1	565.7	4805.7 µg/L	4805.7 ppb	18:05:09
2	K 766.490 Radial†	7287.3	6712.3	4771.1 µg/L	4771.1 ppb	18:04:48
2	Mg 279.077 IEC†	568.2	522.1	4862.2 µg/L	4862.2 ppb	18:05:09
2	Na 589.592 Radial†	31238.6	28782.3	9475.2 µg/L	9475.2 ppb	18:04:48
2	Sr 421.552†	48291.3	45292.3	469.51 µg/L	469.51 ppb	18:04:48
2	Sc 361.383	2007163.9	2007163.9	105.10 %		18:06:19
2	Y 371.029	1370434.0	1370434.0	104.62 %		18:06:19
2	Ag 328.068†	63627.6	61107.0	488.46 µg/L	488.46 ppb	18:06:25
2	As 188.979†	273.7	259.2	505.75 µg/L	505.75 ppb	18:06:46
2	B 249.677†	12114.9	11196.0	487.59 µg/L	487.59 ppb	18:06:25
2	Ba 233.527†	19979.9	19037.1	496.59 µg/L	496.59 ppb	18:06:25
2	Be 313.107†	784264.0	749676.9	489.40 µg/L	489.40 ppb	18:06:19
2	Cd 226.502†	18871.7	18098.7	499.27 µg/L	499.27 ppb	18:06:25
2	Co 228.616†	10694.5	10184.8	500.67 µg/L	500.67 ppb	18:06:25
2	Cr 267.716†	23892.4	22786.3	501.52 µg/L	501.52 ppb	18:06:25
2	Cu 324.752†	76884.7	70670.6	494.32 µg/L	494.32 ppb	18:06:25
2	Mn 257.610†	151108.1	144025.3	499.18 µg/L	499.18 ppb	18:06:19
2	Mo 202.031†	4921.9	4690.8	500.79 µg/L	500.79 ppb	18:06:46
2	Ni 231.604†	9959.3	9174.2	501.07 µg/L	501.07 ppb	18:06:25
2	P 214.914†	1267.5	1178.4	2483.0 µg/L	2483.0 ppb	18:06:46
2	Pb 220.353†	2074.4	1876.6	500.89 µg/L	500.89 ppb	18:06:46

2	S 181.975 Axial†	247.1	220.3	965.20 µg/L	965.20 ppb	18:06:46
2	Sb 206.836†	553.1	499.3	493.56 µg/L	493.56 ppb	18:06:46
2	Se 196.026†	362.2	328.8	508.76 µg/L	508.76 ppb	18:06:46
2	SiO2†	26954.0	24397.1	5254.0 µg/L	5254.0 ppb	18:06:25
2	Si 251.611†	31693.0	29843.4	2453.3 µg/L	2453.3 ppb	18:06:25
2	Sn 189.927†	1148.2	1093.4	502.92 µg/L	502.92 ppb	18:06:46
2	Ti 334.940†	211069.7	200719.2	482.51 µg/L	482.51 ppb	18:06:19
2	Tl 190.801†	350.2	357.5	504.86 µg/L	504.86 ppb	18:06:46
2	U 409.014†	5713.5	5490.1	496.10 µg/L	496.10 ppb	18:06:25
2	V 292.402†	48839.6	46515.7	501.83 µg/L	501.83 ppb	18:06:25
2	Zn 213.857†	21586.8	20064.5	497.52 µg/L	497.52 ppb	18:06:25
3	Sc RADIAL	57420.7	57420.7	105 %		18:05:14
3	Al 396.153Radial†	6887.1	6555.8	4877.6 µg/L	4877.6 ppb	18:05:14
3	Ca 317.933Radial†	5594.0	5137.6	4837.4 µg/L	4837.4 ppb	18:05:34
3	Fe 238.204 Radial†	619.5	574.3	4877.2 µg/L	4877.2 ppb	18:05:34
3	K 766.490 Radial†	7272.3	6783.4	4821.6 µg/L	4821.6 ppb	18:05:14
3	Mg 279.077 IEC†	569.6	530.1	4935.2 µg/L	4935.2 ppb	18:05:34
3	Na 589.592 Radial†	31447.7	29346.9	9661.1 µg/L	9661.1 ppb	18:05:14
3	Sr 421.552†	48895.8	46432.5	481.33 µg/L	481.33 ppb	18:05:14
3	Sc 361.383	2010251.9	2010251.9	105.26 %		18:06:53
3	Y 371.029	1371909.0	1371909.0	104.73 %		18:06:53
3	Ag 328.068†	59865.9	57440.1	459.05 µg/L	459.05 ppb	18:06:58
3	As 188.979†	229.2	216.7	422.67 µg/L	422.67 ppb	18:07:19
3	B 249.677†	11370.0	10470.6	455.76 µg/L	455.76 ppb	18:06:58
3	Ba 233.527†	18395.6	17502.7	456.55 µg/L	456.55 ppb	18:06:58
3	Be 313.107†	741644.3	708039.7	462.22 µg/L	462.22 ppb	18:06:53
3	Cd 226.502†	17275.3	16554.5	456.62 µg/L	456.62 ppb	18:06:58
3	Co 228.616†	9741.1	9263.3	455.31 µg/L	455.31 ppb	18:06:58
3	Cr 267.716†	21256.7	20247.3	445.64 µg/L	445.64 ppb	18:06:58
3	Cu 324.752†	70381.9	64380.2	450.39 µg/L	450.39 ppb	18:06:58
3	Mn 257.610†	143060.5	136158.7	471.95 µg/L	471.95 ppb	18:06:53
3	Mo 202.031†	4127.0	3928.4	419.43 µg/L	419.43 ppb	18:07:19
3	Ni 231.604†	9089.8	8333.5	455.16 µg/L	455.16 ppb	18:06:58
3	P 214.914†	1084.0	1002.2	2108.1 µg/L	2108.1 ppb	18:07:19
3	Pb 220.353†	1818.2	1630.2	435.03 µg/L	435.03 ppb	18:07:19
3	S 181.975 Axial†	224.4	198.4	869.26 µg/L	869.26 ppb	18:07:19
3	Sb 206.836†	480.4	429.5	424.14 µg/L	424.14 ppb	18:07:19
3	Se 196.026†	313.7	282.2	437.85 µg/L	437.85 ppb	18:07:19
3	SiO2†	25019.5	22519.8	4849.8 µg/L	4849.8 ppb	18:06:58
3	Si 251.611†	29405.8	27624.1	2270.8 µg/L	2270.8 ppb	18:06:58
3	Sn 189.927†	955.0	908.2	417.73 µg/L	417.73 ppb	18:07:19
3	Ti 334.940†	198942.9	188889.6	454.05 µg/L	454.05 ppb	18:06:53
3	Tl 190.801†	316.9	325.4	459.73 µg/L	459.73 ppb	18:07:19
3	U 409.014†	5179.0	4973.9	449.35 µg/L	449.35 ppb	18:06:58
3	V 292.402†	44254.0	42087.7	453.84 µg/L	453.84 ppb	18:06:58
3	Zn 213.857†	19673.0	18214.8	451.59 µg/L	451.59 ppb	18:06:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2004427.0	104.95 %	0.397			0.38%
Sc RADIAL	57761.4	106 %	0.7			0.62%
Y 371.029	1368366.8	104.46 %	0.375			0.36%
Ag 328.068†	59953.1	479.20 µg/L	17.470	479.20 ppb	17.470	3.65%
QC value within limits for Ag 328.068 Recovery = 95.84%						
Al 396.153Radial†	6450.3	4797.9 µg/L	69.48	4797.9 ppb	69.48	1.45%
QC value within limits for Al 396.153Radial Recovery = 95.96%						
As 188.979†	245.3	478.65 µg/L	48.486	478.65 ppb	48.486	10.13%
QC value within limits for As 188.979 Recovery = 95.73%						
B 249.677†	10965.6	477.47 µg/L	18.814	477.47 ppb	18.814	3.94%
QC value within limits for B 249.677 Recovery = 95.49%						
Ba 233.527†	18564.4	484.26 µg/L	24.039	484.26 ppb	24.039	4.96%
QC value within limits for Ba 233.527 Recovery = 96.85%						
Be 313.107†	736477.9	480.78 µg/L	16.091	480.78 ppb	16.091	3.35%
QC value within limits for Be 313.107 Recovery = 96.16%						
Ca 317.933Radial†	5106.9	4808.5 µg/L	31.95	4808.5 ppb	31.95	0.66%
QC value within limits for Ca 317.933Radial Recovery = 96.17%						
Cd 226.502†	17630.0	486.32 µg/L	25.796	486.32 ppb	25.796	5.30%
QC value within limits for Cd 226.502 Recovery = 97.26%						
Co 228.616†	9896.7	486.49 µg/L	27.038	486.49 ppb	27.038	5.56%

Cr	267.716†	21965.7	483.46 µg/L	32.763	483.46 ppb	32.763	6.78%
QC value within limits for Cr 267.716 Recovery = 96.69%							
Cu	324.752†	68603.3	479.88 µg/L	25.545	479.88 ppb	25.545	5.32%
QC value within limits for Cu 324.752 Recovery = 95.98%							
Fe	238.204 Radial†	569.9	4840.8 µg/L	35.77	4840.8 ppb	35.77	0.74%
QC value within limits for Fe 238.204 Radial Recovery = 96.82%							
K	766.490 Radial†	6733.6	4786.2 µg/L	30.77	4786.2 ppb	30.77	0.64%
QC value within limits for K 766.490 Radial Recovery = 95.72%							
Mg	279.077 IEC†	525.8	4895.7 µg/L	36.85	4895.7 ppb	36.85	0.75%
QC value within limits for Mg 279.077 IEC Recovery = 97.91%							
Mn	257.610†	141584.1	490.73 µg/L	16.295	490.73 ppb	16.295	3.32%
QC value within limits for Mn 257.610 Recovery = 98.15%							
Mo	202.031†	4463.2	476.50 µg/L	49.601	476.50 ppb	49.601	10.41%
QC value within limits for Mo 202.031 Recovery = 95.30%							
Na	589.592 Radial†	28989.9	9543.6 µg/L	102.24	9543.6 ppb	102.24	1.07%
QC value within limits for Na 589.592 Radial Recovery = 95.44%							
Ni	231.604†	8904.3	486.32 µg/L	27.004	486.32 ppb	27.004	5.55%
QC value within limits for Ni 231.604 Recovery = 97.26%							
P	214.914†	1121.4	2361.7 µg/L	219.74	2361.7 ppb	219.74	9.30%
QC value within limits for P 214.914 Recovery = 94.47%							
Pb	220.353†	1804.1	481.51 µg/L	40.435	481.51 ppb	40.435	8.40%
QC value within limits for Pb 220.353 Recovery = 96.30%							
S	181.975 Axial†	215.6	944.76 µg/L	67.630	944.76 ppb	67.630	7.16%
QC value within limits for S 181.975 Axial Recovery = 94.48%							
Sb	206.836†	477.8	472.20 µg/L	41.713	472.20 ppb	41.713	8.83%
QC value within limits for Sb 206.836 Recovery = 94.44%							
Se	196.026†	315.2	488.01 µg/L	43.651	488.01 ppb	43.651	8.94%
QC value within limits for Se 196.026 Recovery = 97.60%							
SiO2†		23792.0	5123.7 µg/L	237.37	5123.7 ppb	237.37	4.63%
QC value within limits for SiO2 Recovery = 95.82%							
Si	251.611†	29138.9	2395.4 µg/L	107.92	2395.4 ppb	107.92	4.51%
QC value within limits for Si 251.611 Recovery = 95.81%							
Sn	189.927†	1034.7	475.92 µg/L	50.437	475.92 ppb	50.437	10.60%
QC value within limits for Sn 189.927 Recovery = 95.18%							
Sr	421.552†	45666.3	473.38 µg/L	6.879	473.38 ppb	6.879	1.45%
QC value within limits for Sr 421.552 Recovery = 94.68%							
Ti	334.940†	196961.2	473.47 µg/L	16.830	473.47 ppb	16.830	3.55%
QC value within limits for Ti 334.940 Recovery = 94.69%							
Tl	190.801†	348.0	491.40 µg/L	27.532	491.40 ppb	27.532	5.60%
QC value within limits for Tl 190.801 Recovery = 98.28%							
U	409.014†	5349.6	483.37 µg/L	29.770	483.37 ppb	29.770	6.16%
QC value within limits for U 409.014 Recovery = 96.67%							
V	292.402†	45106.3	486.57 µg/L	28.365	486.57 ppb	28.365	5.83%
QC value within limits for V 292.402 Recovery = 97.31%							
Zn	213.857†	19494.3	483.36 µg/L	27.567	483.36 ppb	27.567	5.70%
QC value within limits for Zn 213.857 Recovery = 96.67%							

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 18:07:29

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56532.0	56532.0	104 %		18:08:03
1	Al 396.153Radial†	-15.4	-4.8	-3.5570 µg/L	-3.5570 ppb	18:08:03
1	Ca 317.933Radial†	184.3	-1.2	-1.1516 µg/L	-1.1516 ppb	18:08:24
1	Fe 238.204 Radial†	15.7	0.7	5.7821 µg/L	5.7821 ppb	18:08:24
1	K 766.490 Radial†	164.9	30.8	21.873 µg/L	21.873 ppb	18:08:03
1	Mg 279.077 IEC†	16.1	4.2	39.497 µg/L	39.497 ppb	18:08:24
1	Na 589.592 Radial†	629.4	65.8	21.647 µg/L	21.647 ppb	18:08:03
1	Sr 421.552†	25.1	-15.3	-0.1589 µg/L	-0.1589 ppb	18:08:03
1	Sc 361.383	1970116.9	1970116.9	103.16 %		18:09:26
1	Y 371.029	1351478.3	1351478.3	103.17 %		18:09:26
1	Ag 328.068†	-586.1	-3.7	-0.0267 µg/L	-0.0267 ppb	18:09:32
1	As 188.979†	0.4	-0.7	-1.4081 µg/L	-1.4081 ppb	18:09:52
1	B 249.677†	319.9	-21.4	-0.9375 µg/L	-0.9375 ppb	18:09:52
1	Ba 233.527†	-23.6	3.1	0.0818 µg/L	0.0818 ppb	18:09:52
1	Be 313.107†	-3504.0	43.7	0.0286 µg/L	0.0286 ppb	18:09:32
1	Cd 226.502†	-151.5	-4.7	-0.1322 µg/L	-0.1322 ppb	18:09:52
1	Co 228.616†	-11.0	-1.8	-0.0886 µg/L	-0.0886 ppb	18:09:52
1	Cr 267.716†	-63.6	-9.3	-0.2036 µg/L	-0.2036 ppb	18:09:32
1	Cu 324.752†	2393.3	-166.0	-1.1590 µg/L	-1.1590 ppb	18:09:32
1	Mn 257.610†	-254.5	-2.6	-0.0100 µg/L	-0.0100 ppb	18:09:52
1	Mo 202.031†	-8.7	-0.9	-0.0948 µg/L	-0.0948 ppb	18:09:52
1	Ni 231.604†	290.0	-21.0	-1.1506 µg/L	-1.1506 ppb	18:09:52
1	P 214.914†	32.8	4.2	9.1562 µg/L	9.1562 ppb	18:09:52
1	Pb 220.353†	95.7	-4.4	-1.1812 µg/L	-1.1812 ppb	18:09:52
1	S 181.975 Axial†	14.0	-1.2	-5.3162 µg/L	-5.3162 ppb	18:09:52
1	Sb 206.836†	31.3	3.4	3.3775 µg/L	3.3775 ppb	18:09:52
1	Se 196.026†	11.2	-4.9	-7.5535 µg/L	-7.5535 ppb	18:09:52
1	SiO2†	1234.7	-53.1	-11.434 µg/L	-11.434 ppb	18:09:32
1	Si 251.611†	295.0	-26.9	-2.2136 µg/L	-2.2136 ppb	18:09:52
1	Sn 189.927†	1.4	2.3	1.0452 µg/L	1.0452 ppb	18:09:52
1	Ti 334.940†	70.3	-48.0	-0.1186 µg/L	-0.1186 ppb	18:09:32
1	Tl 190.801†	-29.3	-4.1	-5.6836 µg/L	-5.6836 ppb	18:09:52
1	U 409.014†	-64.3	-8.7	-0.7862 µg/L	-0.7862 ppb	18:09:32
1	V 292.402†	-16.1	28.6	0.3039 µg/L	0.3039 ppb	18:09:32
1	Zn 213.857†	475.3	-14.8	-0.3645 µg/L	-0.3645 ppb	18:09:52
2	Sc RADIAL	55658.7	55658.7	102 %		18:08:29
2	Al 396.153Radial†	8.4	18.4	13.722 µg/L	13.722 ppb	18:08:29
2	Ca 317.933Radial†	182.4	-0.3	-0.2942 µg/L	-0.2942 ppb	18:08:50
2	Fe 238.204 Radial†	17.1	2.3	19.276 µg/L	19.276 ppb	18:08:50
2	K 766.490 Radial†	186.5	54.5	38.722 µg/L	38.722 ppb	18:08:29
2	Mg 279.077 IEC†	15.0	3.4	31.500 µg/L	31.500 ppb	18:08:50
2	Na 589.592 Radial†	680.0	124.9	41.106 µg/L	41.106 ppb	18:08:29
2	Sr 421.552†	30.6	-9.6	-0.0993 µg/L	-0.0993 ppb	18:08:29
2	Sc 361.383	2007038.7	2007038.7	105.09 %		18:09:58
2	Y 371.029	1377314.4	1377314.4	105.15 %		18:09:58
2	Ag 328.068†	-493.3	95.1	0.7576 µg/L	0.7576 ppb	18:10:04
2	As 188.979†	-1.7	-2.7	-5.3378 µg/L	-5.3378 ppb	18:10:25
2	B 249.677†	329.1	-18.3	-0.8077 µg/L	-0.8077 ppb	18:10:25
2	Ba 233.527†	-25.2	2.0	0.0533 µg/L	0.0533 ppb	18:10:25
2	Be 313.107†	-3351.2	251.6	0.1643 µg/L	0.1643 ppb	18:10:04
2	Cd 226.502†	-144.2	4.9	0.1335 µg/L	0.1335 ppb	18:10:25
2	Co 228.616†	-14.3	-4.7	-0.2334 µg/L	-0.2334 ppb	18:10:25
2	Cr 267.716†	-47.8	6.9	0.1524 µg/L	0.1524 ppb	18:10:04
2	Cu 324.752†	2466.3	-139.3	-0.9702 µg/L	-0.9702 ppb	18:10:04
2	Mn 257.610†	-245.5	10.5	0.0378 µg/L	0.0378 ppb	18:10:25
2	Mo 202.031†	-7.5	0.4	0.0445 µg/L	0.0445 ppb	18:10:25
2	Ni 231.604†	299.7	-17.0	-0.9313 µg/L	-0.9313 ppb	18:10:25
2	P 214.914†	31.3	2.2	4.7306 µg/L	4.7306 ppb	18:10:25
2	Pb 220.353†	108.5	6.1	1.6290 µg/L	1.6290 ppb	18:10:25

2	S 181.975 Axial†	16.7	1.1	4.8755 µg/L	4.8755 ppb	18:10:25
2	Sb 206.836†	20.8	-7.2	-7.0445 µg/L	-7.0445 ppb	18:10:25
2	Se 196.026†	16.5	-0.1	-0.1477 µg/L	-0.1477 ppb	18:10:25
2	SiO2†	1217.3	-91.6	-19.736 µg/L	-19.736 ppb	18:10:04
2	Si 251.611†	298.1	-29.3	-2.4046 µg/L	-2.4046 ppb	18:10:25
2	Sn 189.927†	0.2	1.0	0.4758 µg/L	0.4758 ppb	18:10:25
2	Ti 334.940†	145.5	22.4	0.0513 µg/L	0.0513 ppb	18:10:04
2	Tl 190.801†	-26.0	-0.5	-0.6548 µg/L	-0.6548 ppb	18:10:25
2	U 409.014†	-106.1	-47.3	-4.2862 µg/L	-4.2862 ppb	18:10:04
2	V 292.402†	-24.2	21.2	0.2243 µg/L	0.2243 ppb	18:10:04
2	Zn 213.857†	472.5	-25.9	-0.6440 µg/L	-0.6440 ppb	18:10:25
3	Sc RADIAL	55952.9	55952.9	103 %		18:08:56
3	Al 396.153Radial†	-23.9	-13.2	-9.8258 µg/L	-9.8258 ppb	18:08:56
3	Ca 317.933Radial†	192.5	8.6	8.1332 µg/L	8.1332 ppb	18:09:16
3	Fe 238.204 Radial†	17.2	2.3	19.451 µg/L	19.451 ppb	18:09:16
3	K 766.490 Radial†	199.1	65.8	46.778 µg/L	46.778 ppb	18:08:56
3	Mg 279.077 IEC†	13.0	1.4	13.321 µg/L	13.321 ppb	18:09:16
3	Na 589.592 Radial†	622.9	65.7	21.628 µg/L	21.628 ppb	18:08:56
3	Sr 421.552†	22.5	-17.6	-0.1825 µg/L	-0.1825 ppb	18:08:56
3	Sc 361.383	1969215.9	1969215.9	103.11 %		18:10:31
3	Y 371.029	1350905.5	1350905.5	103.13 %		18:10:31
3	Ag 328.068†	-575.5	6.4	0.0513 µg/L	0.0513 ppb	18:10:36
3	As 188.979†	-0.8	-1.9	-3.6705 µg/L	-3.6705 ppb	18:10:57
3	B 249.677†	315.0	-25.9	-1.1434 µg/L	-1.1434 ppb	18:10:57
3	Ba 233.527†	-24.5	2.2	0.0583 µg/L	0.0583 ppb	18:10:57
3	Be 313.107†	-3286.5	253.0	0.1652 µg/L	0.1652 ppb	18:10:36
3	Cd 226.502†	-133.6	12.5	0.3430 µg/L	0.3430 ppb	18:10:57
3	Co 228.616†	-14.1	-4.9	-0.2403 µg/L	-0.2403 ppb	18:10:57
3	Cr 267.716†	-66.1	-11.7	-0.2584 µg/L	-0.2584 ppb	18:10:36
3	Cu 324.752†	2477.5	-83.3	-0.5792 µg/L	-0.5792 ppb	18:10:36
3	Mn 257.610†	-225.9	25.1	0.0888 µg/L	0.0888 ppb	18:10:57
3	Mo 202.031†	-9.8	-2.0	-0.2112 µg/L	-0.2112 ppb	18:10:57
3	Ni 231.604†	298.6	-12.6	-0.6902 µg/L	-0.6902 ppb	18:10:57
3	P 214.914†	27.1	-1.4	-2.9216 µg/L	-2.9216 ppb	18:10:57
3	Pb 220.353†	95.5	-4.6	-1.2298 µg/L	-1.2298 ppb	18:10:57
3	S 181.975 Axial†	18.9	3.5	15.355 µg/L	15.355 ppb	18:10:57
3	Sb 206.836†	19.3	-8.3	-8.1417 µg/L	-8.1417 ppb	18:10:57
3	Se 196.026†	11.7	-4.5	-6.8172 µg/L	-6.8172 ppb	18:10:57
3	SiO2†	1221.9	-65.0	-13.993 µg/L	-13.993 ppb	18:10:36
3	Si 251.611†	305.8	-16.3	-1.3398 µg/L	-1.3398 ppb	18:10:57
3	Sn 189.927†	-1.0	-0.1	-0.0571 µg/L	-0.0571 ppb	18:10:57
3	Ti 334.940†	185.2	63.5	0.1517 µg/L	0.1517 ppb	18:10:36
3	Tl 190.801†	-28.1	-3.0	-4.1975 µg/L	-4.1975 ppb	18:10:57
3	U 409.014†	-9.8	44.1	3.9892 µg/L	3.9892 ppb	18:10:36
3	V 292.402†	-52.5	-6.8	-0.0677 µg/L	-0.0677 ppb	18:10:36
3	Zn 213.857†	470.6	-19.2	-0.4765 µg/L	-0.4765 ppb	18:10:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1982123.8	103.78 %	1.130			1.09%
Sc RADIAL	56047.9	103 %	0.8			0.79%
Y 371.029	1359899.4	103.82 %	1.152			1.11%
Ag 328.068†	32.6	0.2608 µg/L	0.43206	0.2608 ppb	0.43206	165.69%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.1	0.1130 µg/L	12.19532	0.1130 ppb	12.19532	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.8	-3.4721 µg/L	1.97235	-3.4721 ppb	1.97235	56.80%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-21.9	-0.9628 µg/L	0.16927	-0.9628 ppb	0.16927	17.58%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.5	0.0645 µg/L	0.01519	0.0645 ppb	0.01519	23.57%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	182.7	0.1193 µg/L	0.07861	0.1193 ppb	0.07861	65.88%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	2.4	2.2291 µg/L	5.13097	2.2291 ppb	5.13097	230.18%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	4.3	0.1147 µg/L	0.23817	0.1147 ppb	0.23817	207.57%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.8	-0.1875 µg/L	0.08565	-0.1875 ppb	0.08565	45.69%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	-4.7 -0.1032 µg/L	0.22302 -0.1032 ppb	0.22302 216.06%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-129.5 -0.9028 µg/L	0.29572 -0.9028 ppb	0.29572 32.76%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	1.8 14.837 µg/L	7.8419 14.837 ppb	7.8419 52.86%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	50.4 35.791 µg/L	12.7089 35.791 ppb	12.7089 35.51%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	3.0 28.106 µg/L	13.4141 28.106 ppb	13.4141 47.73%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	11.0 0.0389 µg/L	0.04940 0.0389 ppb	0.04940 127.06%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	-0.8 -0.0872 µg/L	0.12800 -0.0872 ppb	0.12800 146.84%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	85.4 28.127 µg/L	11.2402 28.127 ppb	11.2402 39.96%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-16.9 -0.9240 µg/L	0.23026 -0.9240 ppb	0.23026 24.92%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	1.7 3.6551 µg/L	6.11031 3.6551 ppb	6.11031 167.17%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-1.0 -0.2607 µg/L	1.63670 -0.2607 ppb	1.63670 627.82%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	1.1 4.9715 µg/L	10.33607 4.9715 ppb	10.33607 207.91%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-4.0 -3.9362 µg/L	6.35757 -3.9362 ppb	6.35757 161.51%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.2 -4.8394 µg/L	4.07986 -4.8394 ppb	4.07986 84.30%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-69.9 -15.054 µg/L	4.2514 -15.054 ppb	4.2514 28.24%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	-24.2 -1.9860 µg/L	0.56769 -1.9860 ppb	0.56769 28.58%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	1.1 0.4880 µg/L	0.55125 0.4880 ppb	0.55125 112.97%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-14.2 -0.1469 µg/L	0.04288 -0.1469 ppb	0.04288 29.20%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	12.6 0.0281 µg/L	0.13664 0.0281 ppb	0.13664 485.55%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-2.5 -3.5120 µg/L	2.58356 -3.5120 ppb	2.58356 73.56%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-4.0 -0.3611 µg/L	4.15405 -0.3611 ppb	4.15405 >999.9%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	14.4 0.1535 µg/L	0.19568 0.1535 ppb	0.19568 127.50%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-20.0 -0.4950 µg/L	0.14064 -0.4950 ppb	0.14064 28.41%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 2/11/2010 18:32:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55441.9	55441.9	102 %		18:33:25
1	Al 396.153Radial†	6917.9	6819.8	5072.2 µg/L	5072.2 ppb	18:33:25
1	Ca 317.933Radial†	5691.9	5423.7	5106.8 µg/L	5106.8 ppb	18:33:45
1	Fe 238.204 Radial†	625.4	601.1	5105.5 µg/L	5105.5 ppb	18:33:45
1	K 766.490 Radial†	7360.4	7116.9	5058.6 µg/L	5058.6 ppb	18:33:25
1	Mg 279.077 IEC†	579.1	558.7	5203.2 µg/L	5203.2 ppb	18:33:45
1	Na 589.592 Radial†	31674.9	30637.4	10086 µg/L	10086 ppb	18:33:25
1	Sr 421.552†	48916.5	48111.6	498.73 µg/L	498.73 ppb	18:33:25
1	Sc 361.383	1949198.7	1949198.7	102.06 %		18:34:49
1	Y 371.029	1332613.7	1332613.7	101.73 %		18:34:49
1	Ag 328.068†	63737.9	63015.4	503.72 µg/L	503.72 ppb	18:34:54
1	As 188.979†	273.4	266.7	520.31 µg/L	520.31 ppb	18:35:15
1	B 249.677†	12085.6	11510.1	501.18 µg/L	501.18 ppb	18:34:54
1	Ba 233.527†	19929.9	19553.5	510.07 µg/L	510.07 ppb	18:34:54
1	Be 313.107†	791453.2	778912.4	508.48 µg/L	508.48 ppb	18:34:49
1	Cd 226.502†	18764.5	18527.7	511.09 µg/L	511.09 ppb	18:34:54
1	Co 228.616†	10683.8	10476.9	515.03 µg/L	515.03 ppb	18:34:54
1	Cr 267.716†	23886.3	23456.4	516.27 µg/L	516.27 ppb	18:34:54
1	Cu 324.752†	77115.4	73072.1	511.13 µg/L	511.13 ppb	18:34:54
1	Mn 257.610†	152507.4	149672.0	518.76 µg/L	518.76 ppb	18:34:49
1	Mo 202.031†	5014.5	4920.8	525.34 µg/L	525.34 ppb	18:35:15
1	Ni 231.604†	9902.4	9400.2	513.41 µg/L	513.41 ppb	18:34:54
1	P 214.914†	1289.3	1235.7	2604.5 µg/L	2604.5 ppb	18:35:15
1	Pb 220.353†	2098.8	1959.2	522.95 µg/L	522.95 ppb	18:35:15
1	S 181.975 Axial†	252.9	233.0	1020.8 µg/L	1020.8 ppb	18:35:15
1	Sb 206.836†	562.5	524.2	518.28 µg/L	518.28 ppb	18:35:15
1	Se 196.026†	361.5	338.4	523.78 µg/L	523.78 ppb	18:35:15
1	SiO2†	26807.5	25016.2	5387.4 µg/L	5387.4 ppb	18:34:54
1	Si 251.611†	31683.4	30730.8	2526.2 µg/L	2526.2 ppb	18:34:54
1	Sn 189.927†	1171.2	1148.4	528.25 µg/L	528.25 ppb	18:35:15
1	Ti 334.940†	213415.9	208990.5	502.38 µg/L	502.38 ppb	18:34:49
1	Tl 190.801†	344.1	361.4	510.53 µg/L	510.53 ppb	18:35:15
1	U 409.014†	5808.1	5744.4	519.06 µg/L	519.06 ppb	18:34:54
1	V 292.402†	48900.4	47957.2	517.47 µg/L	517.47 ppb	18:34:54
1	Zn 213.857†	21532.1	20621.7	511.32 µg/L	511.32 ppb	18:34:54
2	Sc RADIAL	56230.3	56230.3	103 %		18:33:51
2	Al 396.153Radial†	6941.0	6746.8	5018.0 µg/L	5018.0 ppb	18:33:51
2	Ca 317.933Radial†	5664.7	5318.7	5007.9 µg/L	5007.9 ppb	18:34:11
2	Fe 238.204 Radial†	623.7	590.8	5018.6 µg/L	5018.6 ppb	18:34:11
2	K 766.490 Radial†	7345.4	7000.7	4976.0 µg/L	4976.0 ppb	18:33:51
2	Mg 279.077 IEC†	581.5	553.1	5150.5 µg/L	5150.5 ppb	18:34:11
2	Na 589.592 Radial†	31761.7	30284.4	9969.7 µg/L	9969.7 ppb	18:33:51
2	Sr 421.552†	49439.7	47944.2	497.00 µg/L	497.00 ppb	18:33:51
2	Sc 361.383	1968654.4	1968654.4	103.08 %		18:35:22
2	Y 371.029	1345275.7	1345275.7	102.70 %		18:35:22
2	Ag 328.068†	64265.9	62910.5	502.88 µg/L	502.88 ppb	18:35:28
2	As 188.979†	279.7	270.2	527.15 µg/L	527.15 ppb	18:35:48
2	B 249.677†	12199.0	11503.1	500.92 µg/L	500.92 ppb	18:35:28
2	Ba 233.527†	20118.0	19543.0	509.79 µg/L	509.79 ppb	18:35:28
2	Be 313.107†	797156.7	776781.8	507.09 µg/L	507.09 ppb	18:35:22
2	Cd 226.502†	19012.6	18586.7	512.73 µg/L	512.73 ppb	18:35:28
2	Co 228.616†	10795.4	10481.7	515.26 µg/L	515.26 ppb	18:35:28
2	Cr 267.716†	24075.5	23408.6	515.22 µg/L	515.22 ppb	18:35:28
2	Cu 324.752†	77661.1	72854.9	509.61 µg/L	509.61 ppb	18:35:28
2	Mn 257.610†	153284.1	148948.8	516.25 µg/L	516.25 ppb	18:35:22
2	Mo 202.031†	4982.7	4841.3	516.86 µg/L	516.86 ppb	18:35:48
2	Ni 231.604†	10038.8	9436.7	515.40 µg/L	515.40 ppb	18:35:28
2	P 214.914†	1275.2	1209.5	2548.3 µg/L	2548.3 ppb	18:35:48
2	Pb 220.353†	2089.9	1930.2	515.20 µg/L	515.20 ppb	18:35:48

2	S 181.975 Axial†	253.9	231.5	1014.3 µg/L	1014.3 ppb	18:35:48
2	Sb 206.836†	566.6	522.7	516.68 µg/L	516.68 ppb	18:35:48
2	Se 196.026†	362.7	336.1	520.05 µg/L	520.05 ppb	18:35:48
2	SiO2†	27183.9	25121.8	5410.1 µg/L	5410.1 ppb	18:35:28
2	Si 251.611†	31985.4	30716.9	2525.1 µg/L	2525.1 ppb	18:35:28
2	Sn 189.927†	1162.1	1128.3	518.97 µg/L	518.97 ppb	18:35:48
2	Ti 334.940†	214911.2	208374.5	500.90 µg/L	500.90 ppb	18:35:22
2	Tl 190.801†	347.2	361.1	510.11 µg/L	510.11 ppb	18:35:48
2	U 409.014†	5833.8	5713.1	516.25 µg/L	516.25 ppb	18:35:28
2	V 292.402†	49382.2	47951.1	517.33 µg/L	517.33 ppb	18:35:28
2	Zn 213.857†	21765.8	20640.0	511.77 µg/L	511.77 ppb	18:35:28
3	Sc RADIAL	56202.6	56202.6	103 %		18:34:17
3	Al 396.153Radial†	7002.2	6809.5	5066.3 µg/L	5066.3 ppb	18:34:17
3	Ca 317.933Radial†	5645.9	5303.2	4993.3 µg/L	4993.3 ppb	18:34:37
3	Fe 238.204 Radial†	622.2	589.7	5007.8 µg/L	5007.8 ppb	18:34:37
3	K 766.490 Radial†	7390.9	7048.4	5010.0 µg/L	5010.0 ppb	18:34:17
3	Mg 279.077 IEC†	576.6	548.6	5107.8 µg/L	5107.8 ppb	18:34:37
3	Na 589.592 Radial†	31993.1	30524.4	10049 µg/L	10049 ppb	18:34:17
3	Sr 421.552†	49671.5	48193.0	499.58 µg/L	499.58 ppb	18:34:17
3	Sc 361.383	1949854.5	1949854.5	102.10 %		18:35:55
3	Y 371.029	1332440.6	1332440.6	101.72 %		18:35:55
3	Ag 328.068†	60532.1	59854.4	478.35 µg/L	478.35 ppb	18:36:01
3	As 188.979†	230.7	224.8	438.55 µg/L	438.55 ppb	18:36:21
3	B 249.677†	11478.3	10911.2	474.98 µg/L	474.98 ppb	18:36:01
3	Ba 233.527†	18573.8	18218.6	475.23 µg/L	475.23 ppb	18:36:01
3	Be 313.107†	747182.5	735289.5	480.01 µg/L	480.01 ppb	18:35:55
3	Cd 226.502†	17437.8	17222.1	475.04 µg/L	475.04 ppb	18:36:01
3	Co 228.616†	9818.6	9625.9	473.13 µg/L	473.13 ppb	18:36:01
3	Cr 267.716†	21497.4	21108.6	464.60 µg/L	464.60 ppb	18:36:01
3	Cu 324.752†	71198.9	67251.7	470.46 µg/L	470.46 ppb	18:36:01
3	Mn 257.610†	144456.6	141736.2	491.27 µg/L	491.27 ppb	18:35:55
3	Mo 202.031†	4165.5	4087.6	436.42 µg/L	436.42 ppb	18:36:21
3	Ni 231.604†	9187.6	8696.9	475.00 µg/L	475.00 ppb	18:36:01
3	P 214.914†	1084.2	1034.3	2175.1 µg/L	2175.1 ppb	18:36:21
3	Pb 220.353†	1818.3	1683.8	449.34 µg/L	449.34 ppb	18:36:21
3	S 181.975 Axial†	223.4	204.0	893.71 µg/L	893.71 ppb	18:36:21
3	Sb 206.836†	482.5	445.7	440.11 µg/L	440.11 ppb	18:36:21
3	Se 196.026†	316.7	294.4	456.49 µg/L	456.49 ppb	18:36:21
3	SiO2†	25304.0	23534.7	5068.3 µg/L	5068.3 ppb	18:36:01
3	Si 251.611†	29685.2	28763.1	2364.5 µg/L	2364.5 ppb	18:36:01
3	Sn 189.927†	961.6	942.7	433.62 µg/L	433.62 ppb	18:36:21
3	Ti 334.940†	200490.3	196259.8	471.76 µg/L	471.76 ppb	18:35:55
3	Tl 190.801†	316.1	333.9	471.83 µg/L	471.83 ppb	18:36:21
3	U 409.014†	5179.3	5126.6	463.15 µg/L	463.15 ppb	18:36:01
3	V 292.402†	44764.1	43889.7	473.25 µg/L	473.25 ppb	18:36:01
3	Zn 213.857†	19900.8	19016.9	471.49 µg/L	471.49 ppb	18:36:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1955902.5	102.41 %	0.578			0.56%
Sc RADIAL	55958.3	103 %	0.8			0.80%
Y 371.029	1336776.6	102.05 %	0.562			0.55%
Ag 328.068†	61926.8	494.98 µg/L	14.414	494.98 ppb	14.414	2.91%
QC value within limits for Ag 328.068 Recovery = 99.00%						
Al 396.153Radial†	6792.0	5052.2 µg/L	29.77	5052.2 ppb	29.77	0.59%
QC value within limits for Al 396.153Radial Recovery = 101.04%						
As 188.979†	253.9	495.34 µg/L	49.299	495.34 ppb	49.299	9.95%
QC value within limits for As 188.979 Recovery = 99.07%						
B 249.677†	11308.1	492.36 µg/L	15.053	492.36 ppb	15.053	3.06%
QC value within limits for B 249.677 Recovery = 98.47%						
Ba 233.527†	19105.0	498.36 µg/L	20.034	498.36 ppb	20.034	4.02%
QC value within limits for Ba 233.527 Recovery = 99.67%						
Be 313.107†	763661.2	498.53 µg/L	16.055	498.53 ppb	16.055	3.22%
QC value within limits for Be 313.107 Recovery = 99.71%						
Ca 317.933Radial†	5348.5	5036.0 µg/L	61.72	5036.0 ppb	61.72	1.23%
QC value within limits for Ca 317.933Radial Recovery = 100.72%						
Cd 226.502†	18112.2	499.62 µg/L	21.301	499.62 ppb	21.301	4.26%
QC value within limits for Cd 226.502 Recovery = 99.92%						
Co 228.616†	10194.8	501.14 µg/L	24.256	501.14 ppb	24.256	4.84%

QC value within limits for Co 228.616 Recovery = 100.23%						
Cr 267.716†	22657.9	498.70 µg/L	29.533	498.70 ppb	29.533	5.92%
QC value within limits for Cr 267.716 Recovery = 99.74%						
Cu 324.752†	71059.6	497.07 µg/L	23.052	497.07 ppb	23.052	4.64%
QC value within limits for Cu 324.752 Recovery = 99.41%						
Fe 238.204 Radial†	593.9	5044.0 µg/L	53.59	5044.0 ppb	53.59	1.06%
QC value within limits for Fe 238.204 Radial Recovery = 100.88%						
K 766.490 Radial†	7055.3	5014.9 µg/L	41.51	5014.9 ppb	41.51	0.83%
QC value within limits for K 766.490 Radial Recovery = 100.30%						
Mg 279.077 IEC†	553.5	5153.8 µg/L	47.82	5153.8 ppb	47.82	0.93%
QC value within limits for Mg 279.077 IEC Recovery = 103.08%						
Mn 257.610†	146785.7	508.76 µg/L	15.198	508.76 ppb	15.198	2.99%
QC value within limits for Mn 257.610 Recovery = 101.75%						
Mo 202.031†	4616.6	492.88 µg/L	49.074	492.88 ppb	49.074	9.96%
QC value within limits for Mo 202.031 Recovery = 98.58%						
Na 589.592 Radial†	30482.1	10035 µg/L	59.3	10035 ppb	59.3	0.59%
QC value within limits for Na 589.592 Radial Recovery = 100.35%						
Ni 231.604†	9177.9	501.27 µg/L	22.771	501.27 ppb	22.771	4.54%
QC value within limits for Ni 231.604 Recovery = 100.25%						
P 214.914†	1159.8	2442.6 µg/L	233.37	2442.6 ppb	233.37	9.55%
QC value within limits for P 214.914 Recovery = 97.71%						
Pb 220.353†	1857.7	495.83 µg/L	40.446	495.83 ppb	40.446	8.16%
QC value within limits for Pb 220.353 Recovery = 99.17%						
S 181.975 Axial†	222.8	976.27 µg/L	71.572	976.27 ppb	71.572	7.33%
QC value within limits for S 181.975 Axial Recovery = 97.63%						
Sb 206.836†	497.5	491.69 µg/L	44.681	491.69 ppb	44.681	9.09%
QC value within limits for Sb 206.836 Recovery = 98.34%						
Se 196.026†	322.9	500.11 µg/L	37.818	500.11 ppb	37.818	7.56%
QC value within limits for Se 196.026 Recovery = 100.02%						
SiO2†	24557.5	5288.6 µg/L	191.11	5288.6 ppb	191.11	3.61%
QC value within limits for SiO2 Recovery = 98.90%						
Si 251.611†	30070.3	2471.9 µg/L	93.06	2471.9 ppb	93.06	3.76%
QC value within limits for Si 251.611 Recovery = 98.88%						
Sn 189.927†	1073.1	493.61 µg/L	52.162	493.61 ppb	52.162	10.57%
QC value within limits for Sn 189.927 Recovery = 98.72%						
Sr 421.552†	48082.9	498.44 µg/L	1.315	498.44 ppb	1.315	0.26%
QC value within limits for Sr 421.552 Recovery = 99.69%						
Ti 334.940†	204541.6	491.68 µg/L	17.266	491.68 ppb	17.266	3.51%
QC value within limits for Ti 334.940 Recovery = 98.34%						
Tl 190.801†	352.2	497.49 µg/L	22.222	497.49 ppb	22.222	4.47%
QC value within limits for Tl 190.801 Recovery = 99.50%						
U 409.014†	5528.1	499.49 µg/L	31.500	499.49 ppb	31.500	6.31%
QC value within limits for U 409.014 Recovery = 99.90%						
V 292.402†	46599.3	502.68 µg/L	25.490	502.68 ppb	25.490	5.07%
QC value within limits for V 292.402 Recovery = 100.54%						
Zn 213.857†	20092.9	498.19 µg/L	23.129	498.19 ppb	23.129	4.64%
QC value within limits for Zn 213.857 Recovery = 99.64%						

All analyte(s) passed QC.

Sequence No.: 28

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 2/11/2010 18:36:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56577.3	56577.3	104 %		18:37:06
1	Al 396.153Radial†	-31.7	-20.5	-15.254 µg/L	-15.254 ppb	18:37:06
1	Ca 317.933Radial†	178.1	-7.3	-6.9019 µg/L	-6.9019 ppb	18:37:27
1	Fe 238.204 Radial†	15.3	0.2	1.9399 µg/L	1.9399 ppb	18:37:27
1	K 766.490 Radial†	151.5	17.7	12.611 µg/L	12.611 ppb	18:37:06
1	Mg 279.077 IEC†	8.3	-3.3	-30.287 µg/L	-30.287 ppb	18:37:27
1	Na 589.592 Radial†	633.9	69.6	22.897 µg/L	22.897 ppb	18:37:06
1	Sr 421.552†	44.5	3.3	0.0346 µg/L	0.0346 ppb	18:37:06
1	Sc 361.383	1997175.6	1997175.6	104.57 %		18:38:28
1	Y 371.029	1371834.1	1371834.1	104.73 %		18:38:28
1	Ag 328.068†	-518.3	68.9	0.5460 µg/L	0.5460 ppb	18:38:34
1	As 188.979†	-0.7	-1.8	-3.4701 µg/L	-3.4701 ppb	18:38:54
1	B 249.677†	333.0	-13.0	-0.5696 µg/L	-0.5696 ppb	18:38:54
1	Ba 233.527†	-20.3	6.6	0.1716 µg/L	0.1716 ppb	18:38:54
1	Be 313.107†	-3492.3	100.9	0.0658 µg/L	0.0658 ppb	18:38:34
1	Cd 226.502†	-135.3	12.8	0.3518 µg/L	0.3518 ppb	18:38:54
1	Co 228.616†	-16.0	-6.4	-0.3169 µg/L	-0.3169 ppb	18:38:54
1	Cr 267.716†	-59.9	-4.9	-0.1071 µg/L	-0.1071 ppb	18:38:34
1	Cu 324.752†	2440.0	-152.8	-1.0669 µg/L	-1.0669 ppb	18:38:34
1	Mn 257.610†	-253.9	1.3	0.0061 µg/L	0.0061 ppb	18:38:54
1	Mo 202.031†	-12.2	-4.2	-0.4445 µg/L	-0.4445 ppb	18:38:54
1	Ni 231.604†	302.8	-12.6	-0.6910 µg/L	-0.6910 ppb	18:38:54
1	P 214.914†	25.9	-2.9	-6.0063 µg/L	-6.0063 ppb	18:38:54
1	Pb 220.353†	96.6	-4.8	-1.2749 µg/L	-1.2749 ppb	18:38:54
1	S 181.975 Axial†	16.8	1.3	5.5555 µg/L	5.5555 ppb	18:38:54
1	Sb 206.836†	26.1	-2.0	-1.9561 µg/L	-1.9561 ppb	18:38:54
1	Se 196.026†	17.3	0.7	1.1140 µg/L	1.1140 ppb	18:38:54
1	SiO2†	1249.6	-55.1	-11.856 µg/L	-11.856 ppb	18:38:34
1	Si 251.611†	302.7	-23.4	-1.9253 µg/L	-1.9253 ppb	18:38:54
1	Sn 189.927†	1.0	1.9	0.8554 µg/L	0.8554 ppb	18:38:54
1	Ti 334.940†	152.6	29.8	0.0741 µg/L	0.0741 ppb	18:38:34
1	Tl 190.801†	-22.3	3.0	4.1717 µg/L	4.1717 ppb	18:38:54
1	U 409.014†	-116.8	-58.1	-5.2596 µg/L	-5.2596 ppb	18:38:34
1	V 292.402†	-54.7	-8.1	-0.0953 µg/L	-0.0953 ppb	18:38:34
1	Zn 213.857†	472.6	-23.6	-0.5840 µg/L	-0.5840 ppb	18:38:54
2	Sc RADIAL	55383.9	55383.9	101 %		18:37:32
2	Al 396.153Radial†	-17.3	-7.0	-5.1964 µg/L	-5.1964 ppb	18:37:32
2	Ca 317.933Radial†	188.8	6.9	6.4546 µg/L	6.4546 ppb	18:37:52
2	Fe 238.204 Radial†	14.1	-0.6	-4.8767 µg/L	-4.8767 ppb	18:37:52
2	K 766.490 Radial†	126.5	-3.8	-2.6779 µg/L	-2.6779 ppb	18:37:32
2	Mg 279.077 IEC†	12.6	1.1	10.292 µg/L	10.292 ppb	18:37:52
2	Na 589.592 Radial†	623.8	72.8	23.955 µg/L	23.955 ppb	18:37:32
2	Sr 421.552†	31.5	-8.5	-0.0883 µg/L	-0.0883 ppb	18:37:32
2	Sc 361.383	2013350.1	2013350.1	105.42 %		18:39:00
2	Y 371.029	1381993.5	1381993.5	105.50 %		18:39:00
2	Ag 328.068†	-537.9	54.3	0.4351 µg/L	0.4351 ppb	18:39:06
2	As 188.979†	2.2	1.0	1.8812 µg/L	1.8812 ppb	18:39:26
2	B 249.677†	318.3	-29.5	-1.2874 µg/L	-1.2874 ppb	18:39:26
2	Ba 233.527†	-25.9	1.4	0.0380 µg/L	0.0380 ppb	18:39:26
2	Be 313.107†	-3437.1	180.0	0.1176 µg/L	0.1176 ppb	18:39:06
2	Cd 226.502†	-146.1	3.5	0.0976 µg/L	0.0976 ppb	18:39:26
2	Co 228.616†	-6.0	3.1	0.1553 µg/L	0.1553 ppb	18:39:26
2	Cr 267.716†	-56.6	-1.3	-0.0276 µg/L	-0.0276 ppb	18:39:06
2	Cu 324.752†	2488.4	-125.7	-0.8785 µg/L	-0.8785 ppb	18:39:06
2	Mn 257.610†	-244.3	12.4	0.0419 µg/L	0.0419 ppb	18:39:26
2	Mo 202.031†	-1.5	6.1	0.6511 µg/L	0.6511 ppb	18:39:26
2	Ni 231.604†	301.7	-16.0	-0.8752 µg/L	-0.8752 ppb	18:39:26
2	P 214.914†	26.3	-2.6	-5.5596 µg/L	-5.5596 ppb	18:39:26
2	Pb 220.353†	100.7	-1.7	-0.4405 µg/L	-0.4405 ppb	18:39:26

2	S 181.975 Axial†	19.5	3.7	16.100 µg/L	16.100 ppb	18:39:26
2	Sb 206.836†	25.7	-2.6	-2.5687 µg/L	-2.5687 ppb	18:39:26
2	Se 196.026†	18.4	1.6	2.4087 µg/L	2.4087 ppb	18:39:26
2	SiO2†	1290.6	-25.8	-5.5589 µg/L	-5.5589 ppb	18:39:06
2	Si 251.611†	298.6	-29.7	-2.4388 µg/L	-2.4388 ppb	18:39:26
2	Sn 189.927†	1.6	2.4	1.0965 µg/L	1.0965 ppb	18:39:26
2	Ti 334.940†	143.9	20.4	0.0483 µg/L	0.0483 ppb	18:39:06
2	Tl 190.801†	-19.4	5.9	8.2322 µg/L	8.2322 ppb	18:39:26
2	U 409.014†	-143.2	-82.3	-7.4471 µg/L	-7.4471 ppb	18:39:06
2	V 292.402†	19.9	63.0	0.6686 µg/L	0.6686 ppb	18:39:06
2	Zn 213.857†	478.6	-21.5	-0.5326 µg/L	-0.5326 ppb	18:39:26
3	Sc RADIAL	56905.3	56905.3	104 %		18:37:58
3	Al 396.153Radial†	-1.7	8.5	6.3212 µg/L	6.3212 ppb	18:37:58
3	Ca 317.933Radial†	181.4	-5.2	-4.9145 µg/L	-4.9145 ppb	18:38:18
3	Fe 238.204 Radial†	13.2	-1.8	-15.607 µg/L	-15.607 ppb	18:38:18
3	K 766.490 Radial†	186.8	50.7	36.048 µg/L	36.048 ppb	18:37:58
3	Mg 279.077 IEC†	11.5	-0.3	-2.5813 µg/L	-2.5813 ppb	18:38:18
3	Na 589.592 Radial†	645.3	77.0	25.346 µg/L	25.346 ppb	18:37:58
3	Sr 421.552†	17.2	-23.1	-0.2393 µg/L	-0.2393 ppb	18:37:58
3	Sc 361.383	1996384.7	1996384.7	104.53 %		18:39:32
3	Y 371.029	1369220.3	1369220.3	104.53 %		18:39:32
3	Ag 328.068†	-541.0	47.0	0.3741 µg/L	0.3741 ppb	18:39:38
3	As 188.979†	-1.0	-2.1	-4.0939 µg/L	-4.0939 ppb	18:39:59
3	B 249.677†	333.0	-12.9	-0.5555 µg/L	-0.5555 ppb	18:39:59
3	Ba 233.527†	-17.3	9.5	0.2478 µg/L	0.2478 ppb	18:39:59
3	Be 313.107†	-3308.4	275.5	0.1799 µg/L	0.1799 ppb	18:39:38
3	Cd 226.502†	-144.0	4.4	0.1228 µg/L	0.1228 ppb	18:39:59
3	Co 228.616†	-11.0	-1.7	-0.0836 µg/L	-0.0836 ppb	18:39:59
3	Cr 267.716†	-55.8	-1.0	-0.0220 µg/L	-0.0220 ppb	18:39:38
3	Cu 324.752†	2440.9	-151.0	-1.0572 µg/L	-1.0572 ppb	18:39:38
3	Mn 257.610†	-222.1	31.7	0.1077 µg/L	0.1077 ppb	18:39:59
3	Mo 202.031†	-3.2	4.5	0.4771 µg/L	0.4771 ppb	18:39:59
3	Ni 231.604†	303.2	-12.1	-0.6637 µg/L	-0.6637 ppb	18:39:59
3	P 214.914†	30.5	1.6	3.5034 µg/L	3.5034 ppb	18:39:59
3	Pb 220.353†	89.5	-11.6	-3.0790 µg/L	-3.0790 ppb	18:39:59
3	S 181.975 Axial†	17.8	2.2	9.6185 µg/L	9.6185 ppb	18:39:59
3	Sb 206.836†	27.7	-0.5	-0.4700 µg/L	-0.4700 ppb	18:39:59
3	Se 196.026†	15.0	-1.5	-2.2806 µg/L	-2.2806 ppb	18:39:59
3	SiO2†	1247.6	-56.5	-12.175 µg/L	-12.175 ppb	18:39:38
3	Si 251.611†	300.0	-25.8	-2.1244 µg/L	-2.1244 ppb	18:39:59
3	Sn 189.927†	3.2	3.9	1.8070 µg/L	1.8070 ppb	18:39:59
3	Ti 334.940†	156.9	34.0	0.0818 µg/L	0.0818 ppb	18:39:38
3	Tl 190.801†	-23.6	1.7	2.3286 µg/L	2.3286 ppb	18:39:59
3	U 409.014†	-48.9	6.8	0.6203 µg/L	0.6203 ppb	18:39:38
3	V 292.402†	-14.3	30.6	0.3283 µg/L	0.3283 ppb	18:39:38
3	Zn 213.857†	478.7	-17.6	-0.4352 µg/L	-0.4352 ppb	18:39:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	2002303.4	104.84 %	0.501			0.48%
Sc RADIAL	56288.9	103 %	1.5			1.42%
Y 371.029	1374349.3	104.92 %	0.515			0.49%
Ag 328.068†	56.7	0.4517 µg/L	0.08717	0.4517 ppb	0.08717	19.30%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-6.3	-4.7097 µg/L	10.79578	-4.7097 ppb	10.79578	229.22%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-1.0	-1.8943 µg/L	3.28450	-1.8943 ppb	3.28450	173.39%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-18.5	-0.8042 µg/L	0.41854	-0.8042 ppb	0.41854	52.05%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.8	0.1525 µg/L	0.10621	0.1525 ppb	0.10621	69.66%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	185.5	0.1211 µg/L	0.05710	0.1211 ppb	0.05710	47.16%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.9	-1.7872 µg/L	7.20651	-1.7872 ppb	7.20651	403.22%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	6.9	0.1907 µg/L	0.14008	0.1907 ppb	0.14008	73.44%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.7	-0.0817 µg/L	0.23614	-0.0817 ppb	0.23614	288.95%

Cr 267.716†	QC value within limits for Co 228.616	Recovery = Not calculated			
	-2.4	-0.0522 µg/L	0.04756	-0.0522 ppb	0.04756 91.05%
Cu 324.752†	QC value within limits for Cr 267.716	Recovery = Not calculated			
	-143.2	-1.0009 µg/L	0.10608	-1.0009 ppb	0.10608 10.60%
Fe 238.204 Radial†	QC value within limits for Cu 324.752	Recovery = Not calculated			
	-0.7	-6.1811 µg/L	8.84567	-6.1811 ppb	8.84567 143.11%
K 766.490 Radial†	QC value within limits for Fe 238.204 Radial	Recovery = Not calculated			
	21.6	15.327 µg/L	19.5055	15.327 ppb	19.5055 127.26%
Mg 279.077 IEC†	QC value within limits for K 766.490 Radial	Recovery = Not calculated			
	-0.8	-7.5253 µg/L	20.73608	-7.5253 ppb	20.73608 275.55%
Mn 257.610†	QC value within limits for Mg 279.077 IEC	Recovery = Not calculated			
	15.1	0.0519 µg/L	0.05154	0.0519 ppb	0.05154 99.29%
Mo 202.031†	QC value within limits for Mn 257.610	Recovery = Not calculated			
	2.1	0.2279 µg/L	0.58875	0.2279 ppb	0.58875 258.32%
Na 589.592 Radial†	QC value within limits for Mo 202.031	Recovery = Not calculated			
	73.1	24.066 µg/L	1.2283	24.066 ppb	1.2283 5.10%
Ni 231.604†	QC value within limits for Na 589.592 Radial	Recovery = Not calculated			
	-13.6	-0.7433 µg/L	0.11501	-0.7433 ppb	0.11501 15.47%
P 214.914†	QC value within limits for Ni 231.604	Recovery = Not calculated			
	-1.3	-2.6875 µg/L	5.36613	-2.6875 ppb	5.36613 199.67%
Pb 220.353†	QC value within limits for P 214.914	Recovery = Not calculated			
	-6.0	-1.5981 µg/L	1.34866	-1.5981 ppb	1.34866 84.39%
S 181.975 Axial†	QC value within limits for Pb 220.353	Recovery = Not calculated			
	2.4	10.425 µg/L	5.3180	10.425 ppb	5.3180 51.01%
Sb 206.836†	QC value within limits for S 181.975 Axial	Recovery = Not calculated			
	-1.7	-1.6649 µg/L	1.07918	-1.6649 ppb	1.07918 64.82%
Se 196.026†	QC value within limits for Sb 206.836	Recovery = Not calculated			
	0.3	0.4141 µg/L	2.42173	0.4141 ppb	2.42173 584.88%
SiO2†	QC value within limits for Se 196.026	Recovery = Not calculated			
	-45.8	-9.8634 µg/L	3.73124	-9.8634 ppb	3.73124 37.83%
Si 251.611†	QC value within limits for SiO2	Recovery = Not calculated			
	-26.3	-2.1628 µg/L	0.25893	-2.1628 ppb	0.25893 11.97%
Sn 189.927†	QC value within limits for Si 251.611	Recovery = Not calculated			
	2.7	1.2530 µg/L	0.49474	1.2530 ppb	0.49474 39.49%
Sr 421.552†	QC value within limits for Sn 189.927	Recovery = Not calculated			
	-9.4	-0.0977 µg/L	0.13720	-0.0977 ppb	0.13720 140.50%
Ti 334.940†	QC value within limits for Sr 421.552	Recovery = Not calculated			
	28.1	0.0681 µg/L	0.01753	0.0681 ppb	0.01753 25.76%
Tl 190.801†	QC value within limits for Ti 334.940	Recovery = Not calculated			
	3.5	4.9108 µg/L	3.02042	4.9108 ppb	3.02042 61.51%
U 409.014†	QC value within limits for Tl 190.801	Recovery = Not calculated			
	-44.5	-4.0288 µg/L	4.17218	-4.0288 ppb	4.17218 103.56%
V 292.402†	QC value within limits for U 409.014	Recovery = Not calculated			
	28.5	0.3005 µg/L	0.38270	0.3005 ppb	0.38270 127.35%
Zn 213.857†	QC value within limits for V 292.402	Recovery = Not calculated			
	-20.9	-0.5173 µg/L	0.07558	-0.5173 ppb	0.07558 14.61%
	QC value within limits for Zn 213.857 Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 38

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 19:12:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55671.1	55671.1	102 %		19:13:03
1	Al 396.153Radial†	7032.4	6904.0	5134.7 µg/L	5134.7 ppb	19:13:03
1	Ca 317.933Radial†	5628.4	5338.4	5026.4 µg/L	5026.4 ppb	19:13:23
1	Fe 238.204 Radial†	628.5	601.6	5110.3 µg/L	5110.3 ppb	19:13:23
1	K 766.490 Radial†	7390.7	7116.7	5058.5 µg/L	5058.5 ppb	19:13:03
1	Mg 279.077 IEC†	581.4	558.7	5202.9 µg/L	5202.9 ppb	19:13:23
1	Na 589.592 Radial†	32145.4	30970.2	10196 µg/L	10196 ppb	19:13:03
1	Sr 421.552†	49522.9	48507.7	502.84 µg/L	502.84 ppb	19:13:03
1	Sc 361.383	1951144.3	1951144.3	102.16 %		19:14:27
1	Y 371.029	1335064.4	1335064.4	101.92 %		19:14:27
1	Ag 328.068†	64845.5	64037.3	511.83 µg/L	511.83 ppb	19:14:32
1	As 188.979†	275.5	268.5	523.78 µg/L	523.78 ppb	19:14:53
1	B 249.677†	12049.2	11462.7	499.11 µg/L	499.11 ppb	19:14:32
1	Ba 233.527†	20008.0	19610.4	511.55 µg/L	511.55 ppb	19:14:32
1	Be 313.107†	795598.6	782196.8	510.62 µg/L	510.62 ppb	19:14:27
1	Cd 226.502†	18839.6	18582.9	512.61 µg/L	512.61 ppb	19:14:32
1	Co 228.616†	10676.1	10458.9	514.13 µg/L	514.13 ppb	19:14:32
1	Cr 267.716†	23927.2	23473.1	516.64 µg/L	516.64 ppb	19:14:32
1	Cu 324.752†	77230.7	73109.7	511.40 µg/L	511.40 ppb	19:14:32
1	Mn 257.610†	153022.2	150027.0	519.99 µg/L	519.99 ppb	19:14:27
1	Mo 202.031†	5147.6	5046.1	538.72 µg/L	538.72 ppb	19:14:53
1	Ni 231.604†	9909.1	9397.1	513.24 µg/L	513.24 ppb	19:14:32
1	P 214.914†	1284.0	1229.2	2590.7 µg/L	2590.7 ppb	19:14:53
1	Pb 220.353†	2100.1	1958.5	522.80 µg/L	522.80 ppb	19:14:53
1	S 181.975 Axial†	260.7	240.4	1053.2 µg/L	1053.2 ppb	19:14:53
1	Sb 206.836†	579.1	539.9	533.92 µg/L	533.92 ppb	19:14:53
1	Se 196.026†	368.4	344.8	533.59 µg/L	533.59 ppb	19:14:53
1	SiO2†	27092.9	25269.3	5441.9 µg/L	5441.9 ppb	19:14:32
1	Si 251.611†	31889.8	30901.8	2540.3 µg/L	2540.3 ppb	19:14:32
1	Sn 189.927†	1200.9	1176.4	541.09 µg/L	541.09 ppb	19:14:53
1	Ti 334.940†	218380.7	213641.7	513.57 µg/L	513.57 ppb	19:14:27
1	Tl 190.801†	350.6	367.5	519.14 µg/L	519.14 ppb	19:14:53
1	U 409.014†	5814.6	5745.1	519.13 µg/L	519.13 ppb	19:14:32
1	V 292.402†	48982.0	47989.3	517.92 µg/L	517.92 ppb	19:14:32
1	Zn 213.857†	21483.0	20552.7	509.59 µg/L	509.59 ppb	19:14:32
2	Sc RADIAL	56100.7	56100.7	103 %		19:13:29
2	Al 396.153Radial†	6945.6	6766.8	5032.6 µg/L	5032.6 ppb	19:13:29
2	Ca 317.933Radial†	5631.2	5298.9	4989.2 µg/L	4989.2 ppb	19:13:49
2	Fe 238.204 Radial†	627.7	596.1	5063.7 µg/L	5063.7 ppb	19:13:49
2	K 766.490 Radial†	7341.2	7013.0	4984.8 µg/L	4984.8 ppb	19:13:29
2	Mg 279.077 IEC†	586.0	558.8	5203.5 µg/L	5203.5 ppb	19:13:49
2	Na 589.592 Radial†	31976.7	30564.8	10062 µg/L	10062 ppb	19:13:29
2	Sr 421.552†	49170.9	47793.6	495.44 µg/L	495.44 ppb	19:13:29
2	Sc 361.383	1954250.3	1954250.3	102.33 %		19:15:00
2	Y 371.029	1335611.5	1335611.5	101.96 %		19:15:00
2	Ag 328.068†	65212.5	64295.1	513.88 µg/L	513.88 ppb	19:15:06
2	As 188.979†	274.4	267.0	520.94 µg/L	520.94 ppb	19:15:26
2	B 249.677†	12164.5	11556.6	503.24 µg/L	503.24 ppb	19:15:06
2	Ba 233.527†	20057.8	19628.0	512.01 µg/L	512.01 ppb	19:15:06
2	Be 313.107†	786582.3	772147.7	504.06 µg/L	504.06 ppb	19:15:00
2	Cd 226.502†	18912.0	18624.4	513.76 µg/L	513.76 ppb	19:15:06
2	Co 228.616†	10732.8	10497.7	516.05 µg/L	516.05 ppb	19:15:06
2	Cr 267.716†	24011.5	23518.2	517.63 µg/L	517.63 ppb	19:15:06
2	Cu 324.752†	77632.9	73382.6	513.30 µg/L	513.30 ppb	19:15:06
2	Mn 257.610†	151747.3	148542.9	514.85 µg/L	514.85 ppb	19:15:00
2	Mo 202.031†	5096.3	4988.0	532.52 µg/L	532.52 ppb	19:15:26
2	Ni 231.604†	9986.9	9457.7	516.55 µg/L	516.55 ppb	19:15:06
2	P 214.914†	1269.9	1213.4	2556.6 µg/L	2556.6 ppb	19:15:26
2	Pb 220.353†	2103.2	1958.2	522.70 µg/L	522.70 ppb	19:15:26

2	S 181.975 Axial†	261.6	240.8	1055.1 µg/L	1055.1 ppb	19:15:26
2	Sb 206.836†	583.1	542.9	536.77 µg/L	536.77 ppb	19:15:26
2	Se 196.026†	358.4	334.4	517.63 µg/L	517.63 ppb	19:15:26
2	SiO2†	27219.9	25351.3	5459.5 µg/L	5459.5 ppb	19:15:06
2	Si 251.611†	32020.8	30980.3	2546.7 µg/L	2546.7 ppb	19:15:06
2	Sn 189.927†	1194.0	1167.7	537.13 µg/L	537.13 ppb	19:15:26
2	Ti 334.940†	216182.4	211153.6	507.58 µg/L	507.58 ppb	19:15:00
2	Tl 190.801†	351.8	368.1	519.85 µg/L	519.85 ppb	19:15:26
2	U 409.014†	5813.7	5735.2	518.24 µg/L	518.24 ppb	19:15:06
2	V 292.402†	49127.5	48055.3	518.57 µg/L	518.57 ppb	19:15:06
2	Zn 213.857†	21549.0	20583.8	510.35 µg/L	510.35 ppb	19:15:06
3	Sc RADIAL	56646.4	56646.4	104 %		19:13:55
3	Al 396.153Radial†	6990.5	6744.9	5018.4 µg/L	5018.4 ppb	19:13:55
3	Ca 317.933Radial†	5597.5	5213.6	4908.9 µg/L	4908.9 ppb	19:14:15
3	Fe 238.204 Radial†	629.8	592.2	5029.2 µg/L	5029.2 ppb	19:14:15
3	K 766.490 Radial†	7441.3	7040.7	5004.5 µg/L	5004.5 ppb	19:13:55
3	Mg 279.077 IEC†	585.3	552.6	5144.3 µg/L	5144.3 ppb	19:14:15
3	Na 589.592 Radial†	32200.7	30481.0	10034 µg/L	10034 ppb	19:13:55
3	Sr 421.552†	49653.3	47797.6	495.48 µg/L	495.48 ppb	19:13:55
3	Sc 361.383	1989206.7	1989206.7	104.16 %		19:15:33
3	Y 371.029	1360871.5	1360871.5	103.89 %		19:15:33
3	Ag 328.068†	60452.0	58604.6	468.29 µg/L	468.29 ppb	19:15:39
3	As 188.979†	231.4	221.0	431.16 µg/L	431.16 ppb	19:15:59
3	B 249.677†	11200.8	10422.4	453.57 µg/L	453.57 ppb	19:15:39
3	Ba 233.527†	18155.6	17457.3	455.37 µg/L	455.37 ppb	19:15:39
3	Be 313.107†	746723.2	720370.4	470.26 µg/L	470.26 ppb	19:15:33
3	Cd 226.502†	17034.9	16497.4	455.02 µg/L	455.02 ppb	19:15:39
3	Co 228.616†	9575.0	9201.8	452.26 µg/L	452.26 ppb	19:15:39
3	Cr 267.716†	20898.9	20117.4	442.78 µg/L	442.78 ppb	19:15:39
3	Cu 324.752†	69759.8	64490.4	451.18 µg/L	451.18 ppb	19:15:39
3	Mn 257.610†	144303.8	138790.3	481.07 µg/L	481.07 ppb	19:15:33
3	Mo 202.031†	4187.5	4027.9	430.06 µg/L	430.06 ppb	19:15:59
3	Ni 231.604†	8969.1	8309.0	453.82 µg/L	453.82 ppb	19:15:39
3	P 214.914†	1074.2	1003.7	2111.2 µg/L	2111.2 ppb	19:15:59
3	Pb 220.353†	1799.2	1630.2	435.08 µg/L	435.08 ppb	19:15:59
3	S 181.975 Axial†	224.9	201.1	880.92 µg/L	880.92 ppb	19:15:59
3	Sb 206.836†	494.9	448.2	442.71 µg/L	442.71 ppb	19:15:59
3	Se 196.026†	304.8	276.8	429.75 µg/L	429.75 ppb	19:15:59
3	SiO2†	24880.7	22637.9	4875.2 µg/L	4875.2 ppb	19:15:39
3	Si 251.611†	29305.2	27823.1	2287.2 µg/L	2287.2 ppb	19:15:39
3	Sn 189.927†	959.0	921.6	423.93 µg/L	423.93 ppb	19:15:59
3	Ti 334.940†	203896.7	195645.3	470.28 µg/L	470.28 ppb	19:15:33
3	Tl 190.801†	305.5	317.6	449.03 µg/L	449.03 ppb	19:15:59
3	U 409.014†	5068.3	4919.7	444.42 µg/L	444.42 ppb	19:15:39
3	V 292.402†	43582.6	41887.9	451.80 µg/L	451.80 ppb	19:15:39
3	Zn 213.857†	19376.0	18127.3	449.39 µg/L	449.39 ppb	19:15:39

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1964867.1	102.88 %	1.107			1.08%
Sc RADIAL	56139.4	103 %	0.9			0.87%
Y 371.029	1343849.1	102.59 %	1.126			1.10%
Ag 328.068†	62312.3	498.00 µg/L	25.750	498.00 ppb	25.750	5.17%
QC value within limits for Ag 328.068 Recovery = 99.60%						
Al 396.153Radial†	6805.2	5061.9 µg/L	63.45	5061.9 ppb	63.45	1.25%
QC value within limits for Al 396.153Radial Recovery = 101.24%						
As 188.979†	252.2	491.96 µg/L	52.673	491.96 ppb	52.673	10.71%
QC value within limits for As 188.979 Recovery = 98.39%						
B 249.677†	11147.2	485.30 µg/L	27.561	485.30 ppb	27.561	5.68%
QC value within limits for B 249.677 Recovery = 97.06%						
Ba 233.527†	18898.6	492.97 µg/L	32.570	492.97 ppb	32.570	6.61%
QC value within limits for Ba 233.527 Recovery = 98.59%						
Be 313.107†	758238.3	494.98 µg/L	21.658	494.98 ppb	21.658	4.38%
QC value within limits for Be 313.107 Recovery = 99.00%						
Ca 317.933Radial†	5283.6	4974.8 µg/L	60.06	4974.8 ppb	60.06	1.21%
QC value within limits for Ca 317.933Radial Recovery = 99.50%						
Cd 226.502†	17901.6	493.80 µg/L	33.585	493.80 ppb	33.585	6.80%
QC value within limits for Cd 226.502 Recovery = 98.76%						
Co 228.616†	10052.8	494.14 µg/L	36.289	494.14 ppb	36.289	7.34%

QC value within limits for Co 228.616 Recovery = 98.83%						
Cr 267.716†	22369.6	492.35 µg/L	42.929	492.35 ppb	42.929	8.72%
QC value within limits for Cr 267.716 Recovery = 98.47%						
Cu 324.752†	70327.6	491.96 µg/L	35.329	491.96 ppb	35.329	7.18%
QC value within limits for Cu 324.752 Recovery = 98.39%						
Fe 238.204 Radial†	596.7	5067.7 µg/L	40.70	5067.7 ppb	40.70	0.80%
QC value within limits for Fe 238.204 Radial Recovery = 101.35%						
K 766.490 Radial†	7056.8	5015.9 µg/L	38.15	5015.9 ppb	38.15	0.76%
QC value within limits for K 766.490 Radial Recovery = 100.32%						
Mg 279.077 IEC†	556.7	5183.6 µg/L	33.98	5183.6 ppb	33.98	0.66%
QC value within limits for Mg 279.077 IEC Recovery = 103.67%						
Mn 257.610†	145786.8	505.31 µg/L	21.142	505.31 ppb	21.142	4.18%
QC value within limits for Mn 257.610 Recovery = 101.06%						
Mo 202.031†	4687.4	500.43 µg/L	61.026	500.43 ppb	61.026	12.19%
QC value within limits for Mo 202.031 Recovery = 100.09%						
Na 589.592 Radial†	30672.0	10097 µg/L	86.1	10097 ppb	86.1	0.85%
QC value within limits for Na 589.592 Radial Recovery = 100.97%						
Ni 231.604†	9054.6	494.54 µg/L	35.300	494.54 ppb	35.300	7.14%
QC value within limits for Ni 231.604 Recovery = 98.91%						
P 214.914†	1148.8	2419.5 µg/L	267.56	2419.5 ppb	267.56	11.06%
QC value within limits for P 214.914 Recovery = 96.78%						
Pb 220.353†	1849.0	493.53 µg/L	50.614	493.53 ppb	50.614	10.26%
QC value within limits for Pb 220.353 Recovery = 98.71%						
S 181.975 Axial†	227.4	996.40 µg/L	100.008	996.40 ppb	100.008	10.04%
QC value within limits for S 181.975 Axial Recovery = 99.64%						
Sb 206.836†	510.3	504.47 µg/L	53.501	504.47 ppb	53.501	10.61%
QC value within limits for Sb 206.836 Recovery = 100.89%						
Se 196.026†	318.7	493.66 µg/L	55.921	493.66 ppb	55.921	11.33%
QC value within limits for Se 196.026 Recovery = 98.73%						
SiO2†	24419.5	5258.9 µg/L	332.39	5258.9 ppb	332.39	6.32%
QC value within limits for SiO2 Recovery = 98.34%						
Si 251.611†	29901.8	2458.1 µg/L	148.02	2458.1 ppb	148.02	6.02%
QC value within limits for Si 251.611 Recovery = 98.32%						
Sn 189.927†	1088.6	500.71 µg/L	66.525	500.71 ppb	66.525	13.29%
QC value within limits for Sn 189.927 Recovery = 100.14%						
Sr 421.552†	48033.0	497.92 µg/L	4.262	497.92 ppb	4.262	0.86%
QC value within limits for Sr 421.552 Recovery = 99.58%						
Ti 334.940†	206813.5	497.14 µg/L	23.455	497.14 ppb	23.455	4.72%
QC value within limits for Ti 334.940 Recovery = 99.43%						
Tl 190.801†	351.1	496.01 µg/L	40.687	496.01 ppb	40.687	8.20%
QC value within limits for Tl 190.801 Recovery = 99.20%						
U 409.014†	5466.7	493.93 µg/L	42.881	493.93 ppb	42.881	8.68%
QC value within limits for U 409.014 Recovery = 98.79%						
V 292.402†	45977.5	496.10 µg/L	38.364	496.10 ppb	38.364	7.73%
QC value within limits for V 292.402 Recovery = 99.22%						
Zn 213.857†	19754.6	489.78 µg/L	34.976	489.78 ppb	34.976	7.14%
QC value within limits for Zn 213.857 Recovery = 97.96%						

All analyte(s) passed QC.

Sequence No.: 39

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 19:16:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55600.7	55600.7	102 %		19:16:41
1	Al 396.153Radial†	-4.5	5.7	4.2256 µg/L	4.2256 ppb	19:16:41
1	Ca 317.933Radial†	176.7	-5.7	-5.4036 µg/L	-5.4036 ppb	19:17:01
1	Fe 238.204 Radial†	16.9	2.1	17.440 µg/L	17.440 ppb	19:17:01
1	K 766.490 Radial†	120.8	-9.9	-7.0161 µg/L	-7.0161 ppb	19:16:41
1	Mg 279.077 IEC†	10.9	-0.6	-5.3345 µg/L	-5.3345 ppb	19:17:01
1	Na 589.592 Radial†	652.7	98.7	32.500 µg/L	32.500 ppb	19:16:41
1	Sr 421.552†	22.7	-17.3	-0.1790 µg/L	-0.1790 ppb	19:16:41
1	Sc 361.383	1934829.6	1934829.6	101.31 %		19:18:03
1	Y 371.029	1327190.7	1327190.7	101.32 %		19:18:03
1	Ag 328.068†	-516.6	54.6	0.4388 µg/L	0.4388 ppb	19:18:09
1	As 188.979†	1.2	0.0	0.0845 µg/L	0.0845 ppb	19:18:29
1	B 249.677†	321.4	-14.2	-0.6284 µg/L	-0.6284 ppb	19:18:29
1	Ba 233.527†	-23.7	2.6	0.0683 µg/L	0.0683 ppb	19:18:29
1	Be 313.107†	-3408.1	76.3	0.0498 µg/L	0.0498 ppb	19:18:09
1	Cd 226.502†	-144.3	-0.3	-0.0100 µg/L	-0.0100 ppb	19:18:29
1	Co 228.616†	-6.0	2.9	0.1456 µg/L	0.1456 ppb	19:18:29
1	Cr 267.716†	-15.9	36.7	0.8069 µg/L	0.8069 ppb	19:18:09
1	Cu 324.752†	2442.5	-75.1	-0.5222 µg/L	-0.5222 ppb	19:18:09
1	Mn 257.610†	-225.9	21.1	0.0756 µg/L	0.0756 ppb	19:18:29
1	Mo 202.031†	-2.6	4.9	0.5275 µg/L	0.5275 ppb	19:18:29
1	Ni 231.604†	310.8	4.6	0.2529 µg/L	0.2529 ppb	19:18:29
1	P 214.914†	22.3	-5.6	-12.052 µg/L	-12.052 ppb	19:18:29
1	Pb 220.353†	97.2	-1.3	-0.3391 µg/L	-0.3391 ppb	19:18:29
1	S 181.975 Axial†	15.8	0.7	3.2436 µg/L	3.2436 ppb	19:18:29
1	Sb 206.836†	30.1	2.8	2.7305 µg/L	2.7305 ppb	19:18:29
1	Se 196.026†	14.9	-1.1	-1.6720 µg/L	-1.6720 ppb	19:18:29
1	SiO2†	1241.8	-24.3	-5.2260 µg/L	-5.2260 ppb	19:18:09
1	Si 251.611†	314.2	-2.7	-0.2249 µg/L	-0.2249 ppb	19:18:29
1	Sn 189.927†	3.0	3.9	1.7687 µg/L	1.7687 ppb	19:18:29
1	Ti 334.940†	129.2	11.4	0.0278 µg/L	0.0278 ppb	19:18:09
1	Tl 190.801†	-22.4	2.2	3.0821 µg/L	3.0821 ppb	19:18:29
1	U 409.014†	-44.2	10.0	0.9045 µg/L	0.9045 ppb	19:18:09
1	V 292.402†	22.3	66.2	0.7146 µg/L	0.7146 ppb	19:18:09
1	Zn 213.857†	480.2	-1.5	-0.0391 µg/L	-0.0391 ppb	19:18:29
2	Sc RADIAL	55841.1	55841.1	102 %		19:17:07
2	Al 396.153Radial†	-0.2	10.0	7.4245 µg/L	7.4245 ppb	19:17:07
2	Ca 317.933Radial†	185.5	2.1	1.9861 µg/L	1.9861 ppb	19:17:27
2	Fe 238.204 Radial†	13.8	-1.1	-8.9579 µg/L	-8.9579 ppb	19:17:27
2	K 766.490 Radial†	118.8	-12.3	-8.7251 µg/L	-8.7251 ppb	19:17:07
2	Mg 279.077 IEC†	12.4	0.9	8.1129 µg/L	8.1129 ppb	19:17:27
2	Na 589.592 Radial†	684.6	127.2	41.869 µg/L	41.869 ppb	19:17:07
2	Sr 421.552†	48.5	7.8	0.0810 µg/L	0.0810 ppb	19:17:07
2	Sc 361.383	1955516.9	1955516.9	102.39 %		19:18:35
2	Y 371.029	1342161.2	1342161.2	102.46 %		19:18:35
2	Ag 328.068†	-513.3	63.2	0.5022 µg/L	0.5022 ppb	19:18:41
2	As 188.979†	-5.0	-6.0	-11.703 µg/L	-11.703 ppb	19:19:01
2	B 249.677†	317.0	-21.8	-0.9495 µg/L	-0.9495 ppb	19:19:01
2	Ba 233.527†	-19.8	6.7	0.1743 µg/L	0.1743 ppb	19:19:01
2	Be 313.107†	-3409.1	110.9	0.0724 µg/L	0.0724 ppb	19:18:41
2	Cd 226.502†	-125.7	19.4	0.5362 µg/L	0.5362 ppb	19:19:01
2	Co 228.616†	-4.9	4.1	0.1998 µg/L	0.1998 ppb	19:19:01
2	Cr 267.716†	-35.7	17.5	0.3848 µg/L	0.3848 ppb	19:18:41
2	Cu 324.752†	2432.5	-110.5	-0.7728 µg/L	-0.7728 ppb	19:18:41
2	Mn 257.610†	-217.1	32.1	0.1097 µg/L	0.1097 ppb	19:19:01
2	Mo 202.031†	-0.2	7.4	0.7857 µg/L	0.7857 ppb	19:19:01
2	Ni 231.604†	307.3	-2.1	-0.1144 µg/L	-0.1144 ppb	19:19:01
2	P 214.914†	26.8	-1.4	-2.9443 µg/L	-2.9443 ppb	19:19:01
2	Pb 220.353†	98.0	-1.5	-0.3841 µg/L	-0.3841 ppb	19:19:01

2	S 181.975 Axial†	16.0	0.8	3.5945 µg/L	3.5945 ppb	19:19:01
2	Sb 206.836†	19.9	-7.6	-7.4359 µg/L	-7.4359 ppb	19:19:01
2	Se 196.026†	24.3	7.9	11.982 µg/L	11.982 ppb	19:19:01
2	SiO2†	1252.6	-26.7	-5.7496 µg/L	-5.7496 ppb	19:18:41
2	Si 251.611†	335.5	14.8	1.2146 µg/L	1.2146 ppb	19:19:01
2	Sn 189.927†	0.8	1.7	0.7658 µg/L	0.7658 ppb	19:19:01
2	Ti 334.940†	159.2	39.3	0.0940 µg/L	0.0940 ppb	19:18:41
2	Tl 190.801†	-19.6	5.1	7.1712 µg/L	7.1712 ppb	19:19:01
2	U 409.014†	-39.3	15.2	1.3764 µg/L	1.3764 ppb	19:18:41
2	V 292.402†	-32.1	12.8	0.1441 µg/L	0.1441 ppb	19:18:41
2	Zn 213.857†	480.1	-6.6	-0.1635 µg/L	-0.1635 ppb	19:19:01
3	Sc RADIAL	54991.0	54991.0	101 %		19:17:32
3	Al 396.153Radial†	-25.8	-15.4	-11.501 µg/L	-11.501 ppb	19:17:32
3	Ca 317.933Radial†	179.1	-1.4	-1.2826 µg/L	-1.2826 ppb	19:17:53
3	Fe 238.204 Radial†	16.1	1.5	12.918 µg/L	12.918 ppb	19:17:53
3	K 766.490 Radial†	157.4	27.8	19.781 µg/L	19.781 ppb	19:17:32
3	Mg 279.077 IEC†	9.1	-2.2	-20.551 µg/L	-20.551 ppb	19:17:53
3	Na 589.592 Radial†	624.4	77.8	25.618 µg/L	25.618 ppb	19:17:32
3	Sr 421.552†	39.8	-0.1	-0.0009 µg/L	-0.0009 ppb	19:17:32
3	Sc 361.383	1967438.1	1967438.1	103.02 %		19:19:07
3	Y 371.029	1348776.4	1348776.4	102.97 %		19:19:07
3	Ag 328.068†	-543.2	37.2	0.2976 µg/L	0.2976 ppb	19:19:13
3	As 188.979†	-2.4	-3.5	-6.8853 µg/L	-6.8853 ppb	19:19:33
3	B 249.677†	305.4	-35.0	-1.5334 µg/L	-1.5334 ppb	19:19:33
3	Ba 233.527†	-26.9	-0.1	-0.0009 µg/L	-0.0009 ppb	19:19:33
3	Be 313.107†	-3287.9	248.8	0.1624 µg/L	0.1624 ppb	19:19:13
3	Cd 226.502†	-133.1	12.9	0.3539 µg/L	0.3539 ppb	19:19:33
3	Co 228.616†	-14.2	-5.0	-0.2450 µg/L	-0.2450 ppb	19:19:33
3	Cr 267.716†	-20.7	32.3	0.7108 µg/L	0.7108 ppb	19:19:13
3	Cu 324.752†	2481.8	-76.9	-0.5355 µg/L	-0.5355 ppb	19:19:13
3	Mn 257.610†	-209.8	40.5	0.1427 µg/L	0.1427 ppb	19:19:33
3	Mo 202.031†	-10.0	-2.2	-0.2320 µg/L	-0.2320 ppb	19:19:33
3	Ni 231.604†	301.2	-9.8	-0.5340 µg/L	-0.5340 ppb	19:19:33
3	P 214.914†	26.0	-2.4	-5.0576 µg/L	-5.0576 ppb	19:19:33
3	Pb 220.353†	96.7	-3.3	-0.8887 µg/L	-0.8887 ppb	19:19:33
3	S 181.975 Axial†	14.9	-0.4	-1.5487 µg/L	-1.5487 ppb	19:19:33
3	Sb 206.836†	32.3	4.4	4.3137 µg/L	4.3137 ppb	19:19:33
3	Se 196.026†	14.2	-2.1	-3.1442 µg/L	-3.1442 ppb	19:19:33
3	SiO2†	1256.2	-30.6	-6.5854 µg/L	-6.5854 ppb	19:19:13
3	Si 251.611†	309.4	-12.5	-1.0288 µg/L	-1.0288 ppb	19:19:33
3	Sn 189.927†	-1.0	-0.1	-0.0403 µg/L	-0.0403 ppb	19:19:33
3	Ti 334.940†	153.9	33.3	0.0816 µg/L	0.0816 ppb	19:19:13
3	Tl 190.801†	-21.2	3.7	5.1463 µg/L	5.1463 ppb	19:19:33
3	U 409.014†	-6.3	47.5	4.3005 µg/L	4.3005 ppb	19:19:13
3	V 292.402†	-20.0	24.8	0.2699 µg/L	0.2699 ppb	19:19:13
3	Zn 213.857†	479.8	-9.8	-0.2409 µg/L	-0.2409 ppb	19:19:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1952594.9	102.24 %	0.864			0.84%
Sc RADIAL	55477.6	102 %	0.8			0.79%
Y 371.029	1339376.1	102.25 %	0.844			0.83%
Ag 328.068†	51.7	0.4129 µg/L	0.10471	0.4129 ppb	0.10471	25.36%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.1	0.0498 µg/L	10.13010	0.0498 ppb	10.13010	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.2	-6.1678 µg/L	5.92624	-6.1678 ppb	5.92624	96.08%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-23.7	-1.0371 µg/L	0.45878	-1.0371 ppb	0.45878	44.24%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.1	0.0805 µg/L	0.08826	0.0805 ppb	0.08826	109.58%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	145.3	0.0949 µg/L	0.05957	0.0949 ppb	0.05957	62.77%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	-1.7	-1.5667 µg/L	3.70306	-1.5667 ppb	3.70306	236.36%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	10.7	0.2934 µg/L	0.27809	0.2934 ppb	0.27809	94.78%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.7	0.0335 µg/L	0.24267	0.0335 ppb	0.24267	724.80%

QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	28.8	0.6341 µg/L	0.22120	0.6341 ppb	0.22120 34.88%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-87.5	-0.6102 µg/L	0.14102	-0.6102 ppb	0.14102 23.11%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	0.8	7.1335 µg/L	14.11778	7.1335 ppb	14.11778 197.91%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	1.9	1.3465 µg/L	15.98731	1.3465 ppb	15.98731 >999.9%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.6	-5.9243 µg/L	14.34120	-5.9243 ppb	14.34120 242.07%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	31.2	0.1094 µg/L	0.03354	0.1094 ppb	0.03354 30.67%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	3.4	0.3604 µg/L	0.52901	0.3604 ppb	0.52901 146.78%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	101.2	33.329 µg/L	8.1571	33.329 ppb	8.1571 24.47%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-2.4	-0.1318 µg/L	0.39372	-0.1318 ppb	0.39372 298.69%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-3.1	-6.6846 µg/L	4.76680	-6.6846 ppb	4.76680 71.31%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-2.0	-0.5373 µg/L	0.30511	-0.5373 ppb	0.30511 56.78%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	0.4	1.7632 µg/L	2.87351	1.7632 ppb	2.87351 162.97%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	-0.1	-0.1306 µg/L	6.37594	-0.1306 ppb	6.37594 >999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	1.6	2.3884 µg/L	8.34041	2.3884 ppb	8.34041 349.20%
QC value within limits for Se 196.026 Recovery = Not calculated					
SiO2†	-27.2	-5.8537 µg/L	0.68563	-5.8537 ppb	0.68563 11.71%
QC value within limits for SiO2 Recovery = Not calculated					
Si 251.611†	-0.2	-0.0130 µg/L	1.13664	-0.0130 ppb	1.13664 >999.9%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	1.8	0.8314 µg/L	0.90630	0.8314 ppb	0.90630 109.01%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-3.2	-0.0330 µg/L	0.13293	-0.0330 ppb	0.13293 403.15%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	28.0	0.0678 µg/L	0.03518	0.0678 ppb	0.03518 51.88%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	3.7	5.1332 µg/L	2.04457	5.1332 ppb	2.04457 39.83%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	24.2	2.1938 µg/L	1.83966	2.1938 ppb	1.83966 83.86%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	34.6	0.3762 µg/L	0.29972	0.3762 ppb	0.29972 79.67%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-6.0	-0.1478 µg/L	0.10182	-0.1478 ppb	0.10182 68.87%
QC value within limits for Zn 213.857 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 40

Sample ID: 1202032557|948737|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 330

Date Collected: 2/11/2010 19:19:43

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032557|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56162.6	56162.6	103 %			19:20:21
1	Al 396.153Radial†	-0.9	9.2	6.8694 µg/L		6.8694 ppb	19:20:21
1	Ca 317.933Radial†	193.4	8.8	8.2949 µg/L		8.2949 ppb	19:20:41
1	Fe 238.204 Radial†	17.5	2.5	21.049 µg/L		21.049 ppb	19:20:41
1	K 766.490 Radial†	140.5	8.2	5.7964 µg/L		5.7964 ppb	19:20:21
1	Mg 279.077 IEC†	14.7	3.0	27.583 µg/L		27.583 ppb	19:20:41
1	Na 589.592 Radial†	619.9	60.5	19.922 µg/L		19.922 ppb	19:20:21
1	Sr 421.552†	24.9	-15.4	-0.1597 µg/L		-0.1597 ppb	19:20:21
1	Sc 361.383	1969009.3	1969009.3	103.10 %			19:21:43
1	Y 371.029	1347307.8	1347307.8	102.85 %			19:21:43
1	Ag 328.068†	-572.7	9.0	0.0759 µg/L		0.0759 ppb	19:21:49
1	As 188.979†	4.3	3.1	5.9676 µg/L		5.9676 ppb	19:22:09
1	B 249.677†	319.3	-21.8	-0.9629 µg/L		-0.9629 ppb	19:22:09
1	Ba 233.527†	-16.2	10.3	0.2702 µg/L		0.2702 ppb	19:22:09
1	Be 313.107†	-3531.0	15.6	0.0101 µg/L		0.0101 ppb	19:21:49
1	Cd 226.502†	-147.1	-0.5	-0.0161 µg/L		-0.0161 ppb	19:22:09
1	Co 228.616†	-17.1	-7.8	-0.3825 µg/L		-0.3825 ppb	19:22:09
1	Cr 267.716†	-24.9	28.2	0.6201 µg/L		0.6201 ppb	19:22:09
1	Cu 324.752†	2344.0	-212.5	-1.4815 µg/L		-1.4815 ppb	19:21:49
1	Mn 257.610†	-173.7	75.6	0.2635 µg/L		0.2635 ppb	19:22:09
1	Mo 202.031†	-7.4	0.3	0.0356 µg/L		0.0356 ppb	19:22:09
1	Ni 231.604†	312.9	1.3	0.0735 µg/L		0.0735 ppb	19:22:09
1	P 214.914†	30.5	2.0	4.4454 µg/L		4.4454 ppb	19:22:09
1	Pb 220.353†	103.9	3.6	0.9614 µg/L		0.9614 ppb	19:22:09
1	S 181.975 Axial†	17.6	2.3	9.8847 µg/L		9.8847 ppb	19:22:09
1	Sb 206.836†	28.0	0.2	0.2152 µg/L		0.2152 ppb	19:22:09
1	Se 196.026†	17.5	1.2	1.8091 µg/L		1.8091 ppb	19:22:09
1	SiO2†	1345.3	54.8	11.812 µg/L		11.812 ppb	19:21:49
1	Si 251.611†	418.6	93.2	7.6584 µg/L		7.6584 ppb	19:22:09
1	Sn 189.927†	-0.5	0.4	0.1929 µg/L		0.1929 ppb	19:22:09
1	Ti 334.940†	191.4	69.5	0.1652 µg/L		0.1652 ppb	19:21:49
1	Tl 190.801†	-19.7	5.2	7.2052 µg/L		7.2052 ppb	19:22:09
1	U 409.014†	-22.0	32.3	2.9184 µg/L		2.9184 ppb	19:21:49
1	V 292.402†	-1.5	42.8	0.4631 µg/L		0.4631 ppb	19:21:49
1	Zn 213.857†	523.7	32.4	0.8081 µg/L		0.8081 ppb	19:22:09
2	Sc RADIAL	57033.0	57033.0	105 %			19:20:47
2	Al 396.153Radial†	-29.2	-17.8	-13.303 µg/L		-13.303 ppb	19:20:47
2	Ca 317.933Radial†	198.1	10.4	9.7767 µg/L		9.7767 ppb	19:21:07
2	Fe 238.204 Radial†	15.7	0.5	4.2922 µg/L		4.2922 ppb	19:21:07
2	K 766.490 Radial†	163.1	27.6	19.636 µg/L		19.636 ppb	19:20:47
2	Mg 279.077 IEC†	8.2	-3.5	-32.175 µg/L		-32.175 ppb	19:21:07
2	Na 589.592 Radial†	627.1	58.2	19.145 µg/L		19.145 ppb	19:20:47
2	Sr 421.552†	15.7	-24.5	-0.2542 µg/L		-0.2542 ppb	19:20:47
2	Sc 361.383	1951926.6	1951926.6	102.20 %			19:22:15
2	Y 371.029	1336400.0	1336400.0	102.02 %			19:22:15
2	Ag 328.068†	-524.4	51.4	0.4117 µg/L		0.4117 ppb	19:22:21
2	As 188.979†	-1.8	-2.9	-5.6797 µg/L		-5.6797 ppb	19:22:41
2	B 249.677†	313.0	-25.2	-1.1037 µg/L		-1.1037 ppb	19:22:41
2	Ba 233.527†	-15.7	10.7	0.2791 µg/L		0.2791 ppb	19:22:41
2	Be 313.107†	-3486.1	29.5	0.0193 µg/L		0.0193 ppb	19:22:21
2	Cd 226.502†	-132.0	13.0	0.3577 µg/L		0.3577 ppb	19:22:41
2	Co 228.616†	-14.0	-4.8	-0.2372 µg/L		-0.2372 ppb	19:22:41
2	Cr 267.716†	-26.4	26.5	0.5835 µg/L		0.5835 ppb	19:22:41
2	Cu 324.752†	2384.5	-153.0	-1.0685 µg/L		-1.0685 ppb	19:22:21
2	Mn 257.610†	-179.0	69.0	0.2407 µg/L		0.2407 ppb	19:22:41
2	Mo 202.031†	-5.7	1.9	0.2054 µg/L		0.2054 ppb	19:22:41
2	Ni 231.604†	320.7	11.6	0.6340 µg/L		0.6340 ppb	19:22:41
2	P 214.914†	24.8	-3.3	-7.0323 µg/L		-7.0323 ppb	19:22:41
2	Pb 220.353†	91.9	-7.2	-1.9278 µg/L		-1.9278 ppb	19:22:41

2	S 181.975 Axial†	19.7	4.5	19.528 µg/L	19.528 ppb	19:22:41
2	Sb 206.836†	24.0	-3.5	-3.4566 µg/L	-3.4566 ppb	19:22:41
2	Se 196.026†	13.6	-2.5	-3.7596 µg/L	-3.7596 ppb	19:22:41
2	SiO2†	1333.2	54.4	11.718 µg/L	11.718 ppb	19:22:21
2	Si 251.611†	413.0	91.2	7.4996 µg/L	7.4996 ppb	19:22:41
2	Sn 189.927†	0.9	1.7	0.7999 µg/L	0.7999 ppb	19:22:41
2	Ti 334.940†	113.7	-4.8	-0.0089 µg/L	-0.0089 ppb	19:22:21
2	Tl 190.801†	-24.7	0.1	0.1231 µg/L	0.1231 ppb	19:22:41
2	U 409.014†	-59.8	-4.9	-0.4425 µg/L	-0.4425 ppb	19:22:21
2	V 292.402†	4.4	48.6	0.5204 µg/L	0.5204 ppb	19:22:21
2	Zn 213.857†	510.3	23.7	0.5934 µg/L	0.5934 ppb	19:22:41
3	Sc RADIAL	55968.5	55968.5	103 %		19:21:13
3	Al 396.153Radial†	-7.1	3.2	2.3751 µg/L	2.3751 ppb	19:21:13
3	Ca 317.933Radial†	199.5	15.4	14.455 µg/L	14.455 ppb	19:21:33
3	Fe 238.204 Radial†	15.7	0.8	6.8156 µg/L	6.8156 ppb	19:21:33
3	K 766.490 Radial†	147.8	15.7	11.190 µg/L	11.190 ppb	19:21:13
3	Mg 279.077 IEC†	15.9	4.2	39.435 µg/L	39.435 ppb	19:21:33
3	Na 589.592 Radial†	631.7	74.1	24.401 µg/L	24.401 ppb	19:21:13
3	Sr 421.552†	49.4	8.6	0.0895 µg/L	0.0895 ppb	19:21:13
3	Sc 361.383	1933204.1	1933204.1	101.22 %		19:22:47
3	Y 371.029	1323935.5	1323935.5	101.07 %		19:22:47
3	Ag 328.068†	-593.9	-22.2	-0.1725 µg/L	-0.1725 ppb	19:22:53
3	As 188.979†	2.3	1.1	2.1309 µg/L	2.1309 ppb	19:23:13
3	B 249.677†	321.0	-14.3	-0.6295 µg/L	-0.6295 ppb	19:23:13
3	Ba 233.527†	-21.8	4.5	0.1184 µg/L	0.1184 ppb	19:23:13
3	Be 313.107†	-3438.4	43.6	0.0285 µg/L	0.0285 ppb	19:22:53
3	Cd 226.502†	-140.8	3.0	0.0822 µg/L	0.0822 ppb	19:23:13
3	Co 228.616†	-13.8	-4.8	-0.2340 µg/L	-0.2340 ppb	19:23:13
3	Cr 267.716†	-34.4	18.4	0.4049 µg/L	0.4049 ppb	19:23:13
3	Cu 324.752†	2432.8	-82.7	-0.5764 µg/L	-0.5764 ppb	19:22:53
3	Mn 257.610†	-182.3	64.0	0.2209 µg/L	0.2209 ppb	19:23:13
3	Mo 202.031†	-4.6	3.0	0.3226 µg/L	0.3226 ppb	19:23:13
3	Ni 231.604†	307.3	1.4	0.0745 µg/L	0.0745 ppb	19:23:13
3	P 214.914†	29.5	1.5	3.2678 µg/L	3.2678 ppb	19:23:13
3	Pb 220.353†	88.5	-9.8	-2.6006 µg/L	-2.6006 ppb	19:23:13
3	S 181.975 Axial†	15.9	0.9	3.7746 µg/L	3.7746 ppb	19:23:13
3	Sb 206.836†	23.1	-4.2	-4.0869 µg/L	-4.0869 ppb	19:23:13
3	Se 196.026†	8.2	-7.7	-11.834 µg/L	-11.834 ppb	19:23:13
3	SiO2†	1331.0	64.9	13.967 µg/L	13.967 ppb	19:22:53
3	Si 251.611†	405.4	87.6	7.2021 µg/L	7.2021 ppb	19:23:13
3	Sn 189.927†	-4.0	-3.1	-1.4085 µg/L	-1.4085 ppb	19:23:13
3	Ti 334.940†	115.8	-1.7	-0.0070 µg/L	-0.0070 ppb	19:22:53
3	Tl 190.801†	-23.4	1.2	1.6907 µg/L	1.6907 ppb	19:23:13
3	U 409.014†	-46.8	7.4	0.6668 µg/L	0.6668 ppb	19:22:53
3	V 292.402†	-2.1	42.2	0.4542 µg/L	0.4542 ppb	19:22:53
3	Zn 213.857†	517.2	35.4	0.8820 µg/L	0.8820 ppb	19:23:13

Mean Data: 1202032557|948737|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1951380.0	102.18 %	0.938			0.92%
Sc RADIAL	56388.0	103 %	1.0			1.01%
Y 371.029	1335881.1	101.98 %	0.893			0.88%
Ag 328.068†	12.8	0.1050 µg/L	0.29320	0.1050 ppb	0.29320	279.21%
Al 396.153Radial†	-1.8	-1.3527 µg/L	10.59010	-1.3527 ppb	10.59010	782.87%
As 188.979†	0.4	0.8062 µg/L	5.93558	0.8062 ppb	5.93558	736.20%
B 249.677†	-20.5	-0.8987 µg/L	0.24350	-0.8987 ppb	0.24350	27.09%
Ba 233.527†	8.5	0.2226 µg/L	0.09033	0.2226 ppb	0.09033	40.59%
Be 313.107†	29.6	0.0193 µg/L	0.00919	0.0193 ppb	0.00919	47.63%
Ca 317.933Radial†	11.5	10.842 µg/L	3.2155	10.842 ppb	3.2155	29.66%
Cd 226.502†	5.2	0.1413 µg/L	0.19380	0.1413 ppb	0.19380	137.20%
Co 228.616†	-5.8	-0.2846 µg/L	0.08480	-0.2846 ppb	0.08480	29.80%
Cr 267.716†	24.4	0.5362 µg/L	0.11516	0.5362 ppb	0.11516	21.48%
Cu 324.752†	-149.4	-1.0421 µg/L	0.45311	-1.0421 ppb	0.45311	43.48%
Fe 238.204 Radial†	1.3	10.719 µg/L	9.0344	10.719 ppb	9.0344	84.29%
K 766.490 Radial†	17.2	12.207 µg/L	6.9755	12.207 ppb	6.9755	57.14%
Mg 279.077 IEC†	1.2	11.614 µg/L	38.3828	11.614 ppb	38.3828	330.48%
Mn 257.610†	69.5	0.2417 µg/L	0.02130	0.2417 ppb	0.02130	8.81%
Mo 202.031†	1.8	0.1879 µg/L	0.14430	0.1879 ppb	0.14430	76.81%
Na 589.592 Radial†	64.3	21.156 µg/L	2.8374	21.156 ppb	2.8374	13.41%

Ni 231.604†	4.8	0.2607 µg/L	0.32337	0.2607 ppb	0.32337	124.06%
P 214.914†	0.1	0.2270 µg/L	6.31420	0.2270 ppb	6.31420	>999.9%
Pb 220.353†	-4.5	-1.1890 µg/L	1.89244	-1.1890 ppb	1.89244	159.16%
S 181.975 Axial†	2.5	11.063 µg/L	7.9427	11.063 ppb	7.9427	71.80%
Sb 206.836†	-2.5	-2.4428 µg/L	2.32335	-2.4428 ppb	2.32335	95.11%
Se 196.026†	-3.0	-4.5949 µg/L	6.85979	-4.5949 ppb	6.85979	149.29%
SiO2†	58.0	12.499 µg/L	1.2722	12.499 ppb	1.2722	10.18%
Si 251.611†	90.7	7.4534 µg/L	0.23165	7.4534 ppb	0.23165	3.11%
Sn 189.927†	-0.3	-0.1385 µg/L	1.14090	-0.1385 ppb	1.14090	823.53%
Sr 421.552†	-10.4	-0.1081 µg/L	0.17752	-0.1081 ppb	0.17752	164.18%
Ti 334.940†	21.0	0.0497 µg/L	0.09997	0.0497 ppb	0.09997	200.99%
Tl 190.801†	2.2	3.0063 µg/L	3.71983	3.0063 ppb	3.71983	123.73%
U 409.014†	11.6	1.0476 µg/L	1.71251	1.0476 ppb	1.71251	163.48%
V 292.402†	44.5	0.4792 µg/L	0.03595	0.4792 ppb	0.03595	7.50%
Zn 213.857†	30.5	0.7612 µg/L	0.14993	0.7612 ppb	0.14993	19.70%

Sequence No.: 41

Sample ID: 1202032558|948737|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 331

Date Collected: 2/11/2010 19:23:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032558|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55855.2	55855.2	102 %		19:23:56
1	Al 396.153Radial†	6859.1	6711.9	4992.3 µg/L	4992.3 ppb	19:24:17
1	Ca 317.933Radial†	5588.0	5280.7	4972.1 µg/L	4972.1 ppb	19:24:17
1	Fe 238.204 Radial†	622.5	593.7	5042.2 µg/L	5042.2 ppb	19:24:17
1	K 766.490 Radial†	7222.5	6928.5	4924.7 µg/L	4924.7 ppb	19:23:56
1	Mg 279.077 IEC†	568.8	544.5	5070.0 µg/L	5070.0 ppb	19:24:17
1	Na 589.592 Radial†	16067.2	15156.9	4989.7 µg/L	4989.7 ppb	19:23:56
1	Sr 421.552†	48385.5	47236.4	489.66 µg/L	489.66 ppb	19:23:56
1	Sc 361.383	1989589.0	1989589.0	104.18 %		19:25:20
1	Y 371.029	1358828.2	1358828.2	103.73 %		19:25:20
1	Ag 328.068†	62403.6	60466.8	483.35 µg/L	483.35 ppb	19:25:26
1	As 188.979†	266.7	254.9	497.19 µg/L	497.19 ppb	19:25:46
1	B 249.677†	11770.1	10966.8	477.43 µg/L	477.43 ppb	19:25:26
1	Ba 233.527†	19609.2	18849.2	491.69 µg/L	491.69 ppb	19:25:26
1	Be 313.107†	765769.4	738515.5	482.11 µg/L	482.11 ppb	19:25:20
1	Cd 226.502†	18133.6	17548.9	484.07 µg/L	484.07 ppb	19:25:26
1	Co 228.616†	10204.7	9804.5	481.95 µg/L	481.95 ppb	19:25:26
1	Cr 267.716†	23258.1	22378.3	492.54 µg/L	492.54 ppb	19:25:26
1	Cu 324.752†	75730.0	70208.4	491.12 µg/L	491.12 ppb	19:25:26
1	Mn 257.610†	147968.6	142281.7	493.17 µg/L	493.17 ppb	19:25:20
1	Mo 202.031†	4884.5	4696.3	501.38 µg/L	501.38 ppb	19:25:46
1	Ni 231.604†	9732.2	9040.0	493.75 µg/L	493.75 ppb	19:25:26
1	P 214.914†	274.6	235.9	460.07 µg/L	460.07 ppb	19:25:46
1	Pb 220.353†	2040.6	1861.6	496.90 µg/L	496.90 ppb	19:25:46
1	S 181.975 Axial†	1213.5	1150.0	5038.6 µg/L	5038.6 ppb	19:25:46
1	Sb 206.836†	565.3	515.7	509.80 µg/L	509.80 ppb	19:25:46
1	Se 196.026†	348.9	319.1	494.37 µg/L	494.37 ppb	19:25:46
1	SiO2†	50535.9	47260.3	10178 µg/L	10178 ppb	19:25:26
1	Si 251.611†	60336.9	57605.6	4735.5 µg/L	4735.5 ppb	19:25:26
1	Sn 189.927†	1211.5	1163.8	535.30 µg/L	535.30 ppb	19:25:46
1	Ti 334.940†	209639.9	201120.8	483.46 µg/L	483.46 ppb	19:25:20
1	Tl 190.801†	344.0	354.5	500.64 µg/L	500.64 ppb	19:25:46
1	U 409.014†	5812.7	5633.3	509.02 µg/L	509.02 ppb	19:25:26
1	V 292.402†	47804.6	45932.7	495.64 µg/L	495.64 ppb	19:25:26
1	Zn 213.857†	20684.3	19379.7	480.43 µg/L	480.43 ppb	19:25:26
2	Sc RADIAL	56621.3	56621.3	104 %		19:24:22
2	Al 396.153Radial†	6761.1	6526.9	4854.4 µg/L	4854.4 ppb	19:24:42
2	Ca 317.933Radial†	5510.9	5132.5	4832.6 µg/L	4832.6 ppb	19:24:42
2	Fe 238.204 Radial†	611.2	574.6	4880.2 µg/L	4880.2 ppb	19:24:42
2	K 766.490 Radial†	7318.8	6925.8	4922.8 µg/L	4922.8 ppb	19:24:22
2	Mg 279.077 IEC†	555.6	524.2	4881.7 µg/L	4881.7 ppb	19:24:42
2	Na 589.592 Radial†	16134.1	15009.0	4941.0 µg/L	4941.0 ppb	19:24:22
2	Sr 421.552†	48688.4	46888.7	486.06 µg/L	486.06 ppb	19:24:22
2	Sc 361.383	1981021.9	1981021.9	103.73 %		19:25:53
2	Y 371.029	1354467.5	1354467.5	103.40 %		19:25:53
2	Ag 328.068†	62083.9	60417.6	482.95 µg/L	482.95 ppb	19:25:59
2	As 188.979†	268.8	258.0	503.27 µg/L	503.27 ppb	19:26:19
2	B 249.677†	11697.0	10945.2	476.57 µg/L	476.57 ppb	19:25:59
2	Ba 233.527†	19543.5	18867.3	492.16 µg/L	492.16 ppb	19:25:59
2	Be 313.107†	766542.7	742439.8	484.67 µg/L	484.67 ppb	19:25:53
2	Cd 226.502†	18043.5	17537.3	483.77 µg/L	483.77 ppb	19:25:59
2	Co 228.616†	10157.9	9801.8	481.81 µg/L	481.81 ppb	19:25:59
2	Cr 267.716†	23124.1	22345.6	491.82 µg/L	491.82 ppb	19:25:59
2	Cu 324.752†	75467.1	70269.3	491.53 µg/L	491.53 ppb	19:25:59
2	Mn 257.610†	148155.6	143076.2	495.91 µg/L	495.91 ppb	19:25:53
2	Mo 202.031†	4832.3	4666.2	498.17 µg/L	498.17 ppb	19:26:19
2	Ni 231.604†	9667.7	9018.1	492.55 µg/L	492.55 ppb	19:25:59
2	P 214.914†	272.2	234.8	457.67 µg/L	457.67 ppb	19:26:19
2	Pb 220.353†	2044.7	1874.1	500.20 µg/L	500.20 ppb	19:26:19

2	S 181.975 Axial†	1199.8	1141.9	5003.1 µg/L	5003.1 ppb	19:26:19
2	Sb 206.836†	565.3	518.0	512.02 µg/L	512.02 ppb	19:26:19
2	Se 196.026†	343.0	314.9	487.68 µg/L	487.68 ppb	19:26:19
2	SiO2†	50279.9	47223.2	10170 µg/L	10170 ppb	19:25:59
2	Si 251.611†	60047.4	57576.9	4733.1 µg/L	4733.1 ppb	19:25:59
2	Sn 189.927†	1201.8	1159.5	533.31 µg/L	533.31 ppb	19:26:19
2	Ti 334.940†	209553.6	201907.8	485.37 µg/L	485.37 ppb	19:25:53
2	Tl 190.801†	347.4	359.2	507.29 µg/L	507.29 ppb	19:26:19
2	U 409.014†	5749.9	5596.9	505.75 µg/L	505.75 ppb	19:25:59
2	V 292.402†	47601.0	45934.8	495.61 µg/L	495.61 ppb	19:25:59
2	Zn 213.857†	20543.3	19329.6	479.20 µg/L	479.20 ppb	19:25:59
3	Sc RADIAL	56667.3	56667.3	104 %		19:24:48
3	Al 396.153Radial†	6785.5	6545.0	4869.0 µg/L	4869.0 ppb	19:25:08
3	Ca 317.933Radial†	5519.1	5136.1	4836.0 µg/L	4836.0 ppb	19:25:08
3	Fe 238.204 Radial†	610.2	573.1	4867.6 µg/L	4867.6 ppb	19:25:08
3	K 766.490 Radial†	7189.7	6795.7	4830.4 µg/L	4830.4 ppb	19:24:48
3	Mg 279.077 IEC†	562.6	530.6	4940.1 µg/L	4940.1 ppb	19:25:08
3	Na 589.592 Radial†	15967.1	14835.5	4883.9 µg/L	4883.9 ppb	19:24:48
3	Sr 421.552†	48078.7	46263.5	479.58 µg/L	479.58 ppb	19:24:48
3	Sc 361.383	1962516.7	1962516.7	102.76 %		19:26:26
3	Y 371.029	1343125.0	1343125.0	102.53 %		19:26:26
3	Ag 328.068†	60804.7	59737.2	477.42 µg/L	477.42 ppb	19:26:32
3	As 188.979†	243.9	236.2	460.84 µg/L	460.84 ppb	19:26:53
3	B 249.677†	11399.3	10761.9	468.53 µg/L	468.53 ppb	19:26:32
3	Ba 233.527†	18655.7	18181.0	474.25 µg/L	474.25 ppb	19:26:32
3	Be 313.107†	740791.3	724347.9	472.86 µg/L	472.86 ppb	19:26:26
3	Cd 226.502†	17306.9	16984.5	468.50 µg/L	468.50 ppb	19:26:32
3	Co 228.616†	9664.7	9414.2	462.72 µg/L	462.72 ppb	19:26:32
3	Cr 267.716†	21731.9	21201.0	466.63 µg/L	466.63 ppb	19:26:32
3	Cu 324.752†	72256.6	67831.0	474.49 µg/L	474.49 ppb	19:26:32
3	Mn 257.610†	143350.8	139747.2	484.37 µg/L	484.37 ppb	19:26:26
3	Mo 202.031†	4322.8	4214.3	449.94 µg/L	449.94 ppb	19:26:53
3	Ni 231.604†	9237.2	8687.0	474.47 µg/L	474.47 ppb	19:26:32
3	P 214.914†	257.0	222.5	432.24 µg/L	432.24 ppb	19:26:53
3	Pb 220.353†	1875.5	1728.0	461.14 µg/L	461.14 ppb	19:26:53
3	S 181.975 Axial†	1113.0	1068.4	4680.8 µg/L	4680.8 ppb	19:26:53
3	Sb 206.836†	514.5	473.7	467.94 µg/L	467.94 ppb	19:26:53
3	Se 196.026†	322.8	298.3	462.30 µg/L	462.30 ppb	19:26:53
3	SiO2†	48695.4	46138.3	9936.1 µg/L	9936.1 ppb	19:26:32
3	Si 251.611†	58040.6	56169.8	4617.4 µg/L	4617.4 ppb	19:26:32
3	Sn 189.927†	1062.2	1034.6	475.87 µg/L	475.87 ppb	19:26:53
3	Ti 334.940†	202050.2	196510.8	472.38 µg/L	472.38 ppb	19:26:26
3	Tl 190.801†	308.7	324.7	458.96 µg/L	458.96 ppb	19:26:53
3	U 409.014†	5501.6	5407.5	488.61 µg/L	488.61 ppb	19:26:32
3	V 292.402†	45248.4	44078.0	475.38 µg/L	475.38 ppb	19:26:32
3	Zn 213.857†	19651.1	18648.0	462.29 µg/L	462.29 ppb	19:26:32

Mean Data: 1202032558|948737|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1977709.2	103.55 %		0.725				0.70%
Sc RADIAL	56381.3	103 %		0.8				0.81%
Y 371.029	1352140.2	103.22 %		0.619				0.60%
Ag 328.068†	60207.2	481.24 µg/L		3.315	481.24 ppb		3.315	0.69%
Al 396.153Radial†	6594.6	4905.2 µg/L		75.76	4905.2 ppb		75.76	1.54%
As 188.979†	249.7	487.10 µg/L		22.947	487.10 ppb		22.947	4.71%
B 249.677†	10891.3	474.18 µg/L		4.912	474.18 ppb		4.912	1.04%
Ba 233.527†	18632.5	486.03 µg/L		10.205	486.03 ppb		10.205	2.10%
Be 313.107†	735101.0	479.88 µg/L		6.212	479.88 ppb		6.212	1.29%
Ca 317.933Radial†	5183.1	4880.2 µg/L		79.59	4880.2 ppb		79.59	1.63%
Cd 226.502†	17356.9	478.78 µg/L		8.903	478.78 ppb		8.903	1.86%
Co 228.616†	9673.5	475.49 µg/L		11.063	475.49 ppb		11.063	2.33%
Cr 267.716†	21975.0	483.67 µg/L		14.755	483.67 ppb		14.755	3.05%
Cu 324.752†	69436.2	485.71 µg/L		9.720	485.71 ppb		9.720	2.00%
Fe 238.204 Radial†	580.5	4930.0 µg/L		97.39	4930.0 ppb		97.39	1.98%
K 766.490 Radial†	6883.3	4892.6 µg/L		53.94	4892.6 ppb		53.94	1.10%
Mg 279.077 IEC†	533.1	4963.9 µg/L		96.41	4963.9 ppb		96.41	1.94%
Mn 257.610†	141701.7	491.15 µg/L		6.025	491.15 ppb		6.025	1.23%
Mo 202.031†	4525.6	483.16 µg/L		28.817	483.16 ppb		28.817	5.96%
Na 589.592 Radial†	15000.5	4938.2 µg/L		52.96	4938.2 ppb		52.96	1.07%

Ni 231.604†	8915.0	486.93 µg/L	10.800	486.93 ppb	10.800	2.22%
P 214.914†	231.1	450.00 µg/L	15.419	450.00 ppb	15.419	3.43%
Pb 220.353†	1821.2	486.08 µg/L	21.661	486.08 ppb	21.661	4.46%
S 181.975 Axial†	1120.1	4907.5 µg/L	197.13	4907.5 ppb	197.13	4.02%
Sb 206.836†	502.5	496.59 µg/L	24.834	496.59 ppb	24.834	5.00%
Se 196.026†	310.8	481.45 µg/L	16.915	481.45 ppb	16.915	3.51%
SiO2†	46873.9	10095 µg/L	137.3	10095 ppb	137.3	1.36%
Si 251.611†	57117.4	4695.3 µg/L	67.47	4695.3 ppb	67.47	1.44%
Sn 189.927†	1119.3	514.83 µg/L	33.750	514.83 ppb	33.750	6.56%
Sr 421.552†	46796.2	485.10 µg/L	5.111	485.10 ppb	5.111	1.05%
Ti 334.940†	199846.5	480.40 µg/L	7.013	480.40 ppb	7.013	1.46%
Tl 190.801†	346.1	488.96 µg/L	26.193	488.96 ppb	26.193	5.36%
U 409.014†	5545.9	501.13 µg/L	10.961	501.13 ppb	10.961	2.19%
V 292.402†	45315.2	488.88 µg/L	11.691	488.88 ppb	11.691	2.39%
Zn 213.857†	19119.1	473.97 µg/L	10.138	473.97 ppb	10.138	2.14%

Sequence No.: 43

Sample ID: 1202032559|948737|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 333

Date Collected: 2/11/2010 19:30:37

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032559|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55369.8	55369.8	101 %		19:31:10
1	Al 396.153Radial†	27.3	37.1	27.641 µg/L	27.641 ppb	19:31:10
1	Ca 317.933Radial†	243.4	60.7	57.167 µg/L	57.167 ppb	19:31:30
1	Fe 238.204 Radial†	16.5	1.8	15.034 µg/L	15.034 ppb	19:31:30
1	K 766.490 Radial†	376.1	242.3	172.24 µg/L	172.24 ppb	19:31:10
1	Mg 279.077 IEC†	13.4	1.9	17.989 µg/L	17.989 ppb	19:31:30
1	Na 589.592 Radial†	1118.3	560.4	184.47 µg/L	184.47 ppb	19:31:10
1	Sr 421.552†	80.8	40.1	0.4152 µg/L	0.4152 ppb	19:31:10
1	Sc 361.383	1957288.3	1957288.3	102.48 %		19:32:32
1	Y 371.029	1341003.8	1341003.8	102.37 %		19:32:32
1	Ag 328.068†	-492.7	83.8	0.6666 µg/L	0.6666 ppb	19:32:37
1	As 188.979†	-0.9	-2.0	-4.0031 µg/L	-4.0031 ppb	19:32:58
1	B 249.677†	719.9	371.0	16.207 µg/L	16.207 ppb	19:32:37
1	Ba 233.527†	-10.5	15.7	0.4102 µg/L	0.4102 ppb	19:32:58
1	Be 313.107†	-3539.8	-13.5	-0.0090 µg/L	-0.0090 ppb	19:32:37
1	Cd 226.502†	-150.2	-4.4	-0.1235 µg/L	-0.1235 ppb	19:32:58
1	Co 228.616†	-12.4	-3.3	-0.1634 µg/L	-0.1634 ppb	19:32:58
1	Cr 267.716†	-22.0	30.9	0.6806 µg/L	0.6806 ppb	19:32:58
1	Cu 324.752†	2532.9	-14.6	-0.0998 µg/L	-0.0998 ppb	19:32:37
1	Mn 257.610†	-105.5	141.2	0.4903 µg/L	0.4903 ppb	19:32:58
1	Mo 202.031†	-9.0	-1.2	-0.1312 µg/L	-0.1312 ppb	19:32:58
1	Ni 231.604†	309.3	-0.4	-0.0191 µg/L	-0.0191 ppb	19:32:58
1	P 214.914†	35.6	7.1	15.341 µg/L	15.341 ppb	19:32:58
1	Pb 220.353†	89.9	-9.5	-2.5338 µg/L	-2.5338 ppb	19:32:58
1	S 181.975 Axial†	30.4	14.9	65.128 µg/L	65.128 ppb	19:32:58
1	Sb 206.836†	22.5	-5.0	-4.9601 µg/L	-4.9601 ppb	19:32:58
1	Se 196.026†	14.9	-1.3	-1.9004 µg/L	-1.9004 ppb	19:32:58
1	SiO2†	14720.0	13113.1	2824.0 µg/L	2824.0 ppb	19:32:37
1	Si 251.611†	16745.8	16026.9	1317.5 µg/L	1317.5 ppb	19:32:37
1	Sn 189.927†	4.4	5.2	2.3867 µg/L	2.3867 ppb	19:32:58
1	Ti 334.940†	342.8	218.3	0.5247 µg/L	0.5247 ppb	19:32:37
1	Tl 190.801†	-18.4	6.4	8.8912 µg/L	8.8912 ppb	19:32:58
1	U 409.014†	-31.7	22.7	2.0510 µg/L	2.0510 ppb	19:32:37
1	V 292.402†	-35.4	9.7	0.1073 µg/L	0.1073 ppb	19:32:37
1	Zn 213.857†	550.1	61.2	1.5266 µg/L	1.5266 ppb	19:32:58
2	Sc RADIAL	56232.0	56232.0	103 %		19:31:36
2	Al 396.153Radial†	20.5	30.0	22.366 µg/L	22.366 ppb	19:31:36
2	Ca 317.933Radial†	234.1	48.1	45.285 µg/L	45.285 ppb	19:31:56
2	Fe 238.204 Radial†	18.9	3.9	32.938 µg/L	32.938 ppb	19:31:56
2	K 766.490 Radial†	401.7	261.4	185.83 µg/L	185.83 ppb	19:31:36
2	Mg 279.077 IEC†	11.2	-0.4	-3.5186 µg/L	-3.5186 ppb	19:31:56
2	Na 589.592 Radial†	1117.4	542.6	178.63 µg/L	178.63 ppb	19:31:36
2	Sr 421.552†	60.4	19.0	0.1974 µg/L	0.1974 ppb	19:31:36
2	Sc 361.383	1985418.5	1985418.5	103.96 %		19:33:04
2	Y 371.029	1359374.4	1359374.4	103.78 %		19:33:04
2	Ag 328.068†	-475.1	107.5	0.8590 µg/L	0.8590 ppb	19:33:09
2	As 188.979†	-4.1	-5.1	-9.9165 µg/L	-9.9165 ppb	19:33:30
2	B 249.677†	718.8	360.0	15.716 µg/L	15.716 ppb	19:33:09
2	Ba 233.527†	-18.1	8.6	0.2255 µg/L	0.2255 ppb	19:33:30
2	Be 313.107†	-3406.7	163.4	0.1065 µg/L	0.1065 ppb	19:33:09
2	Cd 226.502†	-148.4	-0.7	-0.0227 µg/L	-0.0227 ppb	19:33:30
2	Co 228.616†	-10.8	-1.5	-0.0755 µg/L	-0.0755 ppb	19:33:30
2	Cr 267.716†	-16.3	36.7	0.8072 µg/L	0.8072 ppb	19:33:30
2	Cu 324.752†	2453.0	-126.5	-0.8788 µg/L	-0.8788 ppb	19:33:09
2	Mn 257.610†	-109.7	138.6	0.4845 µg/L	0.4845 ppb	19:33:30
2	Mo 202.031†	-6.5	1.3	0.1397 µg/L	0.1397 ppb	19:33:30
2	Ni 231.604†	303.1	-10.6	-0.5795 µg/L	-0.5795 ppb	19:33:30
2	P 214.914†	27.9	-0.8	-1.7271 µg/L	-1.7271 ppb	19:33:30
2	Pb 220.353†	100.2	-0.8	-0.2107 µg/L	-0.2107 ppb	19:33:30

2	S 181.975 Axial†	24.6	8.8	38.629 µg/L	38.629 ppb	19:33:30
2	Sb 206.836†	25.5	-2.4	-2.3573 µg/L	-2.3573 ppb	19:33:30
2	Se 196.026†	13.5	-2.9	-4.3357 µg/L	-4.3357 ppb	19:33:30
2	SiO2†	14565.5	12761.0	2748.2 µg/L	2748.2 ppb	19:33:09
2	Si 251.611†	16534.1	15591.9	1281.7 µg/L	1281.7 ppb	19:33:09
2	Sn 189.927†	-3.4	-2.4	-1.0908 µg/L	-1.0908 ppb	19:33:30
2	Ti 334.940†	415.8	283.9	0.6838 µg/L	0.6838 ppb	19:33:09
2	Tl 190.801†	-24.3	0.9	1.3234 µg/L	1.3234 ppb	19:33:30
2	U 409.014†	-74.6	-18.1	-1.6482 µg/L	-1.6482 ppb	19:33:09
2	V 292.402†	9.6	53.5	0.5749 µg/L	0.5749 ppb	19:33:09
2	Zn 213.857†	541.1	45.0	1.1253 µg/L	1.1253 ppb	19:33:30
3	Sc RADIAL	56023.2	56023.2	103 %		19:32:01
3	Al 396.153Radial†	23.5	33.0	24.583 µg/L	24.583 ppb	19:32:01
3	Ca 317.933Radial†	244.2	58.7	55.281 µg/L	55.281 ppb	19:32:22
3	Fe 238.204 Radial†	14.9	-0.0	-0.0783 µg/L	-0.0783 ppb	19:32:22
3	K 766.490 Radial†	448.8	308.8	219.46 µg/L	219.46 ppb	19:32:01
3	Mg 279.077 IEC†	9.0	-2.5	-23.358 µg/L	-23.358 ppb	19:32:22
3	Na 589.592 Radial†	1105.2	534.7	176.03 µg/L	176.03 ppb	19:32:01
3	Sr 421.552†	62.1	20.9	0.2170 µg/L	0.2170 ppb	19:32:01
3	Sc 361.383	1953368.2	1953368.2	102.28 %		19:33:36
3	Y 371.029	1335404.5	1335404.5	101.95 %		19:33:36
3	Ag 328.068†	-556.7	20.3	0.1596 µg/L	0.1596 ppb	19:33:41
3	As 188.979†	0.2	-0.9	-1.8467 µg/L	-1.8467 ppb	19:34:02
3	B 249.677†	701.7	354.6	15.499 µg/L	15.499 ppb	19:33:41
3	Ba 233.527†	-16.3	10.1	0.2614 µg/L	0.2614 ppb	19:34:02
3	Be 313.107†	-3559.8	-40.0	-0.0263 µg/L	-0.0263 ppb	19:33:41
3	Cd 226.502†	-146.9	-1.5	-0.0404 µg/L	-0.0404 ppb	19:34:02
3	Co 228.616†	-11.4	-2.3	-0.1134 µg/L	-0.1134 ppb	19:34:02
3	Cr 267.716†	-18.4	34.4	0.7558 µg/L	0.7558 ppb	19:34:02
3	Cu 324.752†	2463.5	-77.5	-0.5416 µg/L	-0.5416 ppb	19:33:41
3	Mn 257.610†	-124.1	122.8	0.4261 µg/L	0.4261 ppb	19:34:02
3	Mo 202.031†	-6.9	0.8	0.0892 µg/L	0.0892 ppb	19:34:02
3	Ni 231.604†	309.7	0.6	0.0333 µg/L	0.0333 ppb	19:34:02
3	P 214.914†	32.7	4.3	9.3269 µg/L	9.3269 ppb	19:34:02
3	Pb 220.353†	89.9	-9.3	-2.4747 µg/L	-2.4747 ppb	19:34:02
3	S 181.975 Axial†	20.7	5.5	23.923 µg/L	23.923 ppb	19:34:02
3	Sb 206.836†	18.4	-9.0	-8.8834 µg/L	-8.8834 ppb	19:34:02
3	Se 196.026†	8.1	-8.0	-12.127 µg/L	-12.127 ppb	19:34:02
3	SiO2†	14525.8	12952.1	2789.3 µg/L	2789.3 ppb	19:33:41
3	Si 251.611†	16428.3	15749.4	1294.7 µg/L	1294.7 ppb	19:33:41
3	Sn 189.927†	-0.7	0.2	0.1014 µg/L	0.1014 ppb	19:34:02
3	Ti 334.940†	337.4	213.7	0.5169 µg/L	0.5169 ppb	19:33:41
3	Tl 190.801†	-27.2	-2.3	-3.2110 µg/L	-3.2110 ppb	19:34:02
3	U 409.014†	-73.9	-18.6	-1.6874 µg/L	-1.6874 ppb	19:33:41
3	V 292.402†	-61.9	-16.4	-0.1736 µg/L	-0.1736 ppb	19:33:41
3	Zn 213.857†	546.4	58.6	1.4662 µg/L	1.4662 ppb	19:34:02

Mean Data: 1202032559|948737|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1965358.3	102.91 %		0.915			0.89%
Sc RADIAL	55875.0	102 %		0.8			0.81%
Y 371.029	1345260.9	102.70 %		0.957			0.93%
Ag 328.068†	70.5	0.5618 µg/L		0.36128	0.5618 ppb	0.36128	64.31%
Al 396.153Radial†	33.4	24.863 µg/L		2.6486	24.863 ppb	2.6486	10.65%
As 188.979†	-2.7	-5.2554 µg/L		4.17812	-5.2554 ppb	4.17812	79.50%
B 249.677†	361.9	15.807 µg/L		0.3629	15.807 ppb	0.3629	2.30%
Ba 233.527†	11.5	0.2990 µg/L		0.09794	0.2990 ppb	0.09794	32.75%
Be 313.107†	36.6	0.0237 µg/L		0.07220	0.0237 ppb	0.07220	304.72%
Ca 317.933Radial†	55.8	52.578 µg/L		6.3860	52.578 ppb	6.3860	12.15%
Cd 226.502†	-2.2	-0.0622 µg/L		0.05384	-0.0622 ppb	0.05384	86.58%
Co 228.616†	-2.4	-0.1174 µg/L		0.04408	-0.1174 ppb	0.04408	37.55%
Cr 267.716†	34.0	0.7479 µg/L		0.06369	0.7479 ppb	0.06369	8.52%
Cu 324.752†	-72.9	-0.5067 µg/L		0.39067	-0.5067 ppb	0.39067	77.10%
Fe 238.204 Radial†	1.9	15.964 µg/L		16.5276	15.964 ppb	16.5276	103.53%
K 766.490 Radial†	270.8	192.51 µg/L		24.311	192.51 ppb	24.311	12.63%
Mg 279.077 IEC†	-0.3	-2.9625 µg/L		20.67888	-2.9625 ppb	20.67888	698.02%
Mn 257.610†	134.2	0.4670 µg/L		0.03550	0.4670 ppb	0.03550	7.60%
Mo 202.031†	0.3	0.0326 µg/L		0.14408	0.0326 ppb	0.14408	442.34%
Na 589.592 Radial†	545.9	179.71 µg/L		4.323	179.71 ppb	4.323	2.41%

Ni 231.604†	-3.5	-0.1884 µg/L	0.33968	-0.1884 ppb	0.33968	180.30%
P 214.914†	3.5	7.6469 µg/L	8.65706	7.6469 ppb	8.65706	113.21%
Pb 220.353†	-6.5	-1.7397 µg/L	1.32454	-1.7397 ppb	1.32454	76.13%
S 181.975 Axial†	9.7	42.560 µg/L	20.8819	42.560 ppb	20.8819	49.07%
Sb 206.836†	-5.5	-5.4003 µg/L	3.28526	-5.4003 ppb	3.28526	60.84%
Se 196.026†	-4.0	-6.1210 µg/L	5.34190	-6.1210 ppb	5.34190	87.27%
SiO2†	12942.1	2787.1 µg/L	37.96	2787.1 ppb	37.96	1.36%
Si 251.611†	15789.4	1298.0 µg/L	18.11	1298.0 ppb	18.11	1.40%
Sn 189.927†	1.0	0.4657 µg/L	1.76718	0.4657 ppb	1.76718	379.43%
Sr 421.552†	26.7	0.2766 µg/L	0.12050	0.2766 ppb	0.12050	43.57%
Ti 334.940†	238.7	0.5751 µg/L	0.09422	0.5751 ppb	0.09422	16.38%
Tl 190.801†	1.7	2.3345 µg/L	6.11411	2.3345 ppb	6.11411	261.90%
U 409.014†	-4.7	-0.4282 µg/L	2.14716	-0.4282 ppb	2.14716	501.43%
V 292.402†	15.6	0.1695 µg/L	0.37811	0.1695 ppb	0.37811	223.01%
Zn 213.857†	54.9	1.3727 µg/L	0.21636	1.3727 ppb	0.21636	15.76%

Sequence No.: 44

Sample ID: 1202032560|948737|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 334

Date Collected: 2/11/2010 19:34:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032560|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56464.8	56464.8	103 %		19:34:44
1	Al 396.153Radial†	6806.1	6588.3	4900.2 µg/L	4900.2 ppb	19:35:04
1	Ca 317.933Radial†	5506.4	5142.9	4842.4 µg/L	4842.4 ppb	19:35:04
1	Fe 238.204 Radial†	611.9	576.9	4899.7 µg/L	4899.7 ppb	19:35:04
1	K 766.490 Radial†	7333.3	6959.3	4946.6 µg/L	4946.6 ppb	19:34:44
1	Mg 279.077 IEC†	557.7	527.7	4914.4 µg/L	4914.4 ppb	19:35:04
1	Na 589.592 Radial†	16217.5	15132.6	4981.7 µg/L	4981.7 ppb	19:34:44
1	Sr 421.552†	47317.0	45693.3	473.66 µg/L	473.66 ppb	19:34:44
1	Sc 361.383	1969504.1	1969504.1	103.12 %		19:36:08
1	Y 371.029	1344490.8	1344490.8	102.64 %		19:36:08
1	Ag 328.068†	61777.8	60470.9	483.38 µg/L	483.38 ppb	19:36:14
1	As 188.979†	267.3	258.0	503.42 µg/L	503.42 ppb	19:36:34
1	B 249.677†	12031.5	11335.6	493.62 µg/L	493.62 ppb	19:36:14
1	Ba 233.527†	19428.6	18866.0	492.13 µg/L	492.13 ppb	19:36:14
1	Be 313.107†	757639.6	738128.1	481.85 µg/L	481.85 ppb	19:36:08
1	Cd 226.502†	17872.8	17473.5	482.01 µg/L	482.01 ppb	19:36:14
1	Co 228.616†	10159.6	9860.7	484.72 µg/L	484.72 ppb	19:36:14
1	Cr 267.716†	23006.4	22361.8	492.18 µg/L	492.18 ppb	19:36:14
1	Cu 324.752†	75411.0	70640.4	494.12 µg/L	494.12 ppb	19:36:14
1	Mn 257.610†	147190.3	142975.5	495.56 µg/L	495.56 ppb	19:36:08
1	Mo 202.031†	4839.3	4700.2	501.80 µg/L	501.80 ppb	19:36:34
1	Ni 231.604†	9637.5	9043.3	493.93 µg/L	493.93 ppb	19:36:14
1	P 214.914†	274.0	238.0	464.37 µg/L	464.37 ppb	19:36:34
1	Pb 220.353†	2045.5	1886.3	503.48 µg/L	503.48 ppb	19:36:34
1	S 181.975 Axial†	1203.8	1152.6	5049.8 µg/L	5049.8 ppb	19:36:34
1	Sb 206.836†	563.5	519.5	513.56 µg/L	513.56 ppb	19:36:34
1	Se 196.026†	338.7	312.6	484.26 µg/L	484.26 ppb	19:36:34
1	SiO2†	63253.8	60087.6	12940 µg/L	12940 ppb	19:36:14
1	Si 251.611†	75809.8	73200.4	6017.4 µg/L	6017.4 ppb	19:36:14
1	Sn 189.927†	1195.5	1160.1	533.61 µg/L	533.61 ppb	19:36:34
1	Ti 334.940†	208361.9	201933.7	485.43 µg/L	485.43 ppb	19:36:08
1	Tl 190.801†	343.5	357.4	504.78 µg/L	504.78 ppb	19:36:34
1	U 409.014†	5786.5	5664.8	511.90 µg/L	511.90 ppb	19:36:14
1	V 292.402†	47433.2	46040.5	496.78 µg/L	496.78 ppb	19:36:14
1	Zn 213.857†	20405.0	19311.3	478.73 µg/L	478.73 ppb	19:36:14
2	Sc RADIAL	56738.3	56738.3	104 %		19:35:10
2	Al 396.153Radial†	6857.8	6606.4	4913.7 µg/L	4913.7 ppb	19:35:30
2	Ca 317.933Radial†	5550.5	5159.7	4858.2 µg/L	4858.2 ppb	19:35:30
2	Fe 238.204 Radial†	618.4	580.3	4928.8 µg/L	4928.8 ppb	19:35:30
2	K 766.490 Radial†	7512.7	7097.8	5045.0 µg/L	5045.0 ppb	19:35:10
2	Mg 279.077 IEC†	561.6	528.9	4925.0 µg/L	4925.0 ppb	19:35:30
2	Na 589.592 Radial†	16499.1	15328.0	5046.0 µg/L	5046.0 ppb	19:35:10
2	Sr 421.552†	48452.7	46565.3	482.70 µg/L	482.70 ppb	19:35:10
2	Sc 361.383	1963144.1	1963144.1	102.79 %		19:36:41
2	Y 371.029	1340072.9	1340072.9	102.30 %		19:36:41
2	Ag 328.068†	61611.8	60503.4	483.66 µg/L	483.66 ppb	19:36:47
2	As 188.979†	260.2	252.0	491.59 µg/L	491.59 ppb	19:37:07
2	B 249.677†	12050.1	11391.4	496.05 µg/L	496.05 ppb	19:36:47
2	Ba 233.527†	19468.1	18965.5	494.72 µg/L	494.72 ppb	19:36:47
2	Be 313.107†	756552.9	739451.1	482.72 µg/L	482.72 ppb	19:36:41
2	Cd 226.502†	17837.5	17495.3	482.61 µg/L	482.61 ppb	19:36:47
2	Co 228.616†	10063.1	9798.7	481.66 µg/L	481.66 ppb	19:36:47
2	Cr 267.716†	23000.6	22428.5	493.65 µg/L	493.65 ppb	19:36:47
2	Cu 324.752†	75255.1	70725.6	494.72 µg/L	494.72 ppb	19:36:47
2	Mn 257.610†	146664.2	142926.0	495.39 µg/L	495.39 ppb	19:36:41
2	Mo 202.031†	4791.0	4668.4	498.41 µg/L	498.41 ppb	19:37:07
2	Ni 231.604†	9624.9	9061.3	494.92 µg/L	494.92 ppb	19:36:47
2	P 214.914†	259.0	224.3	434.79 µg/L	434.79 ppb	19:37:07
2	Pb 220.353†	2029.3	1877.0	500.98 µg/L	500.98 ppb	19:37:07

2	S 181.975 Axial†	1194.9	1147.6	5028.2 µg/L	5028.2 ppb	19:37:07
2	Sb 206.836†	555.9	513.8	507.88 µg/L	507.88 ppb	19:37:07
2	Se 196.026†	334.4	309.5	479.52 µg/L	479.52 ppb	19:37:07
2	SiO2†	63264.3	60296.5	12985 µg/L	12985 ppb	19:36:47
2	Si 251.611†	75806.3	73435.1	6036.7 µg/L	6036.7 ppb	19:36:47
2	Sn 189.927†	1179.8	1148.7	528.34 µg/L	528.34 ppb	19:37:07
2	Ti 334.940†	208026.1	202261.6	486.21 µg/L	486.21 ppb	19:36:41
2	Tl 190.801†	339.5	354.5	500.78 µg/L	500.78 ppb	19:37:07
2	U 409.014†	5762.6	5659.8	511.44 µg/L	511.44 ppb	19:36:47
2	V 292.402†	47518.7	46272.7	499.23 µg/L	499.23 ppb	19:36:47
2	Zn 213.857†	20383.6	19354.6	479.81 µg/L	479.81 ppb	19:36:47
3	Sc RADIAL	56983.3	56983.3	104 %		19:35:36
3	Al 396.153Radial†	6778.1	6501.7	4836.4 µg/L	4836.4 ppb	19:35:56
3	Ca 317.933Radial†	5483.7	5072.7	4776.3 µg/L	4776.3 ppb	19:35:56
3	Fe 238.204 Radial†	610.2	569.9	4840.0 µg/L	4840.0 ppb	19:35:56
3	K 766.490 Radial†	7476.8	7032.3	4998.5 µg/L	4998.5 ppb	19:35:36
3	Mg 279.077 IEC†	558.6	523.7	4875.9 µg/L	4875.9 ppb	19:35:56
3	Na 589.592 Radial†	16463.0	15225.1	5012.2 µg/L	5012.2 ppb	19:35:36
3	Sr 421.552†	48028.2	45958.3	476.41 µg/L	476.41 ppb	19:35:36
3	Sc 361.383	1953228.5	1953228.5	102.27 %		19:37:14
3	Y 371.029	1334981.2	1334981.2	101.91 %		19:37:14
3	Ag 328.068†	60906.6	60118.1	480.49 µg/L	480.49 ppb	19:37:20
3	As 188.979†	246.6	240.0	468.20 µg/L	468.20 ppb	19:37:41
3	B 249.677†	11806.2	11212.5	488.25 µg/L	488.25 ppb	19:37:20
3	Ba 233.527†	18817.3	18425.3	480.63 µg/L	480.63 ppb	19:37:20
3	Be 313.107†	740878.0	727860.9	475.15 µg/L	475.15 ppb	19:37:14
3	Cd 226.502†	17362.9	17119.4	472.23 µg/L	472.23 ppb	19:37:20
3	Co 228.616†	9771.9	9563.6	470.08 µg/L	470.08 ppb	19:37:20
3	Cr 267.716†	22087.4	21649.1	476.50 µg/L	476.50 ppb	19:37:20
3	Cu 324.752†	72706.1	68604.9	479.89 µg/L	479.89 ppb	19:37:20
3	Mn 257.610†	143804.2	140853.9	488.21 µg/L	488.21 ppb	19:37:14
3	Mo 202.031†	4405.4	4315.1	460.70 µg/L	460.70 ppb	19:37:41
3	Ni 231.604†	9285.9	8777.4	479.41 µg/L	479.41 ppb	19:37:20
3	P 214.914†	254.1	220.8	428.19 µg/L	428.19 ppb	19:37:41
3	Pb 220.353†	1906.4	1766.9	471.52 µg/L	471.52 ppb	19:37:41
3	S 181.975 Axial†	1137.3	1097.2	4807.1 µg/L	4807.1 ppb	19:37:41
3	Sb 206.836†	512.2	473.8	468.13 µg/L	468.13 ppb	19:37:41
3	Se 196.026†	311.2	288.4	447.26 µg/L	447.26 ppb	19:37:41
3	SiO2†	61664.2	59044.4	12716 µg/L	12716 ppb	19:37:20
3	Si 251.611†	73998.6	72042.0	5922.2 µg/L	5922.2 ppb	19:37:20
3	Sn 189.927†	1081.7	1058.6	486.89 µg/L	486.89 ppb	19:37:41
3	Ti 334.940†	203268.0	198636.6	477.50 µg/L	477.50 ppb	19:37:14
3	Tl 190.801†	317.8	335.0	473.39 µg/L	473.39 ppb	19:37:41
3	U 409.014†	5643.9	5572.1	503.52 µg/L	503.52 ppb	19:37:20
3	V 292.402†	45704.3	44733.2	482.48 µg/L	482.48 ppb	19:37:20
3	Zn 213.857†	19736.3	18822.4	466.62 µg/L	466.62 ppb	19:37:20

Mean Data: 1202032560|948737|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1961958.9	102.73 %	0.429			0.42%
Sc RADIAL	56728.8	104 %	0.5			0.46%
Y 371.029	1339848.3	102.28 %	0.363			0.36%
Ag 328.068†	60364.1	482.51 µg/L	1.756	482.51 ppb	1.756	0.36%
Al 396.153Radial†	6565.5	4883.4 µg/L	41.27	4883.4 ppb	41.27	0.85%
As 188.979†	250.0	487.74 µg/L	17.922	487.74 ppb	17.922	3.67%
B 249.677†	11313.1	492.64 µg/L	3.992	492.64 ppb	3.992	0.81%
Ba 233.527†	18752.3	489.16 µg/L	7.501	489.16 ppb	7.501	1.53%
Be 313.107†	735146.7	479.91 µg/L	4.141	479.91 ppb	4.141	0.86%
Ca 317.933Radial†	5125.1	4825.6 µg/L	43.45	4825.6 ppb	43.45	0.90%
Cd 226.502†	17362.7	478.95 µg/L	5.826	478.95 ppb	5.826	1.22%
Co 228.616†	9741.0	478.82 µg/L	7.722	478.82 ppb	7.722	1.61%
Cr 267.716†	22146.5	487.44 µg/L	9.508	487.44 ppb	9.508	1.95%
Cu 324.752†	69990.3	489.58 µg/L	8.392	489.58 ppb	8.392	1.71%
Fe 238.204 Radial†	575.7	4889.5 µg/L	45.26	4889.5 ppb	45.26	0.93%
K 766.490 Radial†	7029.8	4996.7 µg/L	49.22	4996.7 ppb	49.22	0.98%
Mg 279.077 IEC†	526.8	4905.1 µg/L	25.83	4905.1 ppb	25.83	0.53%
Mn 257.610†	142251.8	493.05 µg/L	4.198	493.05 ppb	4.198	0.85%
Mo 202.031†	4561.2	486.97 µg/L	22.812	486.97 ppb	22.812	4.68%
Na 589.592 Radial†	15228.6	5013.3 µg/L	32.17	5013.3 ppb	32.17	0.64%

Ni 231.604†	8960.7	489.42 µg/L	8.683	489.42 ppb	8.683	1.77%
P 214.914†	227.7	442.45 µg/L	19.267	442.45 ppb	19.267	4.35%
Pb 220.353†	1843.4	491.99 µg/L	17.777	491.99 ppb	17.777	3.61%
S 181.975 Axial†	1132.5	4961.7 µg/L	134.32	4961.7 ppb	134.32	2.71%
Sb 206.836†	502.4	496.52 µg/L	24.756	496.52 ppb	24.756	4.99%
Se 196.026†	303.5	470.34 µg/L	20.133	470.34 ppb	20.133	4.28%
SiO2†	59809.5	12880 µg/L	144.5	12880 ppb	144.5	1.12%
Si 251.611†	72892.5	5992.1 µg/L	61.31	5992.1 ppb	61.31	1.02%
Sn 189.927†	1122.5	516.28 µg/L	25.587	516.28 ppb	25.587	4.96%
Sr 421.552†	46072.3	477.59 µg/L	4.634	477.59 ppb	4.634	0.97%
Ti 334.940†	200944.0	483.04 µg/L	4.822	483.04 ppb	4.822	1.00%
Tl 190.801†	349.0	492.98 µg/L	17.083	492.98 ppb	17.083	3.47%
U 409.014†	5632.2	508.95 µg/L	4.711	508.95 ppb	4.711	0.93%
V 292.402†	45682.1	492.83 µg/L	9.049	492.83 ppb	9.049	1.84%
Zn 213.857†	19162.7	475.05 µg/L	7.325	475.05 ppb	7.325	1.54%

Sequence No.: 45

Sample ID: 1202032561|948737|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 335

Date Collected: 2/11/2010 19:37:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202032561|948737|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	55556.9	55556.9	102 %		19:38:23
1	Al 396.153Radial†	-14.4	-4.0	-3.0016 µg/L	-3.0016 ppb	19:38:23
1	Ca 317.933Radial†	193.6	11.0	10.352 µg/L	10.352 ppb	19:38:43
1	Fe 238.204 Radial†	16.0	1.2	10.568 µg/L	10.568 ppb	19:38:43
1	K 766.490 Radial†	200.3	68.3	48.549 µg/L	48.549 ppb	19:38:23
1	Mg 279.077 IEC†	17.4	5.8	54.431 µg/L	54.431 ppb	19:38:43
1	Na 589.592 Radial†	748.0	192.9	63.499 µg/L	63.499 ppb	19:38:23
1	Sr 421.552†	52.3	11.8	0.1221 µg/L	0.1221 ppb	19:38:23
1	Sc 361.383	1967786.0	1967786.0	103.03 %		19:39:45
1	Y 371.029	1347427.9	1347427.9	102.86 %		19:39:45
1	Ag 328.068†	-513.7	65.9	0.5269 µg/L	0.5269 ppb	19:39:51
1	As 188.979†	0.2	-0.9	-1.7879 µg/L	-1.7879 ppb	19:40:11
1	B 249.677†	392.7	49.7	2.1660 µg/L	2.1660 ppb	19:40:11
1	Ba 233.527†	-17.5	9.0	0.2357 µg/L	0.2357 ppb	19:40:11
1	Be 313.107†	-3261.5	274.9	0.1795 µg/L	0.1795 ppb	19:39:51
1	Cd 226.502†	-143.1	3.3	0.0883 µg/L	0.0883 ppb	19:40:11
1	Co 228.616†	-14.2	-4.9	-0.2416 µg/L	-0.2416 ppb	19:40:11
1	Cr 267.716†	-7.4	45.2	0.9940 µg/L	0.9940 ppb	19:40:11
1	Cu 324.752†	2443.8	-114.2	-0.7963 µg/L	-0.7963 ppb	19:39:51
1	Mn 257.610†	-169.1	79.9	0.2761 µg/L	0.2761 ppb	19:40:11
1	Mo 202.031†	-6.4	1.4	0.1476 µg/L	0.1476 ppb	19:40:11
1	Ni 231.604†	306.2	-5.0	-0.2754 µg/L	-0.2754 ppb	19:40:11
1	P 214.914†	36.4	7.7	16.712 µg/L	16.712 ppb	19:40:11
1	Pb 220.353†	91.5	-8.3	-2.2188 µg/L	-2.2188 ppb	19:40:11
1	S 181.975 Axial†	15.5	0.3	1.1200 µg/L	1.1200 ppb	19:40:11
1	Sb 206.836†	23.6	-4.0	-3.9935 µg/L	-3.9935 ppb	19:40:11
1	Se 196.026†	10.4	-5.8	-8.8371 µg/L	-8.8371 ppb	19:40:11
1	Si02†	4053.3	2683.9	578.00 µg/L	578.00 ppb	19:39:51
1	Si 251.611†	3735.4	3312.5	272.31 µg/L	272.31 ppb	19:39:51
1	Sn 189.927†	1.4	2.2	1.0392 µg/L	1.0392 ppb	19:40:11
1	Ti 334.940†	209.0	86.7	0.2045 µg/L	0.2045 ppb	19:39:51
1	Tl 190.801†	-28.8	-3.6	-5.0793 µg/L	-5.0793 ppb	19:40:11
1	U 409.014†	-114.0	-57.1	-5.1684 µg/L	-5.1684 ppb	19:39:51
1	V 292.402†	0.4	44.6	0.4745 µg/L	0.4745 ppb	19:39:51
1	Zn 213.857†	490.8	0.8	0.0180 µg/L	0.0180 ppb	19:40:11
2	Sc RADIAL	55453.1	55453.1	102 %		19:38:49
2	Al 396.153Radial†	-1.2	8.9	6.6613 µg/L	6.6613 ppb	19:38:49
2	Ca 317.933Radial†	195.9	13.6	12.817 µg/L	12.817 ppb	19:39:09
2	Fe 238.204 Radial†	14.7	0.0	0.0944 µg/L	0.0944 ppb	19:39:09
2	K 766.490 Radial†	238.4	106.2	75.456 µg/L	75.456 ppb	19:38:49
2	Mg 279.077 IEC†	15.6	4.1	37.981 µg/L	37.981 ppb	19:39:09
2	Na 589.592 Radial†	708.0	154.9	51.000 µg/L	51.000 ppb	19:38:49
2	Sr 421.552†	57.2	16.8	0.1737 µg/L	0.1737 ppb	19:38:49
2	Sc 361.383	1975775.5	1975775.5	103.45 %		19:40:18
2	Y 371.029	1355586.5	1355586.5	103.49 %		19:40:18
2	Ag 328.068†	-512.8	68.9	0.5480 µg/L	0.5480 ppb	19:40:23
2	As 188.979†	-0.8	-1.9	-3.7879 µg/L	-3.7879 ppb	19:40:44
2	B 249.677†	398.7	53.9	2.3572 µg/L	2.3572 ppb	19:40:44
2	Ba 233.527†	-16.5	10.0	0.2613 µg/L	0.2613 ppb	19:40:44
2	Be 313.107†	-3291.3	258.9	0.1690 µg/L	0.1690 ppb	19:40:23
2	Cd 226.502†	-132.6	13.9	0.3835 µg/L	0.3835 ppb	19:40:44
2	Co 228.616†	-7.1	2.0	0.0984 µg/L	0.0984 ppb	19:40:44
2	Cr 267.716†	-22.7	30.4	0.6696 µg/L	0.6696 ppb	19:40:44
2	Cu 324.752†	2469.7	-98.8	-0.6905 µg/L	-0.6905 ppb	19:40:23
2	Mn 257.610†	-143.9	105.0	0.3620 µg/L	0.3620 ppb	19:40:44
2	Mo 202.031†	-4.2	3.5	0.3717 µg/L	0.3717 ppb	19:40:44
2	Ni 231.604†	302.9	-9.4	-0.5143 µg/L	-0.5143 ppb	19:40:44
2	P 214.914†	29.9	1.3	2.7919 µg/L	2.7919 ppb	19:40:44
2	Pb 220.353†	97.3	-3.1	-0.8261 µg/L	-0.8261 ppb	19:40:44

2	S 181.975 Axial†	20.0	4.5	19.710 µg/L	19.710 ppb	19:40:44
2	Sb 206.836†	23.7	-4.1	-4.0300 µg/L	-4.0300 ppb	19:40:44
2	Se 196.026†	9.3	-6.9	-10.492 µg/L	-10.492 ppb	19:40:44
2	SiO2†	4038.7	2653.9	571.53 µg/L	571.53 ppb	19:40:23
2	Si 251.611†	3707.4	3270.8	268.87 µg/L	268.87 ppb	19:40:23
2	Sn 189.927†	2.0	2.8	1.2773 µg/L	1.2773 ppb	19:40:44
2	Ti 334.940†	221.6	98.1	0.2331 µg/L	0.2331 ppb	19:40:23
2	Tl 190.801†	-21.6	3.4	4.7965 µg/L	4.7965 ppb	19:40:44
2	U 409.014†	-59.9	-4.3	-0.3880 µg/L	-0.3880 ppb	19:40:23
2	V 292.402†	-21.0	23.9	0.2589 µg/L	0.2589 ppb	19:40:23
2	Zn 213.857†	511.8	19.2	0.4807 µg/L	0.4807 ppb	19:40:44
3	Sc RADIAL	54997.2	54997.2	101 %		19:39:15
3	Al 396.153Radial†	-9.6	0.6	0.4496 µg/L	0.4496 ppb	19:39:15
3	Ca 317.933Radial†	197.1	16.5	15.498 µg/L	15.498 ppb	19:39:35
3	Fe 238.204 Radial†	17.3	2.6	22.415 µg/L	22.415 ppb	19:39:35
3	K 766.490 Radial†	180.6	50.8	36.115 µg/L	36.115 ppb	19:39:15
3	Mg 279.077 IEC†	14.5	3.2	29.331 µg/L	29.331 ppb	19:39:35
3	Na 589.592 Radial†	763.4	215.7	70.994 µg/L	70.994 ppb	19:39:15
3	Sr 421.552†	65.9	25.9	0.2681 µg/L	0.2681 ppb	19:39:15
3	Sc 361.383	1964922.8	1964922.8	102.88 %		19:40:50
3	Y 371.029	1347749.0	1347749.0	102.89 %		19:40:50
3	Ag 328.068†	-485.9	92.3	0.7322 µg/L	0.7322 ppb	19:40:55
3	As 188.979†	0.6	-0.6	-1.1015 µg/L	-1.1015 ppb	19:41:16
3	B 249.677†	385.4	43.2	1.8762 µg/L	1.8762 ppb	19:41:16
3	Ba 233.527†	-20.3	6.2	0.1623 µg/L	0.1623 ppb	19:41:16
3	Be 313.107†	-3155.8	373.1	0.2435 µg/L	0.2435 ppb	19:40:55
3	Cd 226.502†	-137.1	8.9	0.2432 µg/L	0.2432 ppb	19:41:16
3	Co 228.616†	-0.5	8.4	0.4121 µg/L	0.4121 ppb	19:41:16
3	Cr 267.716†	-8.2	44.4	0.9768 µg/L	0.9768 ppb	19:41:16
3	Cu 324.752†	2483.7	-72.0	-0.4999 µg/L	-0.4999 ppb	19:40:55
3	Mn 257.610†	-138.7	109.3	0.3805 µg/L	0.3805 ppb	19:41:16
3	Mo 202.031†	-5.4	2.3	0.2508 µg/L	0.2508 ppb	19:41:16
3	Ni 231.604†	316.9	5.9	0.3198 µg/L	0.3198 ppb	19:41:16
3	P 214.914†	26.0	-2.4	-5.0548 µg/L	-5.0548 ppb	19:41:16
3	Pb 220.353†	90.0	-9.7	-2.5999 µg/L	-2.5999 ppb	19:41:16
3	S 181.975 Axial†	20.6	5.2	22.743 µg/L	22.743 ppb	19:41:16
3	Sb 206.836†	23.9	-3.7	-3.6360 µg/L	-3.6360 ppb	19:41:16
3	Se 196.026†	14.1	-2.1	-3.2432 µg/L	-3.2432 ppb	19:41:16
3	SiO2†	3923.3	2563.3	552.03 µg/L	552.03 ppb	19:40:55
3	Si 251.611†	3574.4	3161.3	259.88 µg/L	259.88 ppb	19:40:55
3	Sn 189.927†	1.0	1.8	0.8318 µg/L	0.8318 ppb	19:41:16
3	Ti 334.940†	247.5	124.4	0.2972 µg/L	0.2972 ppb	19:40:55
3	Tl 190.801†	-20.5	4.4	6.0916 µg/L	6.0916 ppb	19:41:16
3	U 409.014†	-23.0	31.3	2.8278 µg/L	2.8278 ppb	19:40:55
3	V 292.402†	-67.0	-20.9	-0.2134 µg/L	-0.2134 ppb	19:40:55
3	Zn 213.857†	498.6	9.1	0.2239 µg/L	0.2239 ppb	19:41:16

Mean Data: 1202032561|948737|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1969494.8	103.12 %		0.295			0.29%
Sc RADIAL	55335.7	101 %		0.5			0.54%
Y 371.029	1350254.5	103.08 %		0.353			0.34%
Ag 328.068†	75.7	0.6024 µg/L		0.11293	0.6024 ppb	0.11293	18.75%
Al 396.153Radial†	1.8	1.3697 µg/L		4.89673	1.3697 ppb	4.89673	357.50%
As 188.979†	-1.1	-2.2258 µg/L		1.39574	-2.2258 ppb	1.39574	62.71%
B 249.677†	48.9	2.1331 µg/L		0.24218	2.1331 ppb	0.24218	11.35%
Ba 233.527†	8.4	0.2198 µg/L		0.05138	0.2198 ppb	0.05138	23.38%
Be 313.107†	302.3	0.1973 µg/L		0.04034	0.1973 ppb	0.04034	20.44%
Ca 317.933Radial†	13.7	12.889 µg/L		2.5739	12.889 ppb	2.5739	19.97%
Cd 226.502†	8.7	0.2383 µg/L		0.14769	0.2383 ppb	0.14769	61.96%
Co 228.616†	1.8	0.0896 µg/L		0.32695	0.0896 ppb	0.32695	364.74%
Cr 267.716†	40.0	0.8801 µg/L		0.18253	0.8801 ppb	0.18253	20.74%
Cu 324.752†	-95.0	-0.6622 µg/L		0.15020	-0.6622 ppb	0.15020	22.68%
Fe 238.204 Radial†	1.3	11.026 µg/L		11.1673	11.026 ppb	11.1673	101.28%
K 766.490 Radial†	75.1	53.373 µg/L		20.1092	53.373 ppb	20.1092	37.68%
Mg 279.077 IEC†	4.4	40.581 µg/L		12.7501	40.581 ppb	12.7501	31.42%
Mn 257.610†	98.1	0.3395 µg/L		0.05572	0.3395 ppb	0.05572	16.41%
Mo 202.031†	2.4	0.2567 µg/L		0.11216	0.2567 ppb	0.11216	43.69%
Na 589.592 Radial†	187.8	61.831 µg/L		10.1008	61.831 ppb	10.1008	16.34%

Ni 231.604†	-2.9	-0.1566 µg/L	0.42953	-0.1566 ppb	0.42953	274.22%
P 214.914†	2.2	4.8165 µg/L	11.02392	4.8165 ppb	11.02392	228.88%
Pb 220.353†	-7.1	-1.8816 µg/L	0.93377	-1.8816 ppb	0.93377	49.63%
S 181.975 Axial†	3.3	14.524 µg/L	11.7071	14.524 ppb	11.7071	80.60%
Sb 206.836†	-3.9	-3.8865 µg/L	0.21773	-3.8865 ppb	0.21773	5.60%
Se 196.026†	-4.9	-7.5242 µg/L	3.79864	-7.5242 ppb	3.79864	50.49%
SiO2†	2633.7	567.19 µg/L	13.522	567.19 ppb	13.522	2.38%
Si 251.611†	3248.2	267.02 µg/L	6.418	267.02 ppb	6.418	2.40%
Sn 189.927†	2.3	1.0494 µg/L	0.22288	1.0494 ppb	0.22288	21.24%
Sr 421.552†	18.1	0.1880 µg/L	0.07405	0.1880 ppb	0.07405	39.39%
Ti 334.940†	103.1	0.2449 µg/L	0.04745	0.2449 ppb	0.04745	19.37%
Tl 190.801†	1.4	1.9362 µg/L	6.11008	1.9362 ppb	6.11008	315.56%
U 409.014†	-10.0	-0.9095 µg/L	4.02356	-0.9095 ppb	4.02356	442.37%
V 292.402†	15.9	0.1733 µg/L	0.35183	0.1733 ppb	0.35183	203.00%
Zn 213.857†	9.7	0.2409 µg/L	0.23181	0.2409 ppb	0.23181	96.23%

Sequence No.: 46

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 19:41:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56419.4	56419.4	103 %		19:42:04
1	Al 396.153Radial†	6864.6	6650.3	4946.1 µg/L	4946.1 ppb	19:42:25
1	Ca 317.933Radial†	5559.4	5198.4	4894.6 µg/L	4894.6 ppb	19:42:25
1	Fe 238.204 Radial†	616.6	581.9	4942.5 µg/L	4942.5 ppb	19:42:25
1	K 766.490 Radial†	7352.0	6983.2	4963.6 µg/L	4963.6 ppb	19:42:04
1	Mg 279.077 IEC†	570.1	540.2	5030.2 µg/L	5030.2 ppb	19:42:25
1	Na 589.592 Radial†	31600.6	30025.3	9884.4 µg/L	9884.4 ppb	19:42:04
1	Sr 421.552†	48468.4	46843.8	485.59 µg/L	485.59 ppb	19:42:04
1	Sc 361.383	2003108.1	2003108.1	104.88 %		19:43:28
1	Y 371.029	1370730.2	1370730.2	104.64 %		19:43:28
1	Ag 328.068†	64726.1	62276.9	497.74 µg/L	497.74 ppb	19:43:34
1	As 188.979†	267.5	253.9	495.37 µg/L	495.37 ppb	19:43:54
1	B 249.677†	12041.2	11149.1	485.46 µg/L	485.46 ppb	19:43:34
1	Ba 233.527†	19842.7	18944.8	494.19 µg/L	494.19 ppb	19:43:34
1	Be 313.107†	766666.1	734409.3	479.43 µg/L	479.43 ppb	19:43:28
1	Cd 226.502†	18686.6	17958.6	495.39 µg/L	495.39 ppb	19:43:34
1	Co 228.616†	10595.4	10110.9	497.04 µg/L	497.04 ppb	19:43:34
1	Cr 267.716†	23720.3	22668.2	498.92 µg/L	498.92 ppb	19:43:34
1	Cu 324.752†	76984.9	70914.3	496.04 µg/L	496.04 ppb	19:43:34
1	Mn 257.610†	147751.2	141115.8	489.12 µg/L	489.12 ppb	19:43:28
1	Mo 202.031†	5026.0	4799.5	512.40 µg/L	512.40 ppb	19:43:54
1	Ni 231.604†	9826.5	9066.7	495.20 µg/L	495.20 ppb	19:43:34
1	P 214.914†	1254.6	1168.6	2461.8 µg/L	2461.8 ppb	19:43:54
1	Pb 220.353†	2050.1	1857.4	495.79 µg/L	495.79 ppb	19:43:54
1	S 181.975 Axial†	255.6	228.9	1003.0 µg/L	1003.0 ppb	19:43:54
1	Sb 206.836†	570.4	516.9	511.09 µg/L	511.09 ppb	19:43:54
1	Se 196.026†	360.0	327.4	506.74 µg/L	506.74 ppb	19:43:54
1	SiO2†	26928.3	24424.4	5259.9 µg/L	5259.9 ppb	19:43:34
1	Si 251.611†	31785.6	29992.7	2465.6 µg/L	2465.6 ppb	19:43:34
1	Sn 189.927†	1167.3	1113.9	512.34 µg/L	512.34 ppb	19:43:54
1	Ti 334.940†	210971.9	201032.6	483.25 µg/L	483.25 ppb	19:43:28
1	Tl 190.801†	351.0	358.9	506.83 µg/L	506.83 ppb	19:43:54
1	U 409.014†	5847.6	5628.9	508.64 µg/L	508.64 ppb	19:43:34
1	V 292.402†	48650.0	46429.0	501.02 µg/L	501.02 ppb	19:43:34
1	Zn 213.857†	21378.5	19907.5	493.60 µg/L	493.60 ppb	19:43:34
2	Sc RADIAL	57083.7	57083.7	105 %		19:42:30
2	Al 396.153Radial†	6804.1	6515.2	4845.3 µg/L	4845.3 ppb	19:42:51
2	Ca 317.933Radial†	5545.5	5122.6	4823.3 µg/L	4823.3 ppb	19:42:51
2	Fe 238.204 Radial†	613.4	571.9	4857.7 µg/L	4857.7 ppb	19:42:51
2	K 766.490 Radial†	7292.4	6843.5	4864.3 µg/L	4864.3 ppb	19:42:30
2	Mg 279.077 IEC†	572.7	536.3	4994.3 µg/L	4994.3 ppb	19:42:51
2	Na 589.592 Radial†	31703.2	29767.7	9799.6 µg/L	9799.6 ppb	19:42:30
2	Sr 421.552†	48760.9	46577.9	482.83 µg/L	482.83 ppb	19:42:30
2	Sc 361.383	1956478.6	1956478.6	102.44 %		19:44:02
2	Y 371.029	1338013.6	1338013.6	102.14 %		19:44:02
2	Ag 328.068†	63625.9	62673.7	500.90 µg/L	500.90 ppb	19:44:07
2	As 188.979†	268.7	261.1	509.35 µg/L	509.35 ppb	19:44:28
2	B 249.677†	11834.0	11220.4	488.63 µg/L	488.63 ppb	19:44:07
2	Ba 233.527†	19447.5	19009.9	495.89 µg/L	495.89 ppb	19:44:07
2	Be 313.107†	783080.7	767854.0	501.26 µg/L	501.26 ppb	19:44:02
2	Cd 226.502†	18262.0	17968.8	495.68 µg/L	495.68 ppb	19:44:07
2	Co 228.616†	10399.7	10160.6	499.45 µg/L	499.45 ppb	19:44:07
2	Cr 267.716†	23262.6	22760.4	500.95 µg/L	500.95 ppb	19:44:07
2	Cu 324.752†	75552.4	71265.3	498.48 µg/L	498.48 ppb	19:44:07
2	Mn 257.610†	151080.8	147723.5	511.99 µg/L	511.99 ppb	19:44:02
2	Mo 202.031†	4987.4	4876.0	520.56 µg/L	520.56 ppb	19:44:28
2	Ni 231.604†	9658.6	9126.2	498.44 µg/L	498.44 ppb	19:44:07
2	P 214.914†	1238.9	1181.7	2490.0 µg/L	2490.0 ppb	19:44:28
2	Pb 220.353†	2049.2	1903.2	508.02 µg/L	508.02 ppb	19:44:28

2	S 181.975 Axial†	249.6	228.9	1002.7 µg/L	1002.7 ppb	19:44:28
2	Sb 206.836†	564.1	523.7	517.93 µg/L	517.93 ppb	19:44:28
2	Se 196.026†	358.2	333.9	516.45 µg/L	516.45 ppb	19:44:28
2	SiO2†	26483.3	24601.9	5298.2 µg/L	5298.2 ppb	19:44:07
2	Si 251.611†	31145.7	30090.4	2473.6 µg/L	2473.6 ppb	19:44:07
2	Sn 189.927†	1159.9	1133.1	521.19 µg/L	521.19 ppb	19:44:28
2	Ti 334.940†	215458.6	210206.4	505.32 µg/L	505.32 ppb	19:44:02
2	Tl 190.801†	341.6	357.7	505.37 µg/L	505.37 ppb	19:44:28
2	U 409.014†	5729.0	5646.0	510.20 µg/L	510.20 ppb	19:44:07
2	V 292.402†	47728.9	46635.3	503.28 µg/L	503.28 ppb	19:44:07
2	Zn 213.857†	20977.4	20001.8	495.95 µg/L	495.95 ppb	19:44:07
3	Sc RADIAL	57202.6	57202.6	105 %		19:42:56
3	Al 396.153Radial†	6841.2	6537.0	4863.4 µg/L	4863.4 ppb	19:43:17
3	Ca 317.933Radial†	5579.2	5143.7	4843.1 µg/L	4843.1 ppb	19:43:17
3	Fe 238.204 Radial†	619.6	576.6	4896.7 µg/L	4896.7 ppb	19:43:17
3	K 766.490 Radial†	7296.8	6833.1	4856.9 µg/L	4856.9 ppb	19:42:56
3	Mg 279.077 IEC†	570.0	532.5	4957.7 µg/L	4957.7 ppb	19:43:17
3	Na 589.592 Radial†	31651.4	29655.3	9762.6 µg/L	9762.6 ppb	19:42:56
3	Sr 421.552†	48633.6	46359.5	480.57 µg/L	480.57 ppb	19:42:56
3	Sc 361.383	1968483.8	1968483.8	103.07 %		19:44:35
3	Y 371.029	1347474.9	1347474.9	102.87 %		19:44:35
3	Ag 328.068†	60287.4	59055.9	471.87 µg/L	471.87 ppb	19:44:40
3	As 188.979†	225.2	217.3	423.99 µg/L	423.99 ppb	19:45:01
3	B 249.677†	11150.7	10487.1	456.47 µg/L	456.47 ppb	19:44:40
3	Ba 233.527†	17981.9	17472.2	455.76 µg/L	455.76 ppb	19:44:40
3	Be 313.107†	731612.9	713257.7	465.62 µg/L	465.62 ppb	19:44:35
3	Cd 226.502†	16841.2	16481.6	454.60 µg/L	454.60 ppb	19:44:40
3	Co 228.616†	9509.8	9235.4	453.92 µg/L	453.92 ppb	19:44:40
3	Cr 267.716†	20728.9	20163.7	443.80 µg/L	443.80 ppb	19:44:40
3	Cu 324.752†	69473.8	64918.0	454.15 µg/L	454.15 ppb	19:44:40
3	Mn 257.610†	141487.4	137516.4	476.65 µg/L	476.65 ppb	19:44:35
3	Mo 202.031†	4166.6	4050.0	432.41 µg/L	432.41 ppb	19:45:01
3	Ni 231.604†	8868.9	8302.5	453.46 µg/L	453.46 ppb	19:44:40
3	P 214.914†	1068.6	1009.2	2122.7 µg/L	2122.7 ppb	19:45:01
3	Pb 220.353†	1791.6	1641.0	437.94 µg/L	437.94 ppb	19:45:01
3	S 181.975 Axial†	225.5	204.0	893.82 µg/L	893.82 ppb	19:45:01
3	Sb 206.836†	488.9	447.4	442.01 µg/L	442.01 ppb	19:45:01
3	Se 196.026†	320.0	294.7	456.84 µg/L	456.84 ppb	19:45:01
3	SiO2†	24830.7	22841.0	4918.9 µg/L	4918.9 ppb	19:44:40
3	Si 251.611†	29062.2	27883.6	2292.2 µg/L	2292.2 ppb	19:44:40
3	Sn 189.927†	952.2	924.7	425.35 µg/L	425.35 ppb	19:45:01
3	Ti 334.940†	200541.4	194450.9	467.42 µg/L	467.42 ppb	19:44:35
3	Tl 190.801†	313.2	328.1	463.67 µg/L	463.67 ppb	19:45:01
3	U 409.014†	5147.7	5048.0	456.05 µg/L	456.05 ppb	19:44:40
3	V 292.402†	43287.8	42042.5	453.47 µg/L	453.47 ppb	19:44:40
3	Zn 213.857†	19269.8	18220.2	451.73 µg/L	451.73 ppb	19:44:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1976023.5	103.47 %	1.268			1.23%
Sc RADIAL	56901.9	104 %	0.8			0.74%
Y 371.029	1352072.9	103.22 %	1.285			1.25%
Ag 328.068†	61335.5	490.17 µg/L	15.926	490.17 ppb	15.926	3.25%
QC value within limits for Ag 328.068 Recovery = 98.03%						
Al 396.153Radial†	6567.5	4884.9 µg/L	53.78	4884.9 ppb	53.78	1.10%
QC value within limits for Al 396.153Radial Recovery = 97.70%						
As 188.979†	244.1	476.24 µg/L	45.784	476.24 ppb	45.784	9.61%
QC value within limits for As 188.979 Recovery = 95.25%						
B 249.677†	10952.2	476.85 µg/L	17.725	476.85 ppb	17.725	3.72%
QC value within limits for B 249.677 Recovery = 95.37%						
Ba 233.527†	18475.6	481.94 µg/L	22.693	481.94 ppb	22.693	4.71%
QC value within limits for Ba 233.527 Recovery = 96.39%						
Be 313.107†	738507.0	482.10 µg/L	17.970	482.10 ppb	17.970	3.73%
QC value within limits for Be 313.107 Recovery = 96.42%						
Ca 317.933Radial†	5154.9	4853.7 µg/L	36.83	4853.7 ppb	36.83	0.76%
QC value within limits for Ca 317.933Radial Recovery = 97.07%						
Cd 226.502†	17469.7	481.89 µg/L	23.632	481.89 ppb	23.632	4.90%
QC value within limits for Cd 226.502 Recovery = 96.38%						
Co 228.616†	9835.6	483.47 µg/L	25.623	483.47 ppb	25.623	5.30%

QC value within limits for Co 228.616 Recovery = 96.69%						
Cr 267.716†	21864.1	481.23 µg/L	32.425	481.23 ppb	32.425	6.74%
QC value within limits for Cr 267.716 Recovery = 96.25%						
Cu 324.752†	69032.5	482.89 µg/L	24.920	482.89 ppb	24.920	5.16%
QC value within limits for Cu 324.752 Recovery = 96.58%						
Fe 238.204 Radial†	576.8	4899.0 µg/L	42.44	4899.0 ppb	42.44	0.87%
QC value within limits for Fe 238.204 Radial Recovery = 97.98%						
K 766.490 Radial†	6886.6	4894.9 µg/L	59.56	4894.9 ppb	59.56	1.22%
QC value within limits for K 766.490 Radial Recovery = 97.90%						
Mg 279.077 IEC†	536.3	4994.1 µg/L	36.28	4994.1 ppb	36.28	0.73%
QC value within limits for Mg 279.077 IEC Recovery = 99.88%						
Mn 257.610†	142118.5	492.59 µg/L	17.923	492.59 ppb	17.923	3.64%
QC value within limits for Mn 257.610 Recovery = 98.52%						
Mo 202.031†	4575.2	488.46 µg/L	48.709	488.46 ppb	48.709	9.97%
QC value within limits for Mo 202.031 Recovery = 97.69%						
Na 589.592 Radial†	29816.1	9815.6 µg/L	62.45	9815.6 ppb	62.45	0.64%
QC value within limits for Na 589.592 Radial Recovery = 98.16%						
Ni 231.604†	8831.8	482.37 µg/L	25.085	482.37 ppb	25.085	5.20%
QC value within limits for Ni 231.604 Recovery = 96.47%						
P 214.914†	1119.8	2358.2 µg/L	204.40	2358.2 ppb	204.40	8.67%
QC value within limits for P 214.914 Recovery = 94.33%						
Pb 220.353†	1800.5	480.58 µg/L	37.434	480.58 ppb	37.434	7.79%
QC value within limits for Pb 220.353 Recovery = 96.12%						
S 181.975 Axial†	220.6	966.52 µg/L	62.959	966.52 ppb	62.959	6.51%
QC value within limits for S 181.975 Axial Recovery = 96.65%						
Sb 206.836†	496.0	490.35 µg/L	41.996	490.35 ppb	41.996	8.56%
QC value within limits for Sb 206.836 Recovery = 98.07%						
Se 196.026†	318.6	493.35 µg/L	31.983	493.35 ppb	31.983	6.48%
QC value within limits for Se 196.026 Recovery = 98.67%						
SiO2†	23955.8	5159.0 µg/L	208.79	5159.0 ppb	208.79	4.05%
QC value within limits for SiO2 Recovery = 96.48%						
Si 251.611†	29322.2	2410.4 µg/L	102.50	2410.4 ppb	102.50	4.25%
QC value within limits for Si 251.611 Recovery = 96.42%						
Sn 189.927†	1057.2	486.29 µg/L	52.962	486.29 ppb	52.962	10.89%
QC value within limits for Sn 189.927 Recovery = 97.26%						
Sr 421.552†	46593.7	483.00 µg/L	2.514	483.00 ppb	2.514	0.52%
QC value within limits for Sr 421.552 Recovery = 96.60%						
Ti 334.940†	201896.6	485.33 µg/L	19.033	485.33 ppb	19.033	3.92%
QC value within limits for Ti 334.940 Recovery = 97.07%						
Tl 190.801†	348.3	491.96 µg/L	24.505	491.96 ppb	24.505	4.98%
QC value within limits for Tl 190.801 Recovery = 98.39%						
U 409.014†	5441.0	491.63 µg/L	30.821	491.63 ppb	30.821	6.27%
QC value within limits for U 409.014 Recovery = 98.33%						
V 292.402†	45035.6	485.92 µg/L	28.129	485.92 ppb	28.129	5.79%
QC value within limits for V 292.402 Recovery = 97.18%						
Zn 213.857†	19376.5	480.43 µg/L	24.881	480.43 ppb	24.881	5.18%
QC value within limits for Zn 213.857 Recovery = 96.09%						

All analyte(s) passed QC.

Sequence No.: 47
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 2/11/2010 19:45:10
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56376.8	56376.8	103 %			19:45:43
1	Al 396.153Radial†	-19.0	-8.3	-6.1741 µg/L	-6.1741 ppb		19:45:43
1	Ca 317.933Radial†	190.5	5.3	4.9933 µg/L	4.9933 ppb		19:46:03
1	Fe 238.204 Radial†	14.9	-0.1	-0.5495 µg/L	-0.5495 ppb		19:46:03
1	K 766.490 Radial†	145.1	12.1	8.5950 µg/L	8.5950 ppb		19:45:43
1	Mg 279.077 IEC†	10.6	-1.0	-9.5449 µg/L	-9.5449 ppb		19:46:03
1	Na 589.592 Radial†	582.4	21.9	7.2091 µg/L	7.2091 ppb		19:45:43
1	Sr 421.552†	18.5	-21.6	-0.2243 µg/L	-0.2243 ppb		19:45:43
1	Sc 361.383	1992362.0	1992362.0	104.32 %			19:47:05
1	Y 371.029	1368353.4	1368353.4	104.46 %			19:47:05
1	Ag 328.068†	-598.5	-9.1	-0.0730 µg/L	-0.0730 ppb		19:47:10
1	As 188.979†	-0.0	-1.2	-2.2711 µg/L	-2.2711 ppb		19:47:31
1	B 249.677†	346.6	0.7	0.0326 µg/L	0.0326 ppb		19:47:31
1	Ba 233.527†	-24.2	2.9	0.0744 µg/L	0.0744 ppb		19:47:31
1	Be 313.107†	-3339.3	239.4	0.1563 µg/L	0.1563 ppb		19:47:10
1	Cd 226.502†	-124.4	22.9	0.6311 µg/L	0.6311 ppb		19:47:31
1	Co 228.616†	-16.5	-7.0	-0.3445 µg/L	-0.3445 ppb		19:47:31
1	Cr 267.716†	-47.2	7.2	0.1575 µg/L	0.1575 ppb		19:47:31
1	Cu 324.752†	2430.9	-155.9	-1.0892 µg/L	-1.0892 ppb		19:47:10
1	Mn 257.610†	-240.7	13.4	0.0467 µg/L	0.0467 ppb		19:47:31
1	Mo 202.031†	-8.3	-0.4	-0.0415 µg/L	-0.0415 ppb		19:47:31
1	Ni 231.604†	297.2	-17.3	-0.9473 µg/L	-0.9473 ppb		19:47:31
1	P 214.914†	35.0	6.0	12.897 µg/L	12.897 ppb		19:47:31
1	Pb 220.353†	95.0	-6.2	-1.6460 µg/L	-1.6460 ppb		19:47:31
1	S 181.975 Axial†	14.6	-0.8	-3.7140 µg/L	-3.7140 ppb		19:47:31
1	Sb 206.836†	19.5	-8.3	-8.1804 µg/L	-8.1804 ppb		19:47:31
1	Se 196.026†	15.6	-0.9	-1.2950 µg/L	-1.2950 ppb		19:47:31
1	SiO2†	1248.6	-53.2	-11.446 µg/L	-11.446 ppb		19:47:10
1	Si 251.611†	306.0	-19.6	-1.6096 µg/L	-1.6096 ppb		19:47:31
1	Sn 189.927†	-6.1	-5.0	-2.2944 µg/L	-2.2944 ppb		19:47:31
1	Ti 334.940†	214.1	89.1	0.2152 µg/L	0.2152 ppb		19:47:10
1	Tl 190.801†	-21.4	3.7	5.2299 µg/L	5.2299 ppb		19:47:31
1	U 409.014†	10.3	63.5	5.7486 µg/L	5.7486 ppb		19:47:10
1	V 292.402†	-52.5	-6.1	-0.0596 µg/L	-0.0596 ppb		19:47:10
1	Zn 213.857†	478.7	-16.6	-0.4092 µg/L	-0.4092 ppb		19:47:31
2	Sc RADIAL	56044.6	56044.6	103 %			19:46:09
2	Al 396.153Radial†	-6.3	4.0	2.9768 µg/L	2.9768 ppb		19:46:09
2	Ca 317.933Radial†	183.8	-0.2	-0.1847 µg/L	-0.1847 ppb		19:46:29
2	Fe 238.204 Radial†	14.3	-0.6	-4.7213 µg/L	-4.7213 ppb		19:46:29
2	K 766.490 Radial†	167.1	34.3	24.398 µg/L	24.398 ppb		19:46:09
2	Mg 279.077 IEC†	11.1	-0.4	-4.0659 µg/L	-4.0659 ppb		19:46:29
2	Na 589.592 Radial†	618.2	60.1	19.792 µg/L	19.792 ppb		19:46:09
2	Sr 421.552†	69.0	27.6	0.2866 µg/L	0.2866 ppb		19:46:09
2	Sc 361.383	1989518.4	1989518.4	104.17 %			19:47:37
2	Y 371.029	1365606.7	1365606.7	104.25 %			19:47:37
2	Ag 328.068†	-547.2	39.3	0.3111 µg/L	0.3111 ppb		19:47:43
2	As 188.979†	-3.9	-4.9	-9.5988 µg/L	-9.5988 ppb		19:48:03
2	B 249.677†	322.6	-21.8	-0.9478 µg/L	-0.9478 ppb		19:48:03
2	Ba 233.527†	-14.9	11.7	0.3048 µg/L	0.3048 ppb		19:48:03
2	Be 313.107†	-3365.6	209.6	0.1369 µg/L	0.1369 ppb		19:47:43
2	Cd 226.502†	-135.4	12.1	0.3352 µg/L	0.3352 ppb		19:48:03
2	Co 228.616†	-12.8	-3.4	-0.1669 µg/L	-0.1669 ppb		19:48:03
2	Cr 267.716†	-34.1	19.6	0.4310 µg/L	0.4310 ppb		19:48:03
2	Cu 324.752†	2392.5	-189.4	-1.3239 µg/L	-1.3239 ppb		19:47:43
2	Mn 257.610†	-233.6	19.8	0.0682 µg/L	0.0682 ppb		19:48:03
2	Mo 202.031†	1.3	8.8	0.9388 µg/L	0.9388 ppb		19:48:03
2	Ni 231.604†	308.4	-6.2	-0.3371 µg/L	-0.3371 ppb		19:48:03
2	P 214.914†	38.1	8.9	19.315 µg/L	19.315 ppb		19:48:03
2	Pb 220.353†	86.4	-14.2	-3.7968 µg/L	-3.7968 ppb		19:48:03

2	S 181.975 Axial†	18.4	2.9	12.528 µg/L	12.528 ppb	19:48:03
2	Sb 206.836†	29.9	1.8	1.7421 µg/L	1.7421 ppb	19:48:03
2	Se 196.026†	17.4	0.9	1.3573 µg/L	1.3573 ppb	19:48:03
2	SiO2†	1243.9	-56.0	-12.052 µg/L	-12.052 ppb	19:47:43
2	Si 251.611†	297.9	-26.9	-2.2125 µg/L	-2.2125 ppb	19:48:03
2	Sn 189.927†	-3.7	-2.7	-1.2451 µg/L	-1.2451 ppb	19:48:03
2	Ti 334.940†	113.7	-7.0	-0.0165 µg/L	-0.0165 ppb	19:47:43
2	Tl 190.801†	-21.7	3.4	4.7734 µg/L	4.7734 ppb	19:48:03
2	U 409.014†	-37.3	17.8	1.6161 µg/L	1.6161 ppb	19:47:43
2	V 292.402†	-50.7	-4.5	-0.0381 µg/L	-0.0381 ppb	19:47:43
2	Zn 213.857†	476.3	-18.3	-0.4528 µg/L	-0.4528 ppb	19:48:03
3	Sc RADIAL	56131.1	56131.1	103 %		19:46:34
3	Al 396.153Radial†	10.7	20.5	15.284 µg/L	15.284 ppb	19:46:34
3	Ca 317.933Radial†	181.6	-2.5	-2.4004 µg/L	-2.4004 ppb	19:46:55
3	Fe 238.204 Radial†	13.6	-1.3	-10.669 µg/L	-10.669 ppb	19:46:55
3	K 766.490 Radial†	173.8	40.6	28.846 µg/L	28.846 ppb	19:46:34
3	Mg 279.077 IEC†	10.5	-1.0	-9.5132 µg/L	-9.5132 ppb	19:46:55
3	Na 589.592 Radial†	587.6	29.4	9.6947 µg/L	9.6947 ppb	19:46:34
3	Sr 421.552†	41.1	0.4	0.0044 µg/L	0.0044 ppb	19:46:34
3	Sc 361.383	1993278.2	1993278.2	104.37 %		19:48:09
3	Y 371.029	1367625.5	1367625.5	104.41 %		19:48:09
3	Ag 328.068†	-556.8	31.0	0.2472 µg/L	0.2472 ppb	19:48:15
3	As 188.979†	0.5	-0.7	-1.3924 µg/L	-1.3924 ppb	19:48:35
3	B 249.677†	311.8	-32.7	-1.4217 µg/L	-1.4217 ppb	19:48:35
3	Ba 233.527†	-24.9	2.1	0.0565 µg/L	0.0565 ppb	19:48:35
3	Be 313.107†	-3343.9	236.6	0.1544 µg/L	0.1544 ppb	19:48:15
3	Cd 226.502†	-139.6	8.3	0.2308 µg/L	0.2308 ppb	19:48:35
3	Co 228.616†	-13.5	-4.1	-0.2026 µg/L	-0.2026 ppb	19:48:35
3	Cr 267.716†	-29.8	23.8	0.5241 µg/L	0.5241 ppb	19:48:35
3	Cu 324.752†	2398.4	-188.1	-1.3155 µg/L	-1.3155 ppb	19:48:15
3	Mn 257.610†	-235.9	18.1	0.0616 µg/L	0.0616 ppb	19:48:35
3	Mo 202.031†	-7.4	0.5	0.0513 µg/L	0.0513 ppb	19:48:35
3	Ni 231.604†	308.0	-7.0	-0.3852 µg/L	-0.3852 ppb	19:48:35
3	P 214.914†	25.9	-2.8	-5.9057 µg/L	-5.9057 ppb	19:48:35
3	Pb 220.353†	95.4	-5.8	-1.5343 µg/L	-1.5343 ppb	19:48:35
3	S 181.975 Axial†	16.1	0.6	2.8080 µg/L	2.8080 ppb	19:48:35
3	Sb 206.836†	23.7	-4.2	-4.1849 µg/L	-4.1849 ppb	19:48:35
3	Se 196.026†	19.8	3.2	4.8107 µg/L	4.8107 ppb	19:48:35
3	SiO2†	1250.9	-51.4	-11.079 µg/L	-11.079 ppb	19:48:15
3	Si 251.611†	298.1	-27.3	-2.2426 µg/L	-2.2426 ppb	19:48:35
3	Sn 189.927†	2.3	3.1	1.4084 µg/L	1.4084 ppb	19:48:35
3	Ti 334.940†	175.4	51.9	0.1256 µg/L	0.1256 ppb	19:48:15
3	Tl 190.801†	-26.8	-1.4	-1.9510 µg/L	-1.9510 ppb	19:48:35
3	U 409.014†	-48.8	6.9	0.6237 µg/L	0.6237 ppb	19:48:15
3	V 292.402†	-16.2	28.7	0.3071 µg/L	0.3071 ppb	19:48:15
3	Zn 213.857†	476.7	-18.8	-0.4644 µg/L	-0.4644 ppb	19:48:35

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1991719.6	104.29 %	0.103			0.10%
Sc RADIAL	56184.2	103 %	0.3			0.31%
Y 371.029	1367195.2	104.37 %	0.109			0.10%
Ag 328.068†	20.4	0.1617 µg/L	0.20583	0.1617 ppb	0.20583	127.26%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	5.4	4.0289 µg/L	10.76761	4.0289 ppb	10.76761	267.26%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-2.3	-4.4208 µg/L	4.50578	-4.4208 ppb	4.50578	101.92%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-17.9	-0.7790 µg/L	0.74170	-0.7790 ppb	0.74170	95.22%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	5.6	0.1452 µg/L	0.13851	0.1452 ppb	0.13851	95.38%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	228.6	0.1492 µg/L	0.01069	0.1492 ppb	0.01069	7.17%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.9	0.8027 µg/L	3.79444	0.8027 ppb	3.79444	472.69%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	14.5	0.3990 µg/L	0.20768	0.3990 ppb	0.20768	52.05%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-4.8	-0.2380 µg/L	0.09392	-0.2380 ppb	0.09392	39.46%

QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	16.9	0.3709 µg/L	0.19057 51.38%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-177.8	-1.2429 µg/L	0.13310 10.71%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.6	-5.3132 µg/L	5.08561 95.72%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	29.0	20.613 µg/L	10.6427 51.63%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.8	-7.7080 µg/L	3.15418 40.92%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	17.1	0.0589 µg/L	0.01100 18.69%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	3.0	0.3162 µg/L	0.54117 171.13%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	37.2	12.232 µg/L	6.6641 54.48%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-10.2	-0.5566 µg/L	0.33928 60.96%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	4.0	8.7689 µg/L	13.10740 149.48%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	-8.7	-2.3257 µg/L	1.27525 54.83%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	0.9	3.8739 µg/L	8.17318 210.98%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	-3.6	-3.5411 µg/L	4.99248 140.99%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	1.1	1.6243 µg/L	3.06159 188.48%
QC value within limits for Se 196.026	Recovery = Not calculated		
SiO2†	-53.5	-11.526 µg/L	0.4912 4.26%
QC value within limits for SiO2	Recovery = Not calculated		
Si 251.611†	-24.6	-2.0216 µg/L	0.35706 17.66%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	-1.5	-0.7104 µg/L	1.90848 268.66%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	2.1	0.0222 µg/L	0.25591 >999.9%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	44.7	0.1081 µg/L	0.11683 108.05%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	1.9	2.6841 µg/L	4.02062 149.79%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	29.4	2.6628 µg/L	2.71803 102.07%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	6.0	0.0698 µg/L	0.20578 294.74%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-17.9	-0.4421 µg/L	0.02911 6.58%
QC value within limits for Zn 213.857	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 52

Sample ID: 245981001|948737|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 340

Date Collected: 2/11/2010 20:03:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 245981001|948737|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56793.1	56793.1	104 %		20:03:41
1	Al 396.153Radial†	26.1	35.3	26.274 µg/L	26.274 ppb	20:03:41
1	Ca 317.933Radial†	225.2	37.3	35.118 µg/L	35.118 ppb	20:04:01
1	Fe 238.204 Radial†	18.2	3.0	25.387 µg/L	25.387 ppb	20:04:01
1	K 766.490 Radial†	391.5	247.8	176.14 µg/L	176.14 ppb	20:03:41
1	Mg 279.077 IEC†	10.6	-1.1	-9.8636 µg/L	-9.8636 ppb	20:04:01
1	Na 589.592 Radial†	887.4	310.9	102.34 µg/L	102.34 ppb	20:03:41
1	Sr 421.552†	13.1	-27.0	-0.2795 µg/L	-0.2795 ppb	20:03:41
1	Sc 361.383	1981801.4	1981801.4	103.77 %		20:05:03
1	Y 371.029	1358318.8	1358318.8	103.69 %		20:05:03
1	Ag 328.068†	-541.0	43.1	0.3436 µg/L	0.3436 ppb	20:05:09
1	As 188.979†	-0.8	-1.9	-3.7331 µg/L	-3.7331 ppb	20:05:29
1	B 249.677†	675.0	319.1	13.931 µg/L	13.931 ppb	20:05:09
1	Ba 233.527†	-3.2	23.0	0.5976 µg/L	0.5976 ppb	20:05:29
1	Be 313.107†	-3306.5	254.0	0.1657 µg/L	0.1657 ppb	20:05:09
1	Cd 226.502†	-138.0	9.1	0.2481 µg/L	0.2481 ppb	20:05:29
1	Co 228.616†	-12.6	-3.3	-0.1658 µg/L	-0.1658 ppb	20:05:29
1	Cr 267.716†	-29.5	24.0	0.5271 µg/L	0.5271 ppb	20:05:29
1	Cu 324.752†	2499.7	-77.2	-0.5356 µg/L	-0.5356 ppb	20:05:09
1	Mn 257.610†	10.6	254.3	0.8845 µg/L	0.8845 ppb	20:05:29
1	Mo 202.031†	-7.1	0.7	0.0792 µg/L	0.0792 ppb	20:05:29
1	Ni 231.604†	309.4	-4.1	-0.2210 µg/L	-0.2210 ppb	20:05:29
1	P 214.914†	29.9	1.2	2.5531 µg/L	2.5531 ppb	20:05:29
1	Pb 220.353†	98.3	-2.4	-0.6497 µg/L	-0.6497 ppb	20:05:29
1	S 181.975 Axial†	21.3	5.7	25.157 µg/L	25.157 ppb	20:05:29
1	Sb 206.836†	25.4	-2.5	-2.4897 µg/L	-2.4897 ppb	20:05:29
1	Se 196.026†	12.3	-4.0	-5.9562 µg/L	-5.9562 ppb	20:05:29
1	SiO2†	14558.2	12779.6	2752.2 µg/L	2752.2 ppb	20:05:09
1	Si 251.611†	16582.5	15667.5	1287.9 µg/L	1287.9 ppb	20:05:09
1	Sn 189.927†	-1.0	-0.1	-0.0489 µg/L	-0.0489 ppb	20:05:29
1	Ti 334.940†	371.5	241.9	0.5832 µg/L	0.5832 ppb	20:05:09
1	Tl 190.801†	-25.4	-0.2	-0.3008 µg/L	-0.3008 ppb	20:05:29
1	U 409.014†	-20.8	33.6	3.0366 µg/L	3.0366 ppb	20:05:09
1	V 292.402†	-49.5	-3.5	-0.0292 µg/L	-0.0292 ppb	20:05:09
1	Zn 213.857†	562.9	66.9	1.6729 µg/L	1.6729 ppb	20:05:29
2	Sc RADIAL	55931.9	55931.9	102 %		20:04:07
2	Al 396.153Radial†	16.2	26.0	19.354 µg/L	19.354 ppb	20:04:07
2	Ca 317.933Radial†	223.0	38.5	36.204 µg/L	36.204 ppb	20:04:27
2	Fe 238.204 Radial†	19.6	4.6	39.382 µg/L	39.382 ppb	20:04:27
2	K 766.490 Radial†	465.6	325.9	231.65 µg/L	231.65 ppb	20:04:07
2	Mg 279.077 IEC†	12.6	1.0	9.4744 µg/L	9.4744 ppb	20:04:27
2	Na 589.592 Radial†	860.5	297.7	97.999 µg/L	97.999 ppb	20:04:07
2	Sr 421.552†	57.5	16.6	0.1719 µg/L	0.1719 ppb	20:04:07
2	Sc 361.383	1985454.0	1985454.0	103.96 %		20:05:35
2	Y 371.029	1359971.3	1359971.3	103.82 %		20:05:35
2	Ag 328.068†	-561.6	24.3	0.1945 µg/L	0.1945 ppb	20:05:41
2	As 188.979†	2.9	1.6	3.1799 µg/L	3.1799 ppb	20:06:02
2	B 249.677†	662.3	305.7	13.339 µg/L	13.339 ppb	20:05:41
2	Ba 233.527†	-5.0	21.2	0.5526 µg/L	0.5526 ppb	20:06:02
2	Be 313.107†	-3335.1	232.4	0.1516 µg/L	0.1516 ppb	20:05:41
2	Cd 226.502†	-153.7	-5.7	-0.1621 µg/L	-0.1621 ppb	20:06:02
2	Co 228.616†	-16.0	-6.5	-0.3219 µg/L	-0.3219 ppb	20:06:02
2	Cr 267.716†	-17.8	35.3	0.7753 µg/L	0.7753 ppb	20:06:02
2	Cu 324.752†	2474.1	-106.3	-0.7367 µg/L	-0.7367 ppb	20:05:41
2	Mn 257.610†	24.0	267.2	0.9302 µg/L	0.9302 ppb	20:06:02
2	Mo 202.031†	-3.6	4.1	0.4390 µg/L	0.4390 ppb	20:06:02
2	Ni 231.604†	319.5	5.2	0.2826 µg/L	0.2826 ppb	20:06:02
2	P 214.914†	37.0	8.0	17.246 µg/L	17.246 ppb	20:06:02
2	Pb 220.353†	93.2	-7.5	-2.0089 µg/L	-2.0089 ppb	20:06:02

2	S 181.975 Axial†	21.9	6.3	27.476 µg/L	27.476 ppb	20:06:02
2	Sb 206.836†	24.8	-3.1	-3.0450 µg/L	-3.0450 ppb	20:06:02
2	Se 196.026†	14.8	-1.6	-2.3583 µg/L	-2.3583 ppb	20:06:02
2	SiO2†	14539.5	12735.7	2742.7 µg/L	2742.7 ppb	20:05:41
2	Si 251.611†	16429.3	15490.7	1273.4 µg/L	1273.4 ppb	20:05:41
2	Sn 189.927†	3.3	4.0	1.8584 µg/L	1.8584 ppb	20:06:02
2	Ti 334.940†	365.4	235.3	0.5659 µg/L	0.5659 ppb	20:05:41
2	Tl 190.801†	-24.6	0.7	0.9409 µg/L	0.9409 ppb	20:06:02
2	U 409.014†	-41.8	13.4	1.2084 µg/L	1.2084 ppb	20:05:41
2	V 292.402†	-61.7	-15.1	-0.1499 µg/L	-0.1499 ppb	20:05:41
2	Zn 213.857†	572.2	74.9	1.8669 µg/L	1.8669 ppb	20:06:02
3	Sc RADIAL	56225.2	56225.2	103 %		20:04:33
3	Al 396.153Radial†	27.7	37.0	27.581 µg/L	27.581 ppb	20:04:33
3	Ca 317.933Radial†	233.2	47.2	44.451 µg/L	44.451 ppb	20:04:53
3	Fe 238.204 Radial†	16.5	1.5	12.722 µg/L	12.722 ppb	20:04:53
3	K 766.490 Radial†	386.4	246.7	175.34 µg/L	175.34 ppb	20:04:33
3	Mg 279.077 IEC†	14.0	2.3	21.462 µg/L	21.462 ppb	20:04:53
3	Na 589.592 Radial†	895.6	327.4	107.80 µg/L	107.80 ppb	20:04:33
3	Sr 421.552†	42.7	1.9	0.0201 µg/L	0.0201 ppb	20:04:33
3	Sc 361.383	1983866.4	1983866.4	103.88 %		20:06:08
3	Y 371.029	1360017.3	1360017.3	103.82 %		20:06:08
3	Ag 328.068†	-502.5	80.8	0.6411 µg/L	0.6411 ppb	20:06:13
3	As 188.979†	-1.8	-2.9	-5.6702 µg/L	-5.6702 ppb	20:06:34
3	B 249.677†	674.0	317.3	13.863 µg/L	13.863 ppb	20:06:13
3	Ba 233.527†	-9.2	17.1	0.4458 µg/L	0.4458 ppb	20:06:34
3	Be 313.107†	-3370.7	195.6	0.1275 µg/L	0.1275 ppb	20:06:13
3	Cd 226.502†	-144.1	3.4	0.0911 µg/L	0.0911 ppb	20:06:34
3	Co 228.616†	-14.6	-5.2	-0.2580 µg/L	-0.2580 ppb	20:06:34
3	Cr 267.716†	-29.6	23.8	0.5245 µg/L	0.5245 ppb	20:06:34
3	Cu 324.752†	2523.1	-57.1	-0.3972 µg/L	-0.3972 ppb	20:06:13
3	Mn 257.610†	-2.2	242.0	0.8388 µg/L	0.8388 ppb	20:06:34
3	Mo 202.031†	-12.6	-4.6	-0.4926 µg/L	-0.4926 ppb	20:06:34
3	Ni 231.604†	307.7	-6.0	-0.3253 µg/L	-0.3253 ppb	20:06:34
3	P 214.914†	34.7	5.8	12.419 µg/L	12.419 ppb	20:06:34
3	Pb 220.353†	96.5	-4.3	-1.1460 µg/L	-1.1460 ppb	20:06:34
3	S 181.975 Axial†	29.5	13.6	59.636 µg/L	59.636 ppb	20:06:34
3	Sb 206.836†	20.5	-7.2	-7.1094 µg/L	-7.1094 ppb	20:06:34
3	Se 196.026†	23.1	6.4	9.8269 µg/L	9.8269 ppb	20:06:34
3	SiO2†	14301.5	12517.8	2695.8 µg/L	2695.8 ppb	20:06:13
3	Si 251.611†	16255.2	15335.8	1260.7 µg/L	1260.7 ppb	20:06:13
3	Sn 189.927†	1.6	2.4	1.0954 µg/L	1.0954 ppb	20:06:34
3	Ti 334.940†	363.7	234.0	0.5618 µg/L	0.5618 ppb	20:06:13
3	Tl 190.801†	-20.6	4.4	6.1697 µg/L	6.1697 ppb	20:06:34
3	U 409.014†	10.6	63.8	5.7718 µg/L	5.7718 ppb	20:06:13
3	V 292.402†	-56.4	-10.1	-0.1030 µg/L	-0.1030 ppb	20:06:13
3	Zn 213.857†	562.8	66.2	1.6543 µg/L	1.6543 ppb	20:06:34

Mean Data: 245981001|948737|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1983707.3	103.87 %	0.096			0.09%
Sc RADIAL	56316.7	103 %	0.8			0.78%
Y 371.029	1359435.8	103.78 %	0.074			0.07%
Ag 328.068†	49.4	0.3931 µg/L	0.22740	0.3931 ppb	0.22740	57.85%
Al 396.153Radial†	32.7	24.403 µg/L	4.4210	24.403 ppb	4.4210	18.12%
As 188.979†	-1.1	-2.0745 µg/L	4.65234	-2.0745 ppb	4.65234	224.26%
B 249.677†	314.0	13.711 µg/L	0.3243	13.711 ppb	0.3243	2.37%
Ba 233.527†	20.4	0.5320 µg/L	0.07800	0.5320 ppb	0.07800	14.66%
Be 313.107†	227.3	0.1482 µg/L	0.01930	0.1482 ppb	0.01930	13.02%
Ca 317.933Radial†	41.0	38.591 µg/L	5.1038	38.591 ppb	5.1038	13.23%
Cd 226.502†	2.2	0.0590 µg/L	0.20700	0.0590 ppb	0.20700	350.66%
Co 228.616†	-5.0	-0.2486 µg/L	0.07848	-0.2486 ppb	0.07848	31.57%
Cr 267.716†	27.7	0.6090 µg/L	0.14409	0.6090 ppb	0.14409	23.66%
Cu 324.752†	-80.2	-0.5565 µg/L	0.17072	-0.5565 ppb	0.17072	30.68%
Fe 238.204 Radial†	3.0	25.830 µg/L	13.3355	25.830 ppb	13.3355	51.63%
K 766.490 Radial†	273.5	194.38 µg/L	32.279	194.38 ppb	32.279	16.61%
Mg 279.077 IEC†	0.8	7.0243 µg/L	15.80594	7.0243 ppb	15.80594	225.02%
Mn 257.610†	254.5	0.8845 µg/L	0.04570	0.8845 ppb	0.04570	5.17%
Mo 202.031†	0.1	0.0086 µg/L	0.46982	0.0086 ppb	0.46982	>999.9%
Na 589.592 Radial†	312.0	102.71 µg/L	4.909	102.71 ppb	4.909	4.78%

Ni 231.604†	-1.6	-0.0879 µg/L	0.32505	-0.0879 ppb	0.32505	369.82%
P 214.914†	5.0	10.740 µg/L	7.4892	10.740 ppb	7.4892	69.73%
Pb 220.353†	-4.7	-1.2682 µg/L	0.68777	-1.2682 ppb	0.68777	54.23%
S 181.975 Axial†	8.5	37.423 µg/L	19.2718	37.423 ppb	19.2718	51.50%
Sb 206.836†	-4.3	-4.2147 µg/L	2.52220	-4.2147 ppb	2.52220	59.84%
Se 196.026†	0.3	0.5041 µg/L	8.27178	0.5041 ppb	8.27178	>999.9%
SiO2†	12677.7	2730.2 µg/L	30.19	2730.2 ppb	30.19	1.11%
Si 251.611†	15498.0	1274.0 µg/L	13.64	1274.0 ppb	13.64	1.07%
Sn 189.927†	2.1	0.9683 µg/L	0.95997	0.9683 ppb	0.95997	99.14%
Sr 421.552†	-2.8	-0.0291 µg/L	0.22969	-0.0291 ppb	0.22969	788.18%
Ti 334.940†	237.1	0.5703 µg/L	0.01137	0.5703 ppb	0.01137	1.99%
Tl 190.801†	1.6	2.2699 µg/L	3.43390	2.2699 ppb	3.43390	151.28%
U 409.014†	36.9	3.3389 µg/L	2.29669	3.3389 ppb	2.29669	68.79%
V 292.402†	-9.6	-0.0941 µg/L	0.06086	-0.0941 ppb	0.06086	64.70%
Zn 213.857†	69.3	1.7314 µg/L	0.11776	1.7314 ppb	0.11776	6.80%

Sequence No.: 53

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 2/11/2010 20:06:44

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56942.5	56942.5	104 %		20:07:20
1	Al 396.153Radial†	6750.2	6479.6	4819.0 µg/L	4819.0 ppb	20:07:41
1	Ca 317.933Radial†	5453.5	5047.5	4752.6 µg/L	4752.6 ppb	20:07:41
1	Fe 238.204 Radial†	600.4	561.0	4764.9 µg/L	4764.9 ppb	20:07:41
1	K 766.490 Radial†	7140.8	6715.4	4773.3 µg/L	4773.3 ppb	20:07:20
1	Mg 279.077 IEC†	558.8	524.3	4882.8 µg/L	4882.8 ppb	20:07:41
1	Na 589.592 Radial†	31379.2	29532.3	9722.1 µg/L	9722.1 ppb	20:07:20
1	Sr 421.552†	47923.4	45890.8	475.71 µg/L	475.71 ppb	20:07:20
1	Sc 361.383	1997110.3	1997110.3	104.57 %		20:08:44
1	Y 371.029	1366245.8	1366245.8	104.30 %		20:08:44
1	Ag 328.068†	63028.6	60838.9	486.24 µg/L	486.24 ppb	20:08:50
1	As 188.979†	264.1	251.4	490.37 µg/L	490.37 ppb	20:09:10
1	B 249.677†	11700.4	10857.6	472.80 µg/L	472.80 ppb	20:08:50
1	Ba 233.527†	19297.5	18480.3	482.07 µg/L	482.07 ppb	20:08:50
1	Be 313.107†	767522.7	737423.7	481.39 µg/L	481.39 ppb	20:08:44
1	Cd 226.502†	18128.7	17478.6	482.15 µg/L	482.15 ppb	20:08:50
1	Co 228.616†	10328.3	9885.8	485.96 µg/L	485.96 ppb	20:08:50
1	Cr 267.716†	23066.4	22110.8	486.65 µg/L	486.65 ppb	20:08:50
1	Cu 324.752†	74922.7	69162.6	483.78 µg/L	483.78 ppb	20:08:50
1	Mn 257.610†	148210.1	141977.7	492.09 µg/L	492.09 ppb	20:08:44
1	Mo 202.031†	4970.4	4760.7	508.25 µg/L	508.25 ppb	20:09:10
1	Ni 231.604†	9599.0	8877.3	484.85 µg/L	484.85 ppb	20:08:50
1	P 214.914†	1239.8	1158.0	2440.4 µg/L	2440.4 ppb	20:09:10
1	Pb 220.353†	2032.4	1846.4	492.88 µg/L	492.88 ppb	20:09:10
1	Sb 181.975 Axial†	252.7	226.8	993.68 µg/L	993.68 ppb	20:09:10
1	Sb 206.836†	559.2	507.8	502.18 µg/L	502.18 ppb	20:09:10
1	Se 196.026†	353.9	322.6	499.11 µg/L	499.11 ppb	20:09:10
1	SiO2†	26266.3	23868.5	5140.2 µg/L	5140.2 ppb	20:08:50
1	Si 251.611†	30881.9	29219.5	2402.0 µg/L	2402.0 ppb	20:08:50
1	Sn 189.927†	1160.9	1111.0	511.04 µg/L	511.04 ppb	20:09:10
1	Ti 334.940†	211075.5	201735.7	484.95 µg/L	484.95 ppb	20:08:44
1	Tl 190.801†	335.9	345.5	488.04 µg/L	488.04 ppb	20:09:10
1	U 409.014†	5659.0	5465.3	493.86 µg/L	493.86 ppb	20:08:50
1	V 292.402†	47264.8	45243.6	488.29 µg/L	488.29 ppb	20:08:50
1	Zn 213.857†	20837.6	19451.4	482.30 µg/L	482.30 ppb	20:08:50
2	Sc RADIAL	56409.7	56409.7	103 %		20:07:46
2	Al 396.153Radial†	6758.8	6549.0	4870.9 µg/L	4870.9 ppb	20:08:07
2	Ca 317.933Radial†	5494.9	5136.9	4836.7 µg/L	4836.7 ppb	20:08:07
2	Fe 238.204 Radial†	605.0	570.8	4848.5 µg/L	4848.5 ppb	20:08:07
2	K 766.490 Radial†	7175.4	6813.5	4843.0 µg/L	4843.0 ppb	20:07:46
2	Mg 279.077 IEC†	565.5	535.8	4989.7 µg/L	4989.7 ppb	20:08:07
2	Na 589.592 Radial†	31167.2	29611.2	9748.1 µg/L	9748.1 ppb	20:07:46
2	Sr 421.552†	47693.8	46102.5	477.91 µg/L	477.91 ppb	20:07:46
2	Sc 361.383	1996473.0	1996473.0	104.54 %		20:09:17
2	Y 371.029	1365976.8	1365976.8	104.28 %		20:09:17
2	Ag 328.068†	63356.2	61171.5	488.90 µg/L	488.90 ppb	20:09:23
2	As 188.979†	265.4	252.7	492.96 µg/L	492.96 ppb	20:09:43
2	B 249.677†	11790.3	10947.2	476.67 µg/L	476.67 ppb	20:09:23
2	Ba 233.527†	19374.2	18559.5	484.14 µg/L	484.14 ppb	20:09:23
2	Be 313.107†	761432.1	731831.7	477.74 µg/L	477.74 ppb	20:09:17
2	Cd 226.502†	18272.2	17621.4	486.09 µg/L	486.09 ppb	20:09:23
2	Co 228.616†	10339.5	9899.7	486.64 µg/L	486.64 ppb	20:09:23
2	Cr 267.716†	23187.0	22233.3	489.35 µg/L	489.35 ppb	20:09:23
2	Cu 324.752†	75285.0	69532.0	486.37 µg/L	486.37 ppb	20:09:23
2	Mn 257.610†	147018.2	140882.8	488.30 µg/L	488.30 ppb	20:09:17
2	Mo 202.031†	4907.1	4701.7	501.95 µg/L	501.95 ppb	20:09:43
2	Ni 231.604†	9622.8	8903.0	486.25 µg/L	486.25 ppb	20:09:23
2	P 214.914†	1220.2	1139.7	2400.7 µg/L	2400.7 ppb	20:09:43
2	Pb 220.353†	2020.4	1835.5	489.96 µg/L	489.96 ppb	20:09:43

2	S 181.975 Axial†	249.1	223.5	979.20 µg/L	979.20 ppb	20:09:43
2	Sb 206.836†	560.4	509.1	503.33 µg/L	503.33 ppb	20:09:43
2	Se 196.026†	351.0	319.9	495.14 µg/L	495.14 ppb	20:09:43
2	SiO2†	26327.8	23935.4	5154.6 µg/L	5154.6 ppb	20:09:23
2	Si 251.611†	31017.5	29358.7	2413.4 µg/L	2413.4 ppb	20:09:23
2	Sn 189.927†	1146.8	1097.9	505.00 µg/L	505.00 ppb	20:09:43
2	Ti 334.940†	209321.5	200122.3	481.06 µg/L	481.06 ppb	20:09:17
2	Tl 190.801†	343.4	352.8	498.21 µg/L	498.21 ppb	20:09:43
2	U 409.014†	5590.8	5401.8	488.10 µg/L	488.10 ppb	20:09:23
2	V 292.402†	47490.4	45473.8	490.70 µg/L	490.70 ppb	20:09:23
2	Zn 213.857†	20893.3	19511.1	483.77 µg/L	483.77 ppb	20:09:23
3	Sc RADIAL	57472.2	57472.2	105 %		20:08:12
3	Al 396.153Radial†	6740.6	6410.8	4769.5 µg/L	4769.5 ppb	20:08:33
3	Ca 317.933Radial†	5456.3	5002.0	4709.7 µg/L	4709.7 ppb	20:08:33
3	Fe 238.204 Radial†	608.4	563.2	4782.9 µg/L	4782.9 ppb	20:08:33
3	K 766.490 Radial†	7228.0	6735.1	4787.3 µg/L	4787.3 ppb	20:08:12
3	Mg 279.077 IEC†	560.3	520.7	4848.2 µg/L	4848.2 ppb	20:08:33
3	Na 589.592 Radial†	31427.6	29301.1	9646.0 µg/L	9646.0 ppb	20:08:12
3	Sr 421.552†	48320.2	45844.2	475.23 µg/L	475.23 ppb	20:08:12
3	Sc 361.383	1990939.7	1990939.7	104.25 %		20:09:51
3	Y 371.029	1362789.8	1362789.8	104.04 %		20:09:51
3	Ag 328.068†	59813.6	57941.7	462.97 µg/L	462.97 ppb	20:09:56
3	As 188.979†	228.8	218.3	425.89 µg/L	425.89 ppb	20:10:17
3	B 249.677†	11049.5	10268.0	446.94 µg/L	446.94 ppb	20:09:56
3	Ba 233.527†	17851.9	17150.7	447.37 µg/L	447.37 ppb	20:09:56
3	Be 313.107†	719449.8	693583.9	452.78 µg/L	452.78 ppb	20:09:51
3	Cd 226.502†	16778.6	16237.3	447.87 µg/L	447.87 ppb	20:09:56
3	Co 228.616†	9445.5	9069.5	445.78 µg/L	445.78 ppb	20:09:56
3	Cr 267.716†	20616.8	19829.4	436.45 µg/L	436.45 ppb	20:09:56
3	Cu 324.752†	68837.1	63547.0	444.55 µg/L	444.55 ppb	20:09:56
3	Mn 257.610†	138989.4	133571.8	462.98 µg/L	462.98 ppb	20:09:51
3	Mo 202.031†	4137.7	3976.7	424.58 µg/L	424.58 ppb	20:10:17
3	Ni 231.604†	8822.5	8161.0	445.73 µg/L	445.73 ppb	20:09:56
3	P 214.914†	1060.6	989.8	2082.0 µg/L	2082.0 ppb	20:10:17
3	Pb 220.353†	1778.7	1609.0	429.41 µg/L	429.41 ppb	20:10:17
3	S 181.975 Axial†	221.0	197.1	863.74 µg/L	863.74 ppb	20:10:17
3	Sb 206.836†	483.5	436.9	431.61 µg/L	431.61 ppb	20:10:17
3	Se 196.026†	316.1	287.4	445.59 µg/L	445.59 ppb	20:10:17
3	SiO2†	24611.0	22358.5	4815.0 µg/L	4815.0 ppb	20:09:56
3	Si 251.611†	28930.7	27439.4	2255.7 µg/L	2255.7 ppb	20:09:56
3	Sn 189.927†	943.6	906.1	416.76 µg/L	416.76 ppb	20:10:17
3	Ti 334.940†	196865.3	188730.0	453.67 µg/L	453.67 ppb	20:09:51
3	Tl 190.801†	309.3	321.0	453.52 µg/L	453.52 ppb	20:10:17
3	U 409.014†	5049.6	4897.5	442.45 µg/L	442.45 ppb	20:09:56
3	V 292.402†	42971.8	41265.5	445.08 µg/L	445.08 ppb	20:09:56
3	Zn 213.857†	19124.6	17870.0	443.04 µg/L	443.04 ppb	20:09:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1994841.0	104.45 %	0.178			0.17%
Sc RADIAL	56941.5	104 %	1.0			0.93%
Y 371.029	1365004.1	104.21 %	0.147			0.14%
Ag 328.068†	59984.0	479.37 µg/L	14.264	479.37 ppb	14.264	2.98%
QC value within limits for Ag 328.068 Recovery = 95.87%						
Al 396.153Radial†	6479.8	4819.8 µg/L	50.70	4819.8 ppb	50.70	1.05%
QC value within limits for Al 396.153Radial Recovery = 96.40%						
As 188.979†	240.8	469.74 µg/L	37.997	469.74 ppb	37.997	8.09%
QC value within limits for As 188.979 Recovery = 93.95%						
B 249.677†	10690.9	465.47 µg/L	16.165	465.47 ppb	16.165	3.47%
QC value within limits for B 249.677 Recovery = 93.09%						
Ba 233.527†	18063.5	471.19 µg/L	20.654	471.19 ppb	20.654	4.38%
QC value within limits for Ba 233.527 Recovery = 94.24%						
Be 313.107†	720946.5	470.64 µg/L	15.576	470.64 ppb	15.576	3.31%
QC value within limits for Be 313.107 Recovery = 94.13%						
Ca 317.933Radial†	5062.2	4766.3 µg/L	64.62	4766.3 ppb	64.62	1.36%
QC value within limits for Ca 317.933Radial Recovery = 95.33%						
Cd 226.502†	17112.5	472.04 µg/L	21.023	472.04 ppb	21.023	4.45%
QC value within limits for Cd 226.502 Recovery = 94.41%						
Co 228.616†	9618.4	472.79 µg/L	23.399	472.79 ppb	23.399	4.95%

Cr	267.716†	21391.1	470.82 µg/L	29.796	470.82 ppb	29.796	6.33%
	QC value within limits for Cr 267.716 Recovery = 94.16%						
Cu	324.752†	67413.9	471.57 µg/L	23.430	471.57 ppb	23.430	4.97%
	QC value within limits for Cu 324.752 Recovery = 94.31%						
Fe	238.204 Radial†	565.0	4798.8 µg/L	43.99	4798.8 ppb	43.99	0.92%
	QC value within limits for Fe 238.204 Radial Recovery = 95.98%						
K	766.490 Radial†	6754.7	4801.2 µg/L	36.89	4801.2 ppb	36.89	0.77%
	QC value within limits for K 766.490 Radial Recovery = 96.02%						
Mg	279.077 IEC†	527.0	4906.9 µg/L	73.74	4906.9 ppb	73.74	1.50%
	QC value within limits for Mg 279.077 IEC Recovery = 98.14%						
Mn	257.610†	138810.8	481.12 µg/L	15.825	481.12 ppb	15.825	3.29%
	QC value within limits for Mn 257.610 Recovery = 96.22%						
Mo	202.031†	4479.7	478.26 µg/L	46.598	478.26 ppb	46.598	9.74%
	QC value within limits for Mo 202.031 Recovery = 95.65%						
Na	589.592 Radial†	29481.5	9705.4 µg/L	53.07	9705.4 ppb	53.07	0.55%
	QC value within limits for Na 589.592 Radial Recovery = 97.05%						
Ni	231.604†	8647.1	472.28 µg/L	23.002	472.28 ppb	23.002	4.87%
	QC value within limits for Ni 231.604 Recovery = 94.46%						
P	214.914†	1095.8	2307.7 µg/L	196.48	2307.7 ppb	196.48	8.51%
	QC value within limits for P 214.914 Recovery = 92.31%						
Pb	220.353†	1763.7	470.75 µg/L	35.831	470.75 ppb	35.831	7.61%
	QC value within limits for Pb 220.353 Recovery = 94.15%						
S	181.975 Axial†	215.8	945.54 µg/L	71.212	945.54 ppb	71.212	7.53%
	QC value within limits for S 181.975 Axial Recovery = 94.55%						
Sb	206.836†	484.6	479.04 µg/L	41.080	479.04 ppb	41.080	8.58%
	QC value within limits for Sb 206.836 Recovery = 95.81%						
Se	196.026†	310.0	479.95 µg/L	29.823	479.95 ppb	29.823	6.21%
	QC value within limits for Se 196.026 Recovery = 95.99%						
SiO2†		23387.4	5036.6 µg/L	192.04	5036.6 ppb	192.04	3.81%
	QC value within limits for SiO2 Recovery = 94.19%						
Si	251.611†	28672.5	2357.0 µg/L	87.98	2357.0 ppb	87.98	3.73%
	QC value within limits for Si 251.611 Recovery = 94.28%						
Sn	189.927†	1038.3	477.60 µg/L	52.775	477.60 ppb	52.775	11.05%
	QC value within limits for Sn 189.927 Recovery = 95.52%						
Sr	421.552†	45945.8	476.28 µg/L	1.427	476.28 ppb	1.427	0.30%
	QC value within limits for Sr 421.552 Recovery = 95.26%						
Ti	334.940†	196862.7	473.23 µg/L	17.050	473.23 ppb	17.050	3.60%
	QC value within limits for Ti 334.940 Recovery = 94.65%						
Tl	190.801†	339.7	479.92 µg/L	23.425	479.92 ppb	23.425	4.88%
	QC value within limits for Tl 190.801 Recovery = 95.98%						
U	409.014†	5254.9	474.80 µg/L	28.164	474.80 ppb	28.164	5.93%
	QC value within limits for U 409.014 Recovery = 94.96%						
V	292.402†	43994.3	474.69 µg/L	25.672	474.69 ppb	25.672	5.41%
	QC value within limits for V 292.402 Recovery = 94.94%						
Zn	213.857†	18944.2	469.70 µg/L	23.098	469.70 ppb	23.098	4.92%
	QC value within limits for Zn 213.857 Recovery = 93.94%						

All analyte(s) passed QC.

Sequence No.: 54

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 2/11/2010 20:10:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc RADIAL	56659.4	56659.4	104 %		20:10:59
1	Al 396.153Radial†	-34.5	-23.1	-17.229 µg/L	-17.229 ppb	20:10:59
1	Ca 317.933Radial†	185.2	-0.8	-0.7364 µg/L	-0.7364 ppb	20:11:19
1	Fe 238.204 Radial†	15.5	0.4	3.7111 µg/L	3.7111 ppb	20:11:19
1	K 766.490 Radial†	206.6	70.6	50.163 µg/L	50.163 ppb	20:10:59
1	Mg 279.077 IEC†	8.1	-3.5	-32.649 µg/L	-32.649 ppb	20:11:19
1	Na 589.592 Radial†	618.2	53.6	17.641 µg/L	17.641 ppb	20:10:59
1	Sr 421.552†	7.1	-32.7	-0.3390 µg/L	-0.3390 ppb	20:10:59
1	Sc 361.383	1969865.1	1969865.1	103.14 %		20:12:22
1	Y 371.029	1352232.0	1352232.0	103.23 %		20:12:22
1	Ag 328.068†	-590.3	-7.8	-0.0586 µg/L	-0.0586 ppb	20:12:27
1	As 188.979†	-2.7	-3.7	-7.3059 µg/L	-7.3059 ppb	20:12:48
1	B 249.677†	327.3	-14.1	-0.6180 µg/L	-0.6180 ppb	20:12:48
1	Ba 233.527†	-20.7	5.9	0.1552 µg/L	0.1552 ppb	20:12:48
1	Be 313.107†	-3325.3	216.5	0.1414 µg/L	0.1414 ppb	20:12:27
1	Cd 226.502†	-131.0	15.1	0.4157 µg/L	0.4157 ppb	20:12:48
1	Co 228.616†	-10.2	-1.0	-0.0509 µg/L	-0.0509 ppb	20:12:48
1	Cr 267.716†	-35.9	17.6	0.3870 µg/L	0.3870 ppb	20:12:48
1	Cu 324.752†	2456.0	-104.9	-0.7325 µg/L	-0.7325 ppb	20:12:27
1	Mn 257.610†	-254.6	-2.7	-0.0075 µg/L	-0.0075 ppb	20:12:48
1	Mo 202.031†	-3.1	4.5	0.4855 µg/L	0.4855 ppb	20:12:48
1	Ni 231.604†	302.7	-8.8	-0.4785 µg/L	-0.4785 ppb	20:12:48
1	P 214.914†	28.8	0.3	0.6377 µg/L	0.6377 ppb	20:12:48
1	Pb 220.353†	100.4	0.1	0.0373 µg/L	0.0373 ppb	20:12:48
1	S 181.975 Axial†	15.9	0.6	2.7080 µg/L	2.7080 ppb	20:12:48
1	Sb 206.836†	20.6	-7.0	-6.8374 µg/L	-6.8374 ppb	20:12:48
1	Se 196.026†	19.3	2.8	4.3630 µg/L	4.3630 ppb	20:12:48
1	SiO2†	1240.9	-46.9	-10.106 µg/L	-10.106 ppb	20:12:27
1	Si 251.611†	312.6	-9.8	-0.8084 µg/L	-0.8084 ppb	20:12:48
1	Sn 189.927†	-1.6	-0.7	-0.3378 µg/L	-0.3378 ppb	20:12:48
1	Ti 334.940†	146.3	25.8	0.0645 µg/L	0.0645 ppb	20:12:27
1	Tl 190.801†	-19.3	5.6	7.7671 µg/L	7.7671 ppb	20:12:48
1	U 409.014†	-42.1	12.8	1.1542 µg/L	1.1542 ppb	20:12:27
1	V 292.402†	-0.1	44.1	0.4765 µg/L	0.4765 ppb	20:12:27
1	Zn 213.857†	476.2	-13.8	-0.3400 µg/L	-0.3400 ppb	20:12:48
2	Sc RADIAL	56311.6	56311.6	103 %		20:11:25
2	Al 396.153Radial†	-11.1	-0.7	-0.4964 µg/L	-0.4964 ppb	20:11:25
2	Ca 317.933Radial†	182.9	-1.9	-1.7833 µg/L	-1.7833 ppb	20:11:45
2	Fe 238.204 Radial†	16.1	1.1	8.9693 µg/L	8.9693 ppb	20:11:45
2	K 766.490 Radial†	135.0	2.4	1.7375 µg/L	1.7375 ppb	20:11:25
2	Mg 279.077 IEC†	9.0	-2.6	-24.083 µg/L	-24.083 ppb	20:11:45
2	Na 589.592 Radial†	609.7	49.0	16.131 µg/L	16.131 ppb	20:11:25
2	Sr 421.552†	43.9	3.0	0.0309 µg/L	0.0309 ppb	20:11:25
2	Sc 361.383	1993246.1	1993246.1	104.37 %		20:12:54
2	Y 371.029	1369824.9	1369824.9	104.57 %		20:12:54
2	Ag 328.068†	-496.4	88.9	0.7074 µg/L	0.7074 ppb	20:12:59
2	As 188.979†	-2.4	-3.4	-6.6828 µg/L	-6.6828 ppb	20:13:20
2	B 249.677†	317.7	-27.1	-1.1866 µg/L	-1.1866 ppb	20:13:20
2	Ba 233.527†	-24.2	2.8	0.0739 µg/L	0.0739 ppb	20:13:20
2	Be 313.107†	-3271.8	305.5	0.1995 µg/L	0.1995 ppb	20:12:59
2	Cd 226.502†	-139.8	8.1	0.2223 µg/L	0.2223 ppb	20:13:20
2	Co 228.616†	-3.3	5.7	0.2808 µg/L	0.2808 ppb	20:13:20
2	Cr 267.716†	-45.4	8.9	0.1956 µg/L	0.1956 ppb	20:13:20
2	Cu 324.752†	2435.6	-152.4	-1.0631 µg/L	-1.0631 ppb	20:12:59
2	Mn 257.610†	-234.4	19.5	0.0698 µg/L	0.0698 ppb	20:13:20
2	Mo 202.031†	-9.1	-1.2	-0.1266 µg/L	-0.1266 ppb	20:13:20
2	Ni 231.604†	294.8	-19.7	-1.0788 µg/L	-1.0788 ppb	20:13:20
2	P 214.914†	30.0	1.1	2.4718 µg/L	2.4718 ppb	20:13:20
2	Pb 220.353†	93.1	-8.0	-2.1208 µg/L	-2.1208 ppb	20:13:20

2	S 181.975 Axial†	16.5	1.0	4.2685 µg/L	4.2685 ppb	20:13:20
2	Sb 206.836†	17.7	-10.0	-9.8534 µg/L	-9.8534 ppb	20:13:20
2	Se 196.026†	12.6	-3.8	-5.7175 µg/L	-5.7175 ppb	20:13:20
2	SiO2†	1249.7	-52.6	-11.333 µg/L	-11.333 ppb	20:12:59
2	Si 251.611†	320.2	-6.0	-0.4973 µg/L	-0.4973 ppb	20:13:20
2	Sn 189.927†	2.8	3.5	1.6248 µg/L	1.6248 ppb	20:13:20
2	Ti 334.940†	188.9	64.9	0.1579 µg/L	0.1579 ppb	20:12:59
2	Tl 190.801†	-28.5	-3.0	-4.1956 µg/L	-4.1956 ppb	20:13:20
2	U 409.014†	-69.7	-13.1	-1.1905 µg/L	-1.1905 ppb	20:12:59
2	V 292.402†	-23.7	21.5	0.2285 µg/L	0.2285 ppb	20:12:59
2	Zn 213.857†	474.3	-21.1	-0.5199 µg/L	-0.5199 ppb	20:13:20
3	Sc RADIAL	56279.9	56279.9	103 %		20:11:51
3	Al 396.153Radial†	-12.9	-2.4	-1.8112 µg/L	-1.8112 ppb	20:11:51
3	Ca 317.933Radial†	188.4	3.5	3.3406 µg/L	3.3406 ppb	20:12:11
3	Fe 238.204 Radial†	17.4	2.4	20.436 µg/L	20.436 ppb	20:12:11
3	K 766.490 Radial†	198.2	63.7	45.307 µg/L	45.307 ppb	20:11:51
3	Mg 279.077 IEC†	8.4	-3.1	-29.101 µg/L	-29.101 ppb	20:12:11
3	Na 589.592 Radial†	580.8	21.4	7.0316 µg/L	7.0316 ppb	20:11:51
3	Sr 421.552†	36.6	-4.1	-0.0421 µg/L	-0.0421 ppb	20:11:51
3	Sc 361.383	2002874.1	2002874.1	104.87 %		20:13:26
3	Y 371.029	1375774.7	1375774.7	105.03 %		20:13:26
3	Ag 328.068†	-572.9	18.2	0.1450 µg/L	0.1450 ppb	20:13:32
3	As 188.979†	-1.7	-2.8	-5.4427 µg/L	-5.4427 ppb	20:13:52
3	B 249.677†	315.7	-30.5	-1.3417 µg/L	-1.3417 ppb	20:13:52
3	Ba 233.527†	-28.2	-0.8	-0.0221 µg/L	-0.0221 ppb	20:13:52
3	Be 313.107†	-3166.3	421.2	0.2751 µg/L	0.2751 ppb	20:13:32
3	Cd 226.502†	-127.4	20.6	0.5649 µg/L	0.5649 ppb	20:13:52
3	Co 228.616†	-19.4	-9.7	-0.4770 µg/L	-0.4770 ppb	20:13:52
3	Cr 267.716†	-37.3	16.8	0.3689 µg/L	0.3689 ppb	20:13:52
3	Cu 324.752†	2426.7	-172.1	-1.1996 µg/L	-1.1996 ppb	20:13:32
3	Mn 257.610†	-224.6	30.0	0.1076 µg/L	0.1076 ppb	20:13:52
3	Mo 202.031†	-4.1	3.6	0.3852 µg/L	0.3852 ppb	20:13:52
3	Ni 231.604†	290.3	-25.4	-1.3870 µg/L	-1.3870 ppb	20:13:52
3	P 214.914†	33.5	4.4	9.4816 µg/L	9.4816 ppb	20:13:52
3	Pb 220.353†	90.7	-10.7	-2.8672 µg/L	-2.8672 ppb	20:13:52
3	S 181.975 Axial†	18.5	2.8	12.161 µg/L	12.161 ppb	20:13:52
3	Sb 206.836†	24.3	-3.8	-3.7594 µg/L	-3.7594 ppb	20:13:52
3	Se 196.026†	15.9	-0.7	-0.9888 µg/L	-0.9888 ppb	20:13:52
3	SiO2†	1207.7	-98.4	-21.190 µg/L	-21.190 ppb	20:13:32
3	Si 251.611†	302.6	-24.3	-2.0003 µg/L	-2.0003 ppb	20:13:52
3	Sn 189.927†	0.7	1.5	0.6894 µg/L	0.6894 ppb	20:13:52
3	Ti 334.940†	101.8	-19.1	-0.0435 µg/L	-0.0435 ppb	20:13:32
3	Tl 190.801†	-25.1	0.4	0.5052 µg/L	0.5052 ppb	20:13:52
3	U 409.014†	-6.5	47.4	4.2901 µg/L	4.2901 ppb	20:13:32
3	V 292.402†	-56.7	-9.8	-0.0938 µg/L	-0.0938 ppb	20:13:32
3	Zn 213.857†	464.1	-33.0	-0.8147 µg/L	-0.8147 ppb	20:13:52

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1988661.8	104.13 %	0.889			0.85%
Sc RADIAL	56417.0	103 %	0.4			0.37%
Y 371.029	1365943.9	104.28 %	0.935			0.90%
Ag 328.068†	33.1	0.2646 µg/L	0.39674	0.2646 ppb	0.39674	149.94%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-8.7	-6.5121 µg/L	9.30422	-6.5121 ppb	9.30422	142.88%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	-3.3	-6.4771 µg/L	0.94849	-6.4771 ppb	0.94849	14.64%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	-23.9	-1.0488 µg/L	0.38103	-1.0488 ppb	0.38103	36.33%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	2.6	0.0690 µg/L	0.08875	0.0690 ppb	0.08875	128.64%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	314.4	0.2053 µg/L	0.06705	0.2053 ppb	0.06705	32.66%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.3	0.2736 µg/L	2.70720	0.2736 ppb	2.70720	989.37%
QC value within limits for Ca 317.933Radial Recovery = Not calculated						
Cd 226.502†	14.6	0.4010 µg/L	0.17178	0.4010 ppb	0.17178	42.84%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-1.7	-0.0824 µg/L	0.37989	-0.0824 ppb	0.37989	461.28%

Cr	267.716†	14.4	0.3172 µg/L	0.10569	0.3172 ppb	0.10569	33.32%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-143.1	-0.9984 µg/L	0.24020	-0.9984 ppb	0.24020	24.06%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	1.3	11.039 µg/L	8.5525	11.039 ppb	8.5525	77.48%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K	766.490 Radial†	45.6	32.402 µg/L	26.6673	32.402 ppb	26.6673	82.30%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	-3.1	-28.611 µg/L	4.3042	-28.611 ppb	4.3042	15.04%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn	257.610†	15.6	0.0566 µg/L	0.05870	0.0566 ppb	0.05870	103.64%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	2.3	0.2480 µg/L	0.32829	0.2480 ppb	0.32829	132.36%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	41.3	13.602 µg/L	5.7396	13.602 ppb	5.7396	42.20%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	-18.0	-0.9814 µg/L	0.46200	-0.9814 ppb	0.46200	47.08%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	1.9	4.1970 µg/L	4.66758	4.1970 ppb	4.66758	111.21%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-6.2	-1.6502 µg/L	1.50832	-1.6502 ppb	1.50832	91.40%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	1.5	6.3791 µg/L	5.06750	6.3791 ppb	5.06750	79.44%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	-6.9	-6.8167 µg/L	3.04704	-6.8167 ppb	3.04704	44.70%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-0.5	-0.7811 µg/L	5.04348	-0.7811 ppb	5.04348	645.70%
QC value within limits for Se 196.026 Recovery = Not calculated							
SiO2†		-66.0	-14.210 µg/L	6.0766	-14.210 ppb	6.0766	42.76%
QC value within limits for SiO2 Recovery = Not calculated							
Si	251.611†	-13.4	-1.1020 µg/L	0.79337	-1.1020 ppb	0.79337	71.99%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	1.4	0.6588 µg/L	0.98163	0.6588 ppb	0.98163	149.00%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	-11.3	-0.1167 µg/L	0.19593	-0.1167 ppb	0.19593	167.87%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	23.9	0.0596 µg/L	0.10080	0.0596 ppb	0.10080	168.98%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	1.0	1.3589 µg/L	6.02688	1.3589 ppb	6.02688	443.51%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	15.7	1.4179 µg/L	2.74983	1.4179 ppb	2.74983	193.94%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	18.6	0.2037 µg/L	0.28596	0.2037 ppb	0.28596	140.37%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	-22.6	-0.5582 µg/L	0.23967	-0.5582 ppb	0.23967	42.93%
QC value within limits for Zn 213.857 Recovery = Not calculated							

All analyte(s) passed QC.

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Wednesday, February 24, 2010 13:58:21

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.583

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Number of Replicates: 5

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD
Be	9.0		8010.6		8010.646		132.493		1.7
Mg	24.0		80464.0		80463.987		802.940		1.0
Co	58.9		170262.1		170262.103		1828.524		1.1
Rh	102.9		306904.0		306903.996		3738.938		1.2
In	114.9		394981.4		394981.376		4192.916		1.1
Pb	208.0		384651.8		384651.804		1928.620		0.5
[> Ba	137.9		372209.0		372209.012		2646.026		0.7
[Ba++	69.0		6742.3		0.018		0.000		0.8
[> Ce	139.9		454620.9		454620.904		3860.277		0.8
[CeO	155.9		12716.3		0.028		0.000		1.2
Bkgd	220.0		18.7		18.700		3.546		19.0

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.8	8280.1
Co	59	13	6.3	167068.6
In	115	13	7.0	394570.1

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	586	2072	0.636
Be	9.0	9.0	2050	2088	0.616
Mg	24.0	24.0	5687	2100	0.608
Mg	25.0	25.0	5927	2100	0.597
Mg	26.0	26.0	6169	2100	0.611
Co	58.9	58.9	14169	2125	0.599
Rh	102.9	102.9	24868	2180	0.588
In	114.9	114.9	27782	2200	0.587
Ce	139.9	139.9	33866	2220	0.600
Pb	206.0	206.0	49948	2305	0.610
Pb	207.0	207.0	50159	2240	0.654
Pb	208.0	208.0	50451	2265	0.722
U	238.1	238.0	57720	2275	0.768

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 25, 2010 00:45:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\Blank.189

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7		ug/L		116	
Be	9		ug/L		27	
B	11		ug/L		596	
Na	23		ug/L		18679	
Mg	24		ug/L		4334	
Al	27		ug/L		7669	
P	31		ug/L		5857	
K	39		ug/L		561175	
Ca	43		ug/L		363	
> Sc	45		ug/L		466836	
Ti	47		ug/L		402	
V	51		ug/L		9348	
Cr	52		ug/L		4541	
Cr	53		ug/L		129660	
Mn	55		ug/L		1656	
Fe	57		ug/L		6902	
Co	59		ug/L		147	
Ni	60		ug/L		140	
Cu	63		ug/L		473	
Cu	65		ug/L		257	
Zn	66		ug/L		698	
Zn	67		ug/L		15316	
Zn	68		ug/L		1656	
> Ge	74		ug/L		572003	
As	75		ug/L		-744	
Se	77		ug/L		8264	
Se	82		ug/L		0	
Kr	83		ug/L		173	
Sr	88		ug/L		291	
Y	89		ug/L		76	
Mo	98		ug/L		141	
Ag	107		ug/L		88	
Cd	111		ug/L		33	
Cd	114		ug/L		69	
> In	115		ug/L		379864	
Sn	120		ug/L		422	
Sb	121		ug/L		582	
Sb	123		ug/L		457	
Ba	135		ug/L		54	
Ba	137		ug/L		91	
Ho	165		ug/L		21	
> Lu	175		ug/L		708476	
Tl	205		ug/L		2105	
Pb	208		ug/L		998	
Bi	209		ug/L		589	
Th	232		ug/L		830	
U	238		ug/L		643	

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 00:47:50

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	0.9999
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	0.9999
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	0.9999
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9998
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9998
U	238Linear Thru Zero	0.9998

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 00:47:50

Page 2

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
L	Cu	65					
[	Zn	66					
|	Zn	67					
|	Zn	68					
>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
L	Kr	83					
[	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
>	In	115					
|	Sn	120					
|	Sb	121					
L	Sb	123					
[	Ba	135					
|	Ba	137					
|	Ho	165					
>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
L	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 25, 2010 00:51:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\Standard 1.190

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	10.000	ug/L	1.105	26890	0.057
Be	9	10.000	ug/L	4.739	5729	0.012
B	11	20.000	ug/L	0.321	12031	0.024
Na	23	1000.000	ug/L	2.963	4393258	9.347
Mg	24	1000.000	ug/L	10.705	3479543	7.430
Al	27	1000.000	ug/L	4.107	5204106	11.105
P	31	1000.000	ug/L	1.944	293596	0.615
K	39	1000.000	ug/L	4.538	6809758	13.354
Ca	43	1000.000	ug/L	3.254	17644	0.037
> Sc	45		ug/L		468066	468065.824
Ti	47	10.000	ug/L	0.987	9225	0.019
V	51	10.000	ug/L	7.478	106749	0.208
Cr	52	10.000	ug/L	3.903	84753	0.171
Cr	53		ug/L		176266	0.099
Mn	55	10.000	ug/L	2.802	130192	0.275
Fe	57	1000.000	ug/L	3.218	274624	0.572
Co	59	10.000	ug/L	0.895	105959	0.226
Ni	60	10.000	ug/L	0.801	23096	0.049
Cu	63		ug/L		56074	0.119
Cu	65	10.000	ug/L	1.060	27358	0.058
Zn	66	10.000	ug/L	2.012	16798	0.028
Zn	67		ug/L		24399	0.016
Zn	68		ug/L		13648	0.021
> Ge	74		ug/L		567866	567865.985
As	75	10.000	ug/L	1.836	16324	0.030
Se	77		ug/L		12599	0.008
Se	82	10.000	ug/L	1.240	1805	0.003
Kr	83		ug/L		149	-0.000
Sr	88	10.000	ug/L	1.351	227001	0.612
Y	89		ug/L		106	0.000
Mo	98	10.000	ug/L	1.107	53630	0.144
Ag	107	10.000	ug/L	2.532	96282	0.259
Cd	111	10.000	ug/L	1.876	22621	0.061
Cd	114		ug/L		53302	0.144
> In	115		ug/L		370762	370762.000
Sn	120	10.000	ug/L	1.295	97007	0.261
Sb	121	10.000	ug/L	1.532	76721	0.205
Sb	123		ug/L		59935	0.160
Ba	135		ug/L		24863	0.035
Ba	137	10.000	ug/L	1.030	44448	0.063
Ho	165		ug/L		31	0.000
> Lu	175		ug/L		703071	703070.874
Tl	205	10.000	ug/L	1.004	339248	0.480
Pb	208	10.000	ug/L	1.089	600186	0.852
Bi	209		ug/L		399	-0.000
Th	232	10.000	ug/L	1.736	730929	1.038
U	238	10.000	ug/L	0.633	764002	1.086

Sample ID: Standard 1

Report Date/Time: Thursday, February 25, 2010 00:53:54

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	1.0000
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	1.0000
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	1.0000
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	1.0000
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
|	Li	7						
|	Be	9						
|	B	11						
|	Na	23						
|	Mg	24						
|	Al	27						
|	P	31						
|	K	39						
|	Ca	43						
>	Sc	45						
|	Ti	47						
|	V	51						
|	Cr	52						
|	Cr	53						
|	Mn	55						
|	Fe	57						
|	Co	59						
|	Ni	60						
|	Cu	63						
|	Cu	65						
|	Zn	66						
|	Zn	67						
|	Zn	68						
>	Ge	74						
|	As	75						
|	Se	77						
|	Se	82						
|	Kr	83						
|	Sr	88						
|	Y	89						
|	Mo	98						
|	Ag	107						
|	Cd	111						
|	Cd	114						
>	In	115						
|	Sn	120						
|	Sb	121						
|	Sb	123						
|	Ba	135						
|	Ba	137						
|	Ho	165						
>	Lu	175						
|	Tl	205						
|	Pb	208						
|	Bi	209						
|	Th	232						
|	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 25, 2010 00:57:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\Standard 2.191

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	100.000	ug/L	2.449	264489	0.572
Be	9	100.013	ug/L	2.463	57085	0.123
B	11	200.038	ug/L	4.593	115722	0.249
Na	23	10012.267	ug/L	1.503	49330670	106.666
Mg	24	9994.280	ug/L	2.912	32487077	70.242
Al	27	9977.507	ug/L	5.822	41846838	90.451
P	31	9996.741	ug/L	2.033	2758099	5.952
K	39	10004.212	ug/L	7.305	65060133	139.467
Ca	43	9997.043	ug/L	1.635	166192	0.359
> Sc	45		ug/L		462373	462373.423
Ti	47	99.998	ug/L	0.744	87343	0.188
V	51	99.954	ug/L	3.260	929215	1.990
Cr	52	99.922	ug/L	0.634	739071	1.589
Cr	53		ug/L		234272	0.229
Mn	55	99.921	ug/L	1.467	1177738	2.544
Fe	57	9998.285	ug/L	1.799	2606334	5.623
Co	59	99.889	ug/L	1.148	940185	2.033
Ni	60	99.956	ug/L	1.897	217299	0.470
Cu	63		ug/L		516746	1.117
Cu	65	99.972	ug/L	2.114	260459	0.563
Zn	66	100.028	ug/L	2.779	162696	0.292
Zn	67		ug/L		45738	0.056
Zn	68		ug/L		118988	0.211
> Ge	74		ug/L		555091	555090.637
As	75	100.021	ug/L	0.615	169753	0.307
Se	77		ug/L		22553	0.026
Se	82	100.000	ug/L	2.418	17642	0.032
Kr	83		ug/L		176	0.000
Sr	88	99.847	ug/L	2.397	1924500	5.295
Y	89		ug/L		300	0.001
Mo	98	99.989	ug/L	2.112	518934	1.427
Ag	107	99.918	ug/L	1.456	871308	2.397
Cd	111	99.998	ug/L	1.800	221055	0.608
Cd	114		ug/L		511858	1.408
> In	115		ug/L		363514	363514.297
Sn	120	99.927	ug/L	2.597	881818	2.426
Sb	121	99.981	ug/L	1.760	733263	2.016
Sb	123		ug/L		577455	1.588
Ba	135		ug/L		238428	0.344
Ba	137	99.967	ug/L	2.692	423069	0.610
Ho	165		ug/L		44	0.000
> Lu	175		ug/L		693126	693125.998
Tl	205	99.819	ug/L	1.206	2810893	4.052
Pb	208	99.830	ug/L	3.632	5037257	7.270
Bi	209		ug/L		848	0.000
Th	232	99.839	ug/L	1.412	6188011	8.928
U	238	99.841	ug/L	2.806	6479656	9.351

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 00:59:58

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 25, 2010 01:03:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 1.192

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	51.254	ug/L	1.528	138357	0.293
Be	9	51.212	ug/L	3.907	29827	0.063
B	11	103.919	ug/L	2.684	61625	0.129
Na	23	4509.685	ug/L	8.125	22670943	48.044
Mg	24	5347.344	ug/L	7.877	17720997	37.582
Al	27	5620.619	ug/L	10.095	24041127	50.954
P	31	4774.087	ug/L	1.484	1346497	2.843
K	39	5130.417	ug/L	9.736	34293745	71.522
Ca	43	4924.759	ug/L	1.318	83672	0.177
> Sc	45		ug/L		471629	471628.507
Ti	47	50.265	ug/L	0.852	44987	0.095
V	51	51.480	ug/L	3.069	492659	1.025
Cr	52	52.523	ug/L	2.178	398384	0.835
Cr	53		ug/L		196456	0.139
Mn	55	53.204	ug/L	1.701	640426	1.355
Fe	57	4590.215	ug/L	0.475	1224465	2.582
Co	59	51.968	ug/L	2.609	498978	1.058
Ni	60	51.394	ug/L	1.632	114032	0.241
Cu	63		ug/L		269542	0.571
Cu	65	51.228	ug/L	2.806	136262	0.288
Zn	66	53.041	ug/L	2.954	87537	0.155
Zn	67		ug/L		33730	0.033
Zn	68		ug/L		63866	0.111
> Ge	74		ug/L		561190	561190.119
As	75	48.840	ug/L	3.695	83406	0.150
Se	77		ug/L		16616	0.015
Se	82	51.104	ug/L	2.320	9114	0.016
Kr	83		ug/L		151	-0.000
Sr	88	54.911	ug/L	2.149	1076141	2.912
Y	89		ug/L		145	0.000
Mo	98	49.596	ug/L	0.309	261705	0.708
Ag	107	51.305	ug/L	0.925	454836	1.231
Cd	111	50.703	ug/L	1.377	113953	0.308
Cd	114		ug/L		265227	0.718
> In	115		ug/L		369463	369462.806
Sn	120	51.875	ug/L	1.341	465621	1.259
Sb	121	51.410	ug/L	1.168	383561	1.037
Sb	123		ug/L		300315	0.812
Ba	135		ug/L		122938	0.178
Ba	137	51.554	ug/L	2.548	217508	0.315
Ho	165		ug/L		64	0.000
> Lu	175		ug/L		690737	690736.635
Tl	205	50.995	ug/L	2.545	1431651	2.070
Pb	208	54.050	ug/L	1.463	2719376	3.936
Bi	209		ug/L		944	0.001
Th	232	52.084	ug/L	1.833	3217656	4.658
U	238	53.616	ug/L	0.733	3469103	5.022

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 01:06:02

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	102.508				
Be	9	102.424				
B	11	103.919				
Na	23	90.194				
Mg	24	106.947				
Al	27	111.299				
P	31	95.482				
K	39	102.608				
Ca	43	98.495				
> Sc	45		101.0			
Ti	47	100.531				
V	51	102.959				
Cr	52	105.046				
Cr	53					
Mn	55	106.409				
Fe	57	91.804				
Co	59	103.937				
Ni	60	102.788				
Cu	63					
Cu	65	102.456				
Zn	66	106.082				
Zn	67					
Zn	68					
> Ge	74		98.1			
As	75	97.681				
Se	77					
Se	82	102.207				
Kr	83					
Sr	88	109.822				
Y	89					
Mo	98	99.192				
Ag	107	102.610				
Cd	111	101.405				
Cd	114					
> In	115		97.3			
Sn	120	103.750				
Sb	121	102.819				
Sb	123					
Ba	135					
Ba	137	103.108				
Ho	165					
> Lu	175		97.5			
Tl	205	101.990				
Pb	208	108.100				
Bi	209					
Th	232	104.169				
U	238	107.231				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Al	27	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 25, 2010 01:09:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 2.193

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.021	ug/L	19.019	172	0.000
Be	9	0.008	ug/L	121.338	32	0.000
B	11	4.097	ug/L	16.405	2984	0.005
Na	23	0.870	ug/L	129.311	23019	0.009
Mg	24	-0.105	ug/L	1050.249	4001	-0.001
Al	27	-0.861	ug/L	96.914	4001	-0.008
P	31	0.980	ug/L	180.971	6126	0.001
K	39	1.158	ug/L	397.345	569148	0.016
Ca	43	-0.503	ug/L	329.039	354	-0.000
> Sc	45		ug/L		467005	467005.242
Ti	47	-0.009	ug/L	325.615	395	-0.000
V	51	-0.308	ug/L	153.633	6437	-0.006
Cr	52	-0.165	ug/L	44.444	3309	-0.003
Cr	53		ug/L		125809	-0.008
Mn	55	-0.010	ug/L	32.542	1539	-0.000
Fe	57	0.291	ug/L	190.434	6980	0.000
Co	59	0.004	ug/L	70.690	182	0.000
Ni	60	0.004	ug/L	50.335	150	0.000
Cu	63		ug/L		487	0.000
Cu	65	-0.004	ug/L	95.984	246	-0.000
Zn	66	0.001	ug/L	1593.283	698	0.000
Zn	67		ug/L		14449	-0.001
Zn	68		ug/L		1604	-0.000
> Ge	74		ug/L		569988	569987.791
As	75	-0.179	ug/L	145.005	-1056	-0.001
Se	77		ug/L		8396	0.000
Se	82	0.091	ug/L	153.517	17	0.000
Kr	83		ug/L		156	-0.000
Sr	88	0.006	ug/L	12.878	419	0.000
Y	89		ug/L		79	0.000
Mo	98	0.027	ug/L	3.432	289	0.000
Ag	107	0.006	ug/L	31.976	141	0.000
Cd	111	0.002	ug/L	466.095	37	0.000
Cd	114		ug/L		108	0.000
> In	115		ug/L		378529	378529.037
Sn	120	0.012	ug/L	32.804	534	0.000
Sb	121	0.437	ug/L	10.437	3917	0.009
Sb	123		ug/L		3199	0.007
Ba	135		ug/L		72	0.000
Ba	137	0.004	ug/L	36.133	109	0.000
Ho	165		ug/L		30	0.000
> Lu	175		ug/L		707983	707982.913
Tl	205	0.158	ug/L	22.647	6640	0.006
Pb	208	0.007	ug/L	21.254	1362	0.001
Bi	209		ug/L		584	-0.000
Th	232	0.024	ug/L	5.204	2323	0.002
U	238	0.008	ug/L	26.689	1170	0.001

Sample ID: QC Std 2

Report Date/Time: Thursday, February 25, 2010 01:12:11

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		100.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		99.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		99.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		99.9			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 25, 2010 01:15:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 3.194

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	11.006	ug/L	2.281	29478	0.063
Be	9	0.537	ug/L	5.699	336	0.001
B	11	17.326	ug/L	3.791	10659	0.022
Na	23	239.283	ug/L	8.349	1207054	2.549
Mg	24	15.408	ug/L	14.004	54772	0.108
Al	27	41.259	ug/L	6.550	182157	0.374
P	31	65.019	ug/L	7.889	23901	0.039
K	39	308.141	ug/L	13.361	2562845	4.296
Ca	43	218.114	ug/L	5.808	4012	0.008
> Sc	45		ug/L		466658	466658.134
Ti	47	8.651	ug/L	2.543	7993	0.016
V	51	10.208	ug/L	9.674	104042	0.203
Cr	52	11.238	ug/L	4.848	87857	0.179
Cr	53		ug/L		157299	0.060
Mn	55	5.897	ug/L	2.990	71691	0.150
Fe	57	105.485	ug/L	2.669	34574	0.059
Co	59	1.130	ug/L	3.872	10879	0.023
Ni	60	2.182	ug/L	2.802	4924	0.010
Cu	63		ug/L		6465	0.013
Cu	65	1.120	ug/L	3.630	3199	0.006
Zn	66	11.321	ug/L	1.546	18871	0.033
Zn	67		ug/L		20464	0.010
Zn	68		ug/L		14797	0.024
> Ge	74		ug/L		550773	550772.701
As	75	5.563	ug/L	3.738	8690	0.017
Se	77		ug/L		10811	0.005
Se	82	5.873	ug/L	3.974	1028	0.002
Kr	83		ug/L		145	-0.000
Sr	88	12.294	ug/L	0.262	241551	0.652
Y	89		ug/L		69	-0.000
Mo	98	0.527	ug/L	4.885	2922	0.008
Ag	107	1.067	ug/L	2.030	9561	0.026
Cd	111	1.111	ug/L	1.215	2532	0.007
Cd	114		ug/L		5724	0.015
> In	115		ug/L		370061	370060.601
Sn	120	5.583	ug/L	1.724	50556	0.136
Sb	121	3.368	ug/L	1.093	25697	0.068
Sb	123		ug/L		20218	0.053
Ba	135		ug/L		5288	0.007
Ba	137	2.158	ug/L	2.765	9314	0.013
Ho	165		ug/L		27	0.000
> Lu	175		ug/L		700109	700108.585
Tl	205	1.260	ug/L	1.742	37884	0.051
Pb	208	2.501	ug/L	1.391	128493	0.182
Bi	209		ug/L		429	-0.000
Th	232	1.296	ug/L	2.070	81953	0.116
U	238	0.284	ug/L	0.865	19262	0.027

Sample ID: QC Std 3

Report Date/Time: Thursday, February 25, 2010 01:18:16

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7	110.055				
Be	9	107.409				
B	11	115.509				
Na	23	95.713				
Mg	24	102.717				
Al	27	137.530				
P	31	130.038				
K	39	102.714				
Ca	43	109.057				
> Sc	45		100.0			
Ti	47	86.512				
V	51	102.076				
Cr	52	112.379				
Cr	53					
Mn	55	117.941				
Fe	57	105.485				
Co	59	113.043				
Ni	60	109.121				
Cu	63					
Cu	65	112.029				
Zn	66	113.212				
Zn	67					
Zn	68					
> Ge	74		96.3			
As	75	111.254				
Se	77					
Se	82	117.453				
Kr	83					
Sr	88	122.942				
Y	89					
Mo	98	105.486				
Ag	107	106.734				
Cd	111	111.062				
Cd	114					
> In	115		97.4			
Sn	120	111.664				
Sb	121	112.266				
Sb	123					
Ba	135					
Ba	137	107.890				
Ho	165					
> Lu	175		98.8			
Tl	205	125.991				
Pb	208	125.060				
Bi	209					
Th	232	129.605				
U	238	142.033				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Al	27	CRDL is out of limits
QC Std 3	P	31	CRDL is out of limits
QC Std 3	U	238	CRDL is out of limits

QC Action

Sample ID: QC Std 3
 Report Date/Time: Thursday, February 25, 2010 01:18:16
 Page 3

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 25, 2010 01:21:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 4.195

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.081	ug/L	10.445	293	0.000
Be	9	0.069	ug/L	19.825	59	0.000
B	11	1.597	ug/L	19.431	1342	0.002
Na	23	76847.089	ug/L	3.522	336523083	818.695
Mg	24	85091.727	ug/L	8.994	245740237	598.043
Al	27	103851.194	ug/L	11.407	387083249	941.464
P	31	82063.023	ug/L	0.909	20088465	48.862
K	39	91466.419	ug/L	0.853	524596315	1275.113
Ca	43	86955.724	ug/L	1.654	1282259	3.119
Sc	45		ug/L		411013	411012.564
Ti	47	1517.851	ug/L	0.321	1173570	2.854
V	51	-0.573	ug/L	51.787	3536	-0.011
Cr	52	1.914	ug/L	0.983	16506	0.030
Cr	53		ug/L		118979	0.012
Mn	55	6.009	ug/L	1.140	64334	0.153
Fe	57	94815.587	ug/L	1.958	21921908	53.325
Co	59	0.371	ug/L	5.093	3231	0.008
Ni	60	3.499	ug/L	2.633	6881	0.016
Cu	63		ug/L		11210	0.026
Cu	65	3.194	ug/L	0.963	7617	0.018
Zn	66	4.370	ug/L	5.913	6859	0.013
Zn	67		ug/L		18056	0.010
Zn	68		ug/L		2656	0.003
Ge	74		ug/L		490891	490890.577
As	75	0.176	ug/L	570.093	-374	0.001
Se	77		ug/L		11647	0.009
Se	82	-1.193	ug/L	6.261	-186	-0.000
Kr	83		ug/L		452	0.001
Sr	88	3.263	ug/L	1.596	57326	0.173
Y	89		ug/L		801	0.002
Mo	98	1814.342	ug/L	1.582	8542173	25.899
Ag	107	0.140	ug/L	4.308	1188	0.003
Cd	111	0.506	ug/L	47.944	1046	0.003
Cd	114		ug/L		14916	0.045
In	115		ug/L		329854	329854.132
Sn	120	0.262	ug/L	2.872	2462	0.006
Sb	121	0.383	ug/L	21.682	3049	0.008
Sb	123		ug/L		2369	0.006
Ba	135		ug/L		1601	0.002
Ba	137	0.714	ug/L	1.305	2815	0.004
Ho	165		ug/L		13545	0.022
Lu	175		ug/L		626869	626869.274
Tl	205	0.005	ug/L	69.273	1989	0.000
Pb	208	0.229	ug/L	0.450	11334	0.017
Bi	209		ug/L		8402	0.013
Th	232	0.049	ug/L	38.303	3510	0.004
U	238	-0.006	ug/L	5.247	219	-0.001

Sample ID: QC Std 4

Report Date/Time: Thursday, February 25, 2010 01:24:23

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 4

Report Date/Time: Thursday, February 25, 2010 01:24:23

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QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
|	Li	7						
|	Be	9						
|	B	11						
|	Na	23	76.847					
|	Mg	24	85.092					
|	Al	27	103.851					
|	P	31	82.063					
|	K	39	91.466					
|	Ca	43	86.956					
>	Sc	45		88.0				
|	Ti	47	75.893					
|	V	51						
|	Cr	52	58.005					
|	Cr	53						
|	Mn	55	103.602					
|	Fe	57	94.816					
|	Co	59	157.727					
|	Ni	60	105.723					
|	Cu	63						
|	Cu	65	95.623					
|	Zn	66	116.221					
|	Zn	67						
|	Zn	68						
>	Ge	74		85.8				
|	As	75						
|	Se	77						
|	Se	82						
|	Kr	83						
|	Sr	88	110.235					
|	Y	89						
|	Mo	98	90.717					
|	Ag	107						
|	Cd	111	114.002					
|	Cd	114						
>	In	115		86.8				
|	Sn	120						
|	Sb	121						
|	Sb	123						
|	Ba	135						
|	Ba	137	89.518					
|	Ho	165						
>	Lu	175		88.5				
|	Tl	205						
|	Pb	208	121.132					
|	Bi	209						
|	Th	232						
|	U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Na	23	ICSA is out of limits
QC Std 4	Ti	47	ICSA is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 4
 Report Date/Time: Thursday, February 25, 2010 01:24:23
 Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 25, 2010 01:27:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 5.196

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	18.541	ug/L	1.142	41347	0.106
Be	9	17.910	ug/L	2.065	8621	0.022
B	11	17.544	ug/L	2.456	8996	0.022
Na	23	79986.935	ug/L	2.610	331638859	852.145
Mg	24	87477.193	ug/L	2.329	239206523	614.808
Al	27	104014.873	ug/L	4.416	366730469	942.948
P	31	86226.228	ug/L	1.257	19977908	51.341
K	39	89267.225	ug/L	4.445	484619607	1244.455
Ca	43	89016.291	ug/L	1.517	1242724	3.193
> Sc	45		ug/L		389069	389069.436
Ti	47	1547.426	ug/L	0.509	1132579	2.910
V	51	21.352	ug/L	2.752	173144	0.425
Cr	52	23.295	ug/L	2.523	147846	0.370
Cr	53		ug/L		113519	0.014
Mn	55	28.422	ug/L	0.512	282925	0.724
Fe	57	99769.769	ug/L	2.675	21831986	56.111
Co	59	21.406	ug/L	2.926	169597	0.436
Ni	60	22.852	ug/L	1.826	41883	0.107
Cu	63		ug/L		96563	0.247
Cu	65	22.637	ug/L	2.014	49801	0.127
Zn	66	22.923	ug/L	2.431	33260	0.067
Zn	67		ug/L		18838	0.012
Zn	68		ug/L		21732	0.042
> Ge	74		ug/L		488347	488346.958
As	75	20.501	ug/L	3.271	30109	0.063
Se	77		ug/L		11207	0.009
Se	82	19.340	ug/L	2.416	3002	0.006
Kr	83		ug/L		429	0.001
Sr	88	25.956	ug/L	2.112	455843	1.376
Y	89		ug/L		717	0.002
Mo	98	1795.815	ug/L	0.228	8485446	25.635
Ag	107	19.454	ug/L	2.322	154561	0.467
Cd	111	19.913	ug/L	1.616	40113	0.121
Cd	114		ug/L		104916	0.317
> In	115		ug/L		331007	331007.181
Sn	120	21.124	ug/L	1.565	170090	0.513
Sb	121	21.156	ug/L	0.969	141717	0.427
Sb	123		ug/L		110137	0.332
Ba	135		ug/L		44251	0.071
Ba	137	20.377	ug/L	1.178	77727	0.124
Ho	165		ug/L		13358	0.021
> Lu	175		ug/L		624039	624039.312
Tl	205	20.864	ug/L	1.138	530352	0.847
Pb	208	21.830	ug/L	0.626	992892	1.590
Bi	209		ug/L		9139	0.014
Th	232	22.315	ug/L	1.168	1245990	1.996
U	238	22.980	ug/L	0.724	1343671	2.152

Sample ID: QC Std 5

Report Date/Time: Thursday, February 25, 2010 01:30:29

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	92.705				
Be	9	89.548				
B	11	87.719				
Na	23	79.987				
Mg	24	87.477				
Al	27	104.015				
P	31	86.226				
K	39	89.267				
Ca	43	89.016				
> Sc	45		83.3			
Ti	47	77.371				
V	51	106.760				
Cr	52	99.977				
Cr	53					
Mn	55	110.163				
Fe	57	99.770				
Co	59	105.787				
Ni	60	98.036				
Cu	63					
Cu	65	96.989				
Zn	66	96.476				
Zn	67					
Zn	68					
> Ge	74		85.4			
As	75	102.506				
Se	77					
Se	82	96.699				
Kr	83					
Sr	88	113.049				
Y	89					
Mo	98	89.791				
Ag	107	97.271				
Cd	111	97.402				
Cd	114					
> In	115		87.1			
Sn	120	105.621				
Sb	121	105.778				
Sb	123					
Ba	135					
Ba	137	97.974				
Ho	165					
> Lu	175		88.1			
Tl	205	104.321				
Pb	208	108.130				
Bi	209					
Th	232	111.574				
U	238	114.899				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Na	23	ICSAB is out of limits
QC Std 5	Ti	47	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 01:33:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 6.197

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	50.856	ug/L	2.578	121226	0.291
Be	9	51.752	ug/L	3.240	26620	0.064
B	11	98.342	ug/L	3.613	51527	0.122
Na	23	4552.550	ug/L	15.725	20195760	48.501
Mg	24	5042.300	ug/L	2.663	14768916	35.438
Al	27	5207.421	ug/L	7.037	19690007	47.208
P	31	4703.749	ug/L	3.584	1171450	2.801
K	39	4332.637	ug/L	4.484	25671318	60.400
Ca	43	4771.309	ug/L	3.390	71592	0.171
> Sc	45		ug/L		416580	416580.161
Ti	47	49.205	ug/L	3.521	38889	0.093
V	51	52.394	ug/L	4.403	442610	1.043
Cr	52	52.723	ug/L	2.378	353165	0.838
Cr	53		ug/L		173110	0.138
Mn	55	53.516	ug/L	2.938	568853	1.362
Fe	57	4645.346	ug/L	3.429	1094022	2.613
Co	59	52.672	ug/L	3.053	446599	1.072
Ni	60	52.519	ug/L	1.808	102895	0.247
Cu	63		ug/L		246344	0.590
Cu	65	50.727	ug/L	1.756	119188	0.286
Zn	66	51.222	ug/L	2.930	77548	0.150
Zn	67		ug/L		29593	0.031
Zn	68		ug/L		56556	0.107
> Ge	74		ug/L		514672	514672.218
As	75	48.752	ug/L	2.768	76358	0.150
Se	77		ug/L		14469	0.014
Se	82	50.062	ug/L	2.082	8188	0.016
Kr	83		ug/L		141	-0.000
Sr	88	53.781	ug/L	1.710	984550	2.852
Y	89		ug/L		168	0.000
Mo	98	49.077	ug/L	0.791	241922	0.701
Ag	107	51.743	ug/L	1.540	428488	1.241
Cd	111	50.768	ug/L	0.996	106604	0.309
Cd	114		ug/L		248527	0.720
> In	115		ug/L		345156	345156.356
Sn	120	51.493	ug/L	1.373	431744	1.250
Sb	121	51.330	ug/L	1.027	357761	1.035
Sb	123		ug/L		282382	0.817
Ba	135		ug/L		115385	0.169
Ba	137	49.242	ug/L	1.246	205400	0.301
Ho	165		ug/L		67	0.000
> Lu	175		ug/L		682807	682807.409
Tl	205	49.827	ug/L	1.117	1383033	2.023
Pb	208	53.468	ug/L	1.497	2659287	3.894
Bi	209		ug/L		957	0.001
Th	232	51.536	ug/L	1.197	3147381	4.609
U	238	51.542	ug/L	1.737	3296507	4.828

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 01:36:36

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	101.711				
Be	9	103.504				
B	11	98.342				
Na	23	91.051				
Mg	24	100.846				
Al	27	103.117				
P	31	94.075				
K	39	86.653				
Ca	43	95.426				
> Sc	45		89.2			
Ti	47	98.410				
V	51	104.788				
Cr	52	105.446				
Cr	53					
Mn	55	107.032				
Fe	57	92.907				
Co	59	105.344				
Ni	60	105.038				
Cu	63					
Cu	65	101.454				
Zn	66	102.443				
Zn	67					
Zn	68					
> Ge	74		90.0			
As	75	97.504				
Se	77					
Se	82	100.123				
Kr	83					
Sr	88	107.563				
Y	89					
Mo	98	98.154				
Ag	107	103.486				
Cd	111	101.536				
Cd	114					
> In	115		90.9			
Sn	120	102.986				
Sb	121	102.661				
Sb	123					
Ba	135					
Ba	137	98.484				
Ho	165					
> Lu	175		96.4			
Tl	205	99.655				
Pb	208	106.936				
Bi	209					
Th	232	103.073				
U	238	103.085				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 01:40:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 7.198

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.019	ug/L	19.141	149	0.000
Be	9	0.002	ug/L	728.636	25	0.000
B	11	2.533	ug/L	22.205	1848	0.003
Na	23	2.396	ug/L	51.756	27360	0.026
Mg	24	0.956	ug/L	114.511	6668	0.007
Al	27	2.695	ug/L	31.242	17010	0.024
P	31	1.126	ug/L	68.843	5507	0.001
K	39	5.504	ug/L	74.073	532758	0.077
Ca	43	1.125	ug/L	68.383	341	0.000
Sc	45		ug/L		416774	416774.349
Ti	47	0.051	ug/L	49.426	400	0.000
V	51	-0.473	ug/L	18.561	4423	-0.009
Cr	52	-0.473	ug/L	9.957	914	-0.008
Cr	53		ug/L		108799	-0.017
Mn	55	-0.012	ug/L	34.432	1356	-0.000
Fe	57	-0.949	ug/L	26.247	5940	-0.001
Co	59	0.004	ug/L	38.201	167	0.000
Ni	60	0.010	ug/L	18.742	146	0.000
Cu	63		ug/L		387	-0.000
Cu	65	0.001	ug/L	229.755	233	0.000
Zn	66	-0.024	ug/L	53.198	599	-0.000
Zn	67		ug/L		12866	-0.002
Zn	68		ug/L		1437	-0.000
Ge	74		ug/L		521240	521240.111
As	75	0.221	ug/L	53.128	-323	0.001
Se	77		ug/L		6939	-0.001
Se	82	0.016	ug/L	370.605	3	0.000
Kr	83		ug/L		144	-0.000
Sr	88	0.005	ug/L	47.801	374	0.000
Y	89		ug/L		70	-0.000
Mo	98	0.063	ug/L	5.593	450	0.001
Ag	107	0.006	ug/L	14.955	132	0.000
Cd	111	0.005	ug/L	128.110	43	0.000
Cd	114		ug/L		91	0.000
In	115		ug/L		355440	355440.489
Sn	120	0.011	ug/L	35.866	490	0.000
Sb	121	0.155	ug/L	8.034	1659	0.003
Sb	123		ug/L		1327	0.003
Ba	135		ug/L		62	0.000
Ba	137	0.004	ug/L	49.014	105	0.000
Ho	165		ug/L		27	0.000
Lu	175		ug/L		691627	691626.720
Tl	205	0.224	ug/L	18.598	8345	0.009
Pb	208	0.006	ug/L	37.321	1281	0.000
Bi	209		ug/L		617	0.000
Th	232	0.021	ug/L	5.469	2137	0.002
U	238	0.007	ug/L	32.882	1054	0.001

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 01:42:45

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.3			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		91.1			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.6			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.6			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 01:42:45

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ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Thursday, February 25, 2010 01:46:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 10.199

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	908.148	ug/L	2.424	1874486	5.194
Be	9	951.375	ug/L	1.719	423800	1.174
B	11	1.566	ug/L	15.177	1165	0.002
Na	23	48963.331	ug/L	5.462	188368267	521.633
Mg	24	52502.636	ug/L	11.268	133033673	369.000
Al	27	54937.246	ug/L	2.656	179751189	498.034
P	31	21975.073	ug/L	2.357	4726633	13.085
K	39	47751.459	ug/L	3.116	240644107	665.693
Ca	43	47390.870	ug/L	1.958	613793	1.700
> Sc	45		ug/L		361004	361003.669
Ti	47	43.749	ug/L	1.635	30006	0.082
V	51	904.479	ug/L	2.586	6505041	18.006
Cr	52	894.043	ug/L	3.388	5132659	14.214
Cr	53		ug/L		774563	1.869
Mn	55	965.413	ug/L	1.448	8874170	24.579
Fe	57	49460.687	ug/L	0.018	10047325	27.817
Co	59	879.775	ug/L	2.549	6462298	17.907
Ni	60	855.509	ug/L	3.761	1450545	4.019
Cu	63		ug/L		3370054	9.337
Cu	65	809.449	ug/L	1.865	1645282	4.558
Zn	66	2256.169	ug/L	0.467	2956197	6.585
Zn	67		ug/L		473424	1.028
Zn	68		ug/L		1846360	4.111
> Ge	74		ug/L		448846	448845.629
As	75	816.633	ug/L	0.627	1125003	2.508
Se	77		ug/L		55858	0.110
Se	82	459.331	ug/L	2.018	65518	0.146
Kr	83		ug/L		270	0.000
Sr	88	991.112	ug/L	0.957	16759897	52.560
Y	89		ug/L		613	0.002
Mo	98	915.334	ug/L	1.384	4166215	13.066
Ag	107	211.925	ug/L	0.351	1621230	5.084
Cd	111	830.235	ug/L	0.459	1609938	5.049
Cd	114		ug/L		3840458	12.044
> In	115		ug/L		318855	318855.037
Sn	120	888.428	ug/L	0.778	6876169	21.565
Sb	121	222.617	ug/L	1.988	1431814	4.489
Sb	123		ug/L		1131261	3.547
Ba	135		ug/L		1734671	2.749
Ba	137	844.735	ug/L	0.281	3255477	5.159
Ho	165		ug/L		194	0.000
> Lu	175		ug/L		631074	631073.614
Tl	205	466.428	ug/L	3.113	11948443	18.934
Pb	208	4781.042	ug/L	1.641	219700515	348.163
Bi	209		ug/L		6701	0.010
Th	232	2537.017	ug/L	2.540	143156342	226.877
U	238	5256.734	ug/L	0.889	310701302	492.353

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 01:48:50

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	90.815				
Be	9	95.138				
B	11					
Na	23	97.927				
Mg	24	105.005				
Al	27	109.874				
P	31	87.900				
K	39	95.503				
Ca	43	94.782				
> Sc	45		77.3			
Ti	47					
V	51	90.448				
Cr	52	89.404				
Cr	53					
Mn	55	96.541				
Fe	57	98.921				
Co	59	87.977				
Ni	60	85.551				
Cu	63					
Cu	65	80.945				
Zn	66	90.247				
Zn	67					
Zn	68					
> Ge	74		78.5			
As	75	81.663				
Se	77					
Se	82	91.866				
Kr	83					
Sr	88	99.111				
Y	89					
Mo	98	91.533				
Ag	107	84.770				
Cd	111	83.024				
Cd	114					
> In	115		83.9			
Sn	120	88.843				
Sb	121	89.047				
Sb	123					
Ba	135					
Ba	137	84.474				
Ho	165					
> Lu	175		89.1			
Tl	205	93.286				
Pb	208	95.621				
Bi	209					
Th	232	101.481				
U	238	105.135				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 10	P	31	LRS is out of limits (+/- 10%)
Sc 45 Int Std for QC	Sc	45	
QC Std 10	Cr	52	LRS is out of limits (+/- 10%)
QC Std 10	Co	59	LRS is out of limits (+/- 10%)
QC Std 10	Ni	60	LRS is out of limits (+/- 10%)
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)
Ge 74 Int Std for QC	Ge	74	

Sample ID: QC Std 10

Report Date/Time: Thursday, February 25, 2010 01:48:50

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QC Std 10	As	75LRS is out of limits (+/- 10%)
QC Std 10	Ag	107LRS is out of limits (+/- 10%)
QC Std 10	Cd	111LRS is out of limits (+/- 10%)
QC Std 10	Sn	120LRS is out of limits (+/- 10%)
QC Std 10	Sb	121LRS is out of limits (+/- 10%)
QC Std 10	Ba	137LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Thursday, February 25, 2010 01:52:13

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 11.200

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	54.196	ug/L	0.675	124156	0.310
Be	9	54.193	ug/L	1.593	26794	0.067
B	11	102.665	ug/L	4.172	51685	0.128
Na	23	4788.488	ug/L	4.856	20434884	51.014
Mg	24	5400.192	ug/L	4.677	15194288	37.954
Al	27	5449.235	ug/L	5.070	19779169	49.400
P	31	4764.081	ug/L	0.169	1140414	2.837
K	39	5151.257	ug/L	13.117	29223170	71.813
Ca	43	4933.715	ug/L	1.733	71145	0.177
> Sc	45		ug/L		400258	400258.051
Ti	47	50.075	ug/L	2.048	38038	0.094
V	51	52.375	ug/L	2.015	425346	1.043
Cr	52	52.430	ug/L	1.642	337549	0.834
Cr	53		ug/L		165024	0.135
Mn	55	54.510	ug/L	0.980	556900	1.388
Fe	57	4766.520	ug/L	1.578	1078880	2.681
Co	59	53.611	ug/L	1.011	436890	1.091
Ni	60	53.600	ug/L	1.754	100915	0.252
Cu	63		ug/L		236140	0.589
Cu	65	52.077	ug/L	1.536	117580	0.293
Zn	66	52.112	ug/L	1.547	76044	0.152
Zn	67		ug/L		29932	0.034
Zn	68		ug/L		55232	0.108
> Ge	74		ug/L		496057	496057.360
As	75	48.906	ug/L	0.967	73856	0.150
Se	77		ug/L		12992	0.012
Se	82	49.965	ug/L	2.870	7876	0.016
Kr	83		ug/L		137	-0.000
Sr	88	54.271	ug/L	2.485	961158	2.878
Y	89		ug/L		119	0.000
Mo	98	49.006	ug/L	3.544	233635	0.700
Ag	107	52.610	ug/L	2.993	421432	1.262
Cd	111	51.427	ug/L	2.143	104455	0.313
Cd	114		ug/L		244311	0.732
> In	115		ug/L		334023	334023.113
Sn	120	52.691	ug/L	3.573	427313	1.279
Sb	121	54.043	ug/L	3.070	364319	1.090
Sb	123		ug/L		286486	0.857
Ba	135		ug/L		115314	0.174
Ba	137	49.566	ug/L	2.291	200991	0.303
Ho	165		ug/L		59	0.000
> Lu	175		ug/L		663851	663850.793
Tl	205	52.389	ug/L	2.109	1413544	2.127
Pb	208	55.266	ug/L	1.770	2672392	4.025
Bi	209		ug/L		902	0.001
Th	232	53.892	ug/L	1.577	3199837	4.819
U	238	55.370	ug/L	0.825	3443184	5.186

Sample ID: QC Std 11

Report Date/Time: Thursday, February 25, 2010 01:54:55

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: QC Std 11

Report Date/Time: Thursday, February 25, 2010 01:54:55

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	108.391				
Be	9	108.386				
B	11	102.665				
Na	23	95.770				
Mg	24	108.004				
Al	27	107.906				
P	31	95.282				
K	39	103.025				
Ca	43	98.674				
> Sc	45		85.7			
Ti	47	100.150				
V	51	104.750				
Cr	52	104.861				
Cr	53					
Mn	55	109.021				
Fe	57	95.330				
Co	59	107.223				
Ni	60	107.200				
Cu	63					
Cu	65	104.154				
Zn	66	104.223				
Zn	67					
Zn	68					
> Ge	74		86.7			
As	75	97.812				
Se	77					
Se	82	99.930				
Kr	83					
Sr	88	108.542				
Y	89					
Mo	98	98.011				
Ag	107	105.220				
Cd	111	102.854				
Cd	114					
> In	115		87.9			
Sn	120	105.383				
Sb	121	108.087				
Sb	123					
Ba	135					
Ba	137	99.132				
Ho	165					
> Lu	175		93.7			
Tl	205	104.778				
Pb	208	110.532				
Bi	209					
Th	232	107.784				
U	238	110.740				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Pb	208	CCV is out of limits (+/- 10%)
QC Std 11	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Thursday, February 25, 2010 01:58:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 12.201

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.081	ug/L	10.197	299	0.000
Be	9	0.018	ug/L	51.844	33	0.000
B	11	2.579	ug/L	15.125	1884	0.003
Na	23	1.316	ug/L	84.987	22685	0.014
Mg	24	0.489	ug/L	108.302	5334	0.003
Al	27	1.173	ug/L	112.531	11338	0.011
P	31	1.722	ug/L	86.879	5697	0.001
K	39	3.328	ug/L	55.503	524112	0.046
Ca	43	0.968	ug/L	59.645	341	0.000
> Sc	45		ug/L		419767	419767.140
Ti	47	0.004	ug/L	877.318	365	0.000
V	51	-1.017	ug/L	82.790	-111	-0.020
Cr	52	-0.487	ug/L	21.332	828	-0.008
Cr	53		ug/L		109105	-0.018
Mn	55	-0.010	ug/L	62.129	1378	-0.000
Fe	57	-2.374	ug/L	42.893	5645	-0.001
Co	59	0.017	ug/L	11.866	281	0.000
Ni	60	0.018	ug/L	17.750	162	0.000
Cu	63		ug/L		554	0.000
Cu	65	0.028	ug/L	53.165	297	0.000
Zn	66	0.008	ug/L	100.614	644	0.000
Zn	67		ug/L		13924	0.000
Zn	68		ug/L		1632	0.000
> Ge	74		ug/L		518179	518178.770
As	75	0.331	ug/L	97.478	-143	0.001
Se	77		ug/L		6369	-0.002
Se	82	0.194	ug/L	18.296	32	0.000
Kr	83		ug/L		147	-0.000
Sr	88	0.016	ug/L	25.521	573	0.001
Y	89		ug/L		59	-0.000
Mo	98	0.086	ug/L	12.447	565	0.001
Ag	107	0.009	ug/L	7.425	155	0.000
Cd	111	0.019	ug/L	49.545	72	0.000
Cd	114		ug/L		158	0.000
> In	115		ug/L		354160	354159.678
Sn	120	0.048	ug/L	27.503	801	0.001
Sb	121	0.877	ug/L	10.887	6799	0.018
Sb	123		ug/L		5313	0.014
Ba	135		ug/L		88	0.000
Ba	137	0.015	ug/L	32.187	150	0.000
Ho	165		ug/L		30	0.000
> Lu	175		ug/L		692811	692811.033
Tl	205	0.297	ug/L	15.828	10425	0.012
Pb	208	0.072	ug/L	19.153	4624	0.005
Bi	209		ug/L		573	-0.000
Th	232	0.062	ug/L	6.357	4669	0.006
U	238	0.087	ug/L	17.296	6259	0.008

Sample ID: QC Std 12

Report Date/Time: Thursday, February 25, 2010 02:01:04

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		89.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		90.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		93.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		97.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 03:06:24

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 8.212

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.465	ug/L	1.954	118632	0.306
Be	9	53.925	ug/L	1.997	25821	0.067
B	11	99.750	ug/L	1.592	48652	0.124
Na	23	4455.631	ug/L	3.102	18422685	47.468
Mg	24	4776.217	ug/L	5.396	13019219	33.568
Al	27	5033.646	ug/L	3.899	17701688	45.633
P	31	4544.170	ug/L	0.649	1053826	2.706
K	39	4592.157	ug/L	5.447	25279389	64.018
Ca	43	4816.015	ug/L	1.923	67269	0.173
> Sc	45		ug/L		387700	387700.329
Ti	47	49.528	ug/L	3.202	36438	0.093
V	51	49.899	ug/L	3.841	392794	0.993
Cr	52	51.839	ug/L	1.935	323304	0.824
Cr	53		ug/L		170480	0.162
Mn	55	54.104	ug/L	2.127	535329	1.377
Fe	57	4692.131	ug/L	2.583	1028649	2.639
Co	59	52.684	ug/L	1.709	415824	1.072
Ni	60	52.046	ug/L	2.538	94908	0.245
Cu	63		ug/L		227636	0.586
Cu	65	51.237	ug/L	1.995	112052	0.288
Zn	66	50.843	ug/L	0.318	71998	0.148
Zn	67		ug/L		29748	0.035
Zn	68		ug/L		51891	0.105
> Ge	74		ug/L		481221	481220.561
As	75	47.765	ug/L	1.495	69952	0.147
Se	77		ug/L		13474	0.014
Se	82	49.353	ug/L	3.993	7546	0.016
Kr	83		ug/L		134	-0.000
Sr	88	52.285	ug/L	2.686	918989	2.773
Y	89		ug/L		155	0.000
Mo	98	47.993	ug/L	2.726	227104	0.685
Ag	107	51.141	ug/L	2.709	406585	1.227
Cd	111	49.932	ug/L	3.069	100630	0.304
Cd	114		ug/L		235139	0.709
> In	115		ug/L		331469	331469.489
Sn	120	52.088	ug/L	3.245	419230	1.264
Sb	121	51.190	ug/L	3.297	342473	1.032
Sb	123		ug/L		271371	0.818
Ba	135		ug/L		110871	0.165
Ba	137	48.101	ug/L	0.597	197420	0.294
Ho	165		ug/L		62	0.000
> Lu	175		ug/L		671772	671772.270
Tl	205	50.110	ug/L	2.090	1368390	2.034
Pb	208	53.590	ug/L	2.298	2621957	3.902
Bi	209		ug/L		848	0.000
Th	232	50.971	ug/L	1.947	3062468	4.558
U	238	51.964	ug/L	0.543	3270061	4.867

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 03:09:07

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7	106.929				
Be	9	107.850				
B	11	99.750				
Na	23	89.113				
Mg	24	95.524				
Al	27	99.676				
P	31	90.883				
K	39	91.843				
Ca	43	96.320				
> Sc	45		83.0			
Ti	47	99.055				
V	51	99.799				
Cr	52	103.679				
Cr	53					
Mn	55	108.207				
Fe	57	93.843				
Co	59	105.369				
Ni	60	104.092				
Cu	63					
Cu	65	102.474				
Zn	66	101.686				
Zn	67					
Zn	68					
> Ge	74		84.1			
As	75	95.529				
Se	77					
Se	82	98.706				
Kr	83					
Sr	88	104.570				
Y	89					
Mo	98	95.986				
Ag	107	102.281				
Cd	111	99.864				
Cd	114					
> In	115		87.3			
Sn	120	104.176				
Sb	121	102.380				
Sb	123					
Ba	135					
Ba	137	96.202				
Ho	165					
> Lu	175		94.8			
Tl	205	100.221				
Pb	208	107.179				
Bi	209					
Th	232	101.942				
U	238	103.927				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 03:12:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 9.213

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.002	ug/L	181.797	93	-0.000
Be	9	0.013	ug/L	92.819	29	0.000
B	11	2.538	ug/L	12.464	1751	0.003
Na	23	0.699	ug/L	252.559	18680	0.007
Mg	24	-0.119	ug/L	174.163	3334	-0.001
Al	27	0.522	ug/L	164.908	8336	0.005
P	31	1.329	ug/L	32.453	5261	0.001
K	39	7.771	ug/L	109.355	516903	0.108
Ca	43	2.269	ug/L	113.069	339	0.000
> Sc	45		ug/L		394424	394423.568
Ti	47	0.008	ug/L	876.599	346	0.000
V	51	-1.188	ug/L	23.281	-1433	-0.024
Cr	52	-0.577	ug/L	10.875	218	-0.009
Cr	53		ug/L		112822	0.008
Mn	55	-0.016	ug/L	16.502	1237	-0.000
Fe	57	-2.116	ug/L	7.287	5362	-0.001
Co	59	0.004	ug/L	23.457	153	0.000
Ni	60	0.003	ug/L	344.680	124	0.000
Cu	63		ug/L		385	-0.000
Cu	65	-0.003	ug/L	129.972	211	-0.000
Zn	66	-0.014	ug/L	215.355	588	-0.000
Zn	67		ug/L		13821	0.001
Zn	68		ug/L		1600	0.000
> Ge	74		ug/L		497771	497770.977
As	75	0.140	ug/L	10.133	-434	0.000
Se	77		ug/L		6583	-0.001
Se	82	-0.002	ug/L	3289.256	-0	-0.000
Kr	83		ug/L		151	0.000
Sr	88	0.003	ug/L	27.952	314	0.000
Y	89		ug/L		62	-0.000
Mo	98	0.020	ug/L	18.977	229	0.000
Ag	107	0.003	ug/L	65.382	102	0.000
Cd	111	0.007	ug/L	30.382	44	0.000
Cd	114		ug/L		74	0.000
> In	115		ug/L		347292	347291.835
Sn	120	0.009	ug/L	15.923	465	0.000
Sb	121	0.142	ug/L	15.937	1529	0.003
Sb	123		ug/L		1169	0.002
Ba	135		ug/L		65	0.000
Ba	137	-0.000	ug/L	430.105	87	-0.000
Ho	165		ug/L		28	0.000
> Lu	175		ug/L		688217	688216.705
Tl	205	0.228	ug/L	22.575	8414	0.009
Pb	208	0.005	ug/L	6.134	1229	0.000
Bi	209		ug/L		507	-0.000
Th	232	0.025	ug/L	11.434	2360	0.002
U	238	0.006	ug/L	7.177	1001	0.001

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 03:15:16

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Li	7						
Be	9						
B	11						
Na	23						
Mg	24						
Al	27						
P	31						
K	39						
Ca	43						
> Sc	45		84.5				
Ti	47						
V	51						
Cr	52						
Cr	53						
Mn	55						
Fe	57						
Co	59						
Ni	60						
Cu	63						
Cu	65						
Zn	66						
Zn	67						
Zn	68						
> Ge	74		87.0				
As	75						
Se	77						
Se	82						
Kr	83						
Sr	88						
Y	89						
Mo	98						
Ag	107						
Cd	111						
Cd	114						
> In	115		91.4				
Sn	120						
Sb	121						
Sb	123						
Ba	135						
Ba	137						
Ho	165						
> Lu	175		97.1				
Tl	205						
Pb	208						
Bi	209						
Th	232						
U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 03:15:16

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 04:01:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 8.221

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.297	ug/L	0.876	110710	0.305
Be	9	54.146	ug/L	3.019	24265	0.067
B	11	100.480	ug/L	3.587	45859	0.125
Na	23	4171.471	ug/L	2.958	16138293	44.441
Mg	24	4586.782	ug/L	5.716	11694894	32.237
Al	27	5055.741	ug/L	4.486	16631740	45.833
P	31	4577.718	ug/L	2.256	993543	2.726
K	39	4802.389	ug/L	2.715	24743549	66.949
Ca	43	4846.935	ug/L	0.926	63379	0.174
> Sc	45		ug/L		362947	362947.495
Ti	47	49.047	ug/L	3.723	33775	0.092
V	51	50.336	ug/L	6.076	370668	1.002
Cr	52	51.846	ug/L	1.989	302704	0.824
Cr	53		ug/L		167069	0.183
Mn	55	53.537	ug/L	2.899	495800	1.363
Fe	57	4713.288	ug/L	3.470	967035	2.651
Co	59	53.158	ug/L	2.348	392706	1.082
Ni	60	52.434	ug/L	1.328	89505	0.246
Cu	63		ug/L		213057	0.586
Cu	65	51.062	ug/L	1.162	104532	0.287
Zn	66	50.557	ug/L	2.303	67110	0.148
Zn	67		ug/L		27645	0.035
Zn	68		ug/L		49177	0.106
> Ge	74		ug/L		451139	451139.409
As	75	48.399	ug/L	2.181	66454	0.149
Se	77		ug/L		13618	0.016
Se	82	50.015	ug/L	0.660	7172	0.016
Kr	83		ug/L		136	-0.000
Sr	88	53.795	ug/L	2.400	874162	2.853
Y	89		ug/L		146	0.000
Mo	98	48.885	ug/L	0.506	213906	0.698
Ag	107	51.628	ug/L	1.230	379525	1.239
Cd	111	50.511	ug/L	0.583	94137	0.307
Cd	114		ug/L		218241	0.712
> In	115		ug/L		306374	306373.728
Sn	120	52.632	ug/L	1.336	391718	1.278
Sb	121	52.095	ug/L	0.572	322301	1.050
Sb	123		ug/L		255324	0.832
Ba	135		ug/L		104261	0.162
Ba	137	47.032	ug/L	1.624	184518	0.287
Ho	165		ug/L		64	0.000
> Lu	175		ug/L		642286	642285.524
Tl	205	47.409	ug/L	2.192	1238198	1.924
Pb	208	53.506	ug/L	1.974	2502884	3.896
Bi	209		ug/L		767	0.000
Th	232	50.854	ug/L	1.982	2920992	4.548
U	238	52.228	ug/L	2.841	3141856	4.892

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 04:04:33

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Li	7	106.593					
Be	9	108.292					
B	11	100.480					
Na	23	83.429					
Mg	24	91.736					
Al	27	100.114					
P	31	91.554					
K	39	96.048					
Ca	43	96.939					
> Sc	45		77.7				
Ti	47	98.095					
V	51	100.671					
Cr	52	103.692					
Cr	53						
Mn	55	107.074					
Fe	57	94.266					
Co	59	106.317					
Ni	60	104.868					
Cu	63						
Cu	65	102.124					
Zn	66	101.114					
Zn	67						
Zn	68						
> Ge	74		78.9				
As	75	96.798					
Se	77						
Se	82	100.031					
Kr	83						
Sr	88	107.591					
Y	89						
Mo	98	97.769					
Ag	107	103.257					
Cd	111	101.022					
Cd	114						
> In	115		80.7				
Sn	120	105.263					
Sb	121	104.191					
Sb	123						
Ba	135						
Ba	137	94.064					
Ho	165						
> Lu	175		90.7				
Tl	205	94.818					
Pb	208	107.012					
Bi	209						
Th	232	101.709					
U	238	104.456					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	

QC Action

Sample ID: QC Std 8
 Report Date/Time: Thursday, February 25, 2010 04:04:33
 Page 3

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 04:07:58

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 9.222

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.007	ug/L	70.600	75	-0.000
Be	9	0.001	ug/L	427.705	21	0.000
B	11	2.858	ug/L	13.649	1735	0.004
Na	23	2.439	ug/L	61.149	23687	0.026
Mg	24	-0.394	ug/L	209.953	2334	-0.003
Al	27	0.134	ug/L	261.103	6335	0.001
P	31	1.182	ug/L	136.933	4755	0.001
K	39	5.490	ug/L	106.207	458943	0.077
Ca	43	3.046	ug/L	45.207	318	0.000
Sc	45		ug/L		358890	358890.056
Ti	47	0.028	ug/L	71.080	328	0.000
V	51	-1.351	ug/L	6.580	-2470	-0.027
Cr	52	-0.516	ug/L	15.492	547	-0.008
Cr	53		ug/L		104474	0.013
Mn	55	-0.015	ug/L	1.320	1138	-0.000
Fe	57	-3.066	ug/L	9.844	4687	-0.002
Co	59	0.004	ug/L	29.358	141	0.000
Ni	60	0.018	ug/L	28.015	139	0.000
Cu	63		ug/L		370	0.000
Cu	65	-0.003	ug/L	222.559	192	-0.000
Zn	66	-0.088	ug/L	17.806	449	-0.000
Zn	67		ug/L		12172	-0.001
Zn	68		ug/L		1411	0.000
Ge	74		ug/L		466737	466736.805
As	75	0.324	ug/L	144.041	-140	0.001
Se	77		ug/L		6273	-0.001
Se	82	0.082	ug/L	142.286	12	0.000
Kr	83		ug/L		123	-0.000
Sr	88	0.003	ug/L	29.478	298	0.000
Y	89		ug/L		55	-0.000
Mo	98	0.024	ug/L	22.589	233	0.000
Ag	107	0.003	ug/L	88.056	98	0.000
Cd	111	0.002	ug/L	268.427	32	0.000
Cd	114		ug/L		77	0.000
In	115		ug/L		324681	324681.252
Sn	120	0.012	ug/L	31.440	456	0.000
Sb	121	0.144	ug/L	16.700	1443	0.003
Sb	123		ug/L		1182	0.002
Ba	135		ug/L		58	0.000
Ba	137	-0.000	ug/L	774.420	84	-0.000
Ho	165		ug/L		23	0.000
Lu	175		ug/L		664658	664658.160
Tl	205	1.290	ug/L	8.742	36744	0.052
Pb	208	0.004	ug/L	43.036	1148	0.000
Bi	209		ug/L		514	-0.000
Th	232	0.027	ug/L	8.660	2372	0.002
U	238	0.006	ug/L	26.064	963	0.001

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 04:10:42

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		76.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		81.6			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		85.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		93.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	
QC Std 9	Tl	205	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202032562

Sample Date/Time: Thursday, February 25, 2010 04:14:08

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032562.223

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.016	ug/L	22.151	128	0.000
Be	9	-0.009	ug/L	29.117	17	-0.000
B	11	1.401	ug/L	17.463	1134	0.002
Na	23	4.350	ug/L	35.523	32371	0.046
Mg	24	-0.560	ug/L	68.232	2000	-0.004
Al	27	7.783	ug/L	4.956	32704	0.071
P	31	6.164	ug/L	43.133	6087	0.004
K	39	21.005	ug/L	11.696	561489	0.293
Ca	43	30.231	ug/L	3.138	699	0.001
> Sc	45		ug/L		375746	375745.796
Ti	47	0.449	ug/L	5.663	641	0.001
V	51	-7.066	ug/L	16.943	-45278	-0.141
Cr	52	-0.014	ug/L	288.062	3574	-0.000
Cr	53		ug/L		299123	0.519
Mn	55	0.270	ug/L	5.227	3919	0.007
Fe	57	19.815	ug/L	3.550	9741	0.011
Co	59	-0.002	ug/L	64.075	105	-0.000
Ni	60	0.059	ug/L	20.296	218	0.000
Cu	63		ug/L		660	0.001
Cu	65	0.067	ug/L	16.819	348	0.000
Zn	66	1.501	ug/L	2.297	2515	0.004
Zn	67		ug/L		55765	0.097
Zn	68		ug/L		4784	0.008
> Ge	74		ug/L		449040	449040.038
As	75	-1.259	ug/L	75.403	-2320	-0.004
Se	77		ug/L		21464	0.033
Se	82	0.095	ug/L	50.908	14	0.000
Kr	83		ug/L		116	-0.000
Sr	88	0.103	ug/L	3.988	1818	0.005
Y	89		ug/L		82	0.000
Mo	98	0.030	ug/L	15.255	234	0.000
Ag	107	-0.001	ug/L	75.904	61	-0.000
Cd	111	-0.003	ug/L	179.448	20	-0.000
Cd	114		ug/L		35	-0.000
> In	115		ug/L		291215	291215.233
Sn	120	0.147	ug/L	3.602	1361	0.004
Sb	121	0.093	ug/L	28.490	990	0.002
Sb	123		ug/L		800	0.002
Ba	135		ug/L		131	0.000
Ba	137	0.040	ug/L	11.205	230	0.000
Ho	165		ug/L		28	0.000
> Lu	175		ug/L		620339	620338.726
Tl	205	0.831	ug/L	3.621	22760	0.034
Pb	208	0.012	ug/L	8.330	1401	0.001
Bi	209		ug/L		329	-0.000
Th	232	0.032	ug/L	27.318	2528	0.003
U	238	-0.006	ug/L	5.233	219	-0.001

Sample ID: 1202032562

Report Date/Time: Thursday, February 25, 2010 04:16:53

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		80.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		78.5			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		76.7			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		87.6			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032562

Report Date/Time: Thursday, February 25, 2010 04:16:53

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ICPMS#5 - Summary Report

Sample ID: 1202032563

Sample Date/Time: Thursday, February 25, 2010 04:20:19

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948740|1|ba|

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032563.224

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	49.569	ug/L	1.851	104603	0.283
Be	9	53.487	ug/L	0.551	24361	0.066
B	11	98.988	ug/L	1.738	45918	0.123
Na	23	1723.869	ug/L	3.011	6784493	18.365
Mg	24	1958.303	ug/L	5.903	5078942	13.763
Al	27	2003.800	ug/L	6.081	6705005	18.165
P	31	1877.731	ug/L	2.492	416782	1.118
K	39	1949.349	ug/L	7.980	10459592	27.175
Ca	43	1885.290	ug/L	1.577	25220	0.068
> Sc	45		ug/L		368745	368744.994
Ti	47	42.497	ug/L	2.978	29779	0.080
V	51	38.420	ug/L	4.356	289276	0.765
Cr	52	47.878	ug/L	3.131	284186	0.761
Cr	53		ug/L		324168	0.602
Mn	55	50.570	ug/L	2.495	475927	1.287
Fe	57	1870.062	ug/L	1.803	393191	1.052
Co	59	49.544	ug/L	3.461	371830	1.008
Ni	60	48.465	ug/L	2.757	84051	0.228
Cu	63		ug/L		202473	0.548
Cu	65	47.455	ug/L	2.259	98703	0.267
Zn	66	49.371	ug/L	2.096	64352	0.144
Zn	67		ug/L		66996	0.125
Zn	68		ug/L		49465	0.109
> Ge	74		ug/L		442864	442864.089
As	75	45.802	ug/L	0.542	61708	0.141
Se	77		ug/L		25591	0.043
Se	82	49.700	ug/L	0.975	6997	0.016
Kr	83		ug/L		127	-0.000
Sr	88	52.381	ug/L	1.355	801820	2.778
Y	89		ug/L		124	0.000
Mo	98	48.629	ug/L	2.407	200393	0.694
Ag	107	51.470	ug/L	2.157	356353	1.235
Cd	111	48.569	ug/L	2.043	85251	0.295
Cd	114		ug/L		197890	0.685
> In	115		ug/L		288597	288597.458
Sn	120	50.304	ug/L	2.798	352607	1.221
Sb	121	52.327	ug/L	2.756	304870	1.055
Sb	123		ug/L		240133	0.831
Ba	135		ug/L		92888	0.152
Ba	137	44.194	ug/L	2.352	165053	0.270
Ho	165		ug/L		52	0.000
> Lu	175		ug/L		611402	611401.608
Tl	205	43.929	ug/L	5.775	1091482	1.783
Pb	208	52.668	ug/L	1.824	2345327	3.835
Bi	209		ug/L		1852324	3.029
Th	232	47.940	ug/L	2.144	2621285	4.287
U	238	49.516	ug/L	2.470	2835286	4.638

Sample ID: 1202032563

Report Date/Time: Thursday, February 25, 2010 04:23:04

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		79.0			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		77.4			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		76.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		86.3			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032563

Report Date/Time: Thursday, February 25, 2010 04:23:04

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ICPMS#5 - Summary Report

Sample ID: 245981001

Sample Date/Time: Thursday, February 25, 2010 04:51:13

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\245981001.229

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
|	Li	7	0.121	ug/L	4.601	346	0.001
|	Be	9	0.005	ug/L	224.575	23	0.000
|	B	11	18.011	ug/L	3.470	8710	0.022
|	Na	23	104.928	ug/L	9.616	425621	1.118
|	Mg	24	5.664	ug/L	25.922	18012	0.040
|	Al	27	38.827	ug/L	7.773	135306	0.352
|	P	31	7.335	ug/L	15.799	6214	0.004
|	K	39	199.486	ug/L	11.545	1463193	2.781
|	Ca	43	53.350	ug/L	14.162	989	0.002
>	Sc	45		ug/L		367461	367460.943
|	Ti	47	0.897	ug/L	5.255	936	0.002
|	V	51	-6.404	ug/L	14.677	-39527	-0.127
|	Cr	52	1.390	ug/L	18.731	11685	0.022
|	Cr	53		ug/L		317706	0.587
|	Mn	55	0.958	ug/L	2.807	10264	0.024
|	Fe	57	25.911	ug/L	2.903	10787	0.015
|	Co	59	0.020	ug/L	2.508	266	0.000
|	Ni	60	0.257	ug/L	3.576	555	0.001
|	Cu	63		ug/L		3994	0.010
|	Cu	65	0.827	ug/L	2.463	1913	0.005
|	Zn	66	1.145	ug/L	3.794	1954	0.003
|	Zn	67		ug/L		55258	0.102
|	Zn	68		ug/L		4258	0.007
>	Ge	74		ug/L		428464	428463.805
|	As	75	-2.688	ug/L	38.209	-4088	-0.008
|	Se	77		ug/L		25662	0.045
|	Se	82	0.139	ug/L	55.344	19	0.000
|	Kr	83		ug/L		105	-0.000
|	Sr	88	0.221	ug/L	1.939	3480	0.012
|	Y	89		ug/L		659	0.002
|	Mo	98	0.063	ug/L	5.990	355	0.001
|	Ag	107	0.001	ug/L	116.204	70	0.000
|	Cd	111	0.004	ug/L	73.491	31	0.000
|	Cd	114		ug/L		50	-0.000
>	In	115		ug/L		279158	279158.063
|	Sn	120	0.394	ug/L	4.125	2981	0.010
|	Sb	121	-0.027	ug/L	19.806	276	-0.001
|	Sb	123		ug/L		243	-0.000
|	Ba	135		ug/L		720	0.001
|	Ba	137	0.346	ug/L	1.585	1366	0.002
|	Ho	165		ug/L		75	0.000
>	Lu	175		ug/L		609626	609625.755
|	Tl	205	0.240	ug/L	4.147	7739	0.010
|	Pb	208	0.283	ug/L	1.341	13439	0.021
|	Bi	209		ug/L		276	-0.000
|	Th	232	0.009	ug/L	8.652	1201	0.001
|	U	238	0.602	ug/L	0.797	34941	0.056

Sample ID: 245981001

Report Date/Time: Thursday, February 25, 2010 04:53:58

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		78.7			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		74.9			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		73.5			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		86.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245981001

Report Date/Time: Thursday, February 25, 2010 04:53:58

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 04:57:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 8.230

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	53.506	ug/L	0.339	109582	0.306
Be	9	54.515	ug/L	0.898	24094	0.067
B	11	99.038	ug/L	1.385	44587	0.123
Na	23	4616.235	ug/L	9.139	17595928	49.179
Mg	24	5036.190	ug/L	4.456	12664742	35.395
Al	27	5078.636	ug/L	3.934	16474220	46.040
P	31	4592.433	ug/L	3.138	982657	2.734
K	39	4762.234	ug/L	3.561	24180152	66.389
Ca	43	4847.075	ug/L	1.802	62484	0.174
> Sc	45		ug/L		357833	357833.029
Ti	47	49.687	ug/L	0.710	33742	0.093
V	51	50.563	ug/L	4.728	367223	1.007
Cr	52	51.936	ug/L	2.975	298873	0.826
Cr	53		ug/L		170179	0.198
Mn	55	54.215	ug/L	1.908	495131	1.380
Fe	57	4774.446	ug/L	3.694	965925	2.685
Co	59	53.053	ug/L	2.866	386422	1.080
Ni	60	53.199	ug/L	1.625	89530	0.250
Cu	63		ug/L		210242	0.587
Cu	65	51.309	ug/L	2.290	103546	0.289
Zn	66	49.773	ug/L	1.522	66136	0.145
Zn	67		ug/L		28288	0.036
Zn	68		ug/L		48867	0.105
> Ge	74		ug/L		451461	451460.838
As	75	48.008	ug/L	0.832	65967	0.147
Se	77		ug/L		13698	0.016
Se	82	49.592	ug/L	2.864	7117	0.016
Kr	83		ug/L		128	-0.000
Sr	88	52.768	ug/L	1.425	855952	2.798
Y	89		ug/L		149	0.000
Mo	98	48.988	ug/L	3.210	213900	0.699
Ag	107	51.362	ug/L	2.086	376828	1.232
Cd	111	50.212	ug/L	2.678	93390	0.305
Cd	114		ug/L		216323	0.707
> In	115		ug/L		305832	305831.645
Sn	120	51.900	ug/L	2.512	385500	1.260
Sb	121	52.095	ug/L	1.504	321698	1.050
Sb	123		ug/L		251575	0.821
Ba	135		ug/L		102932	0.163
Ba	137	47.701	ug/L	2.112	184012	0.291
Ho	165		ug/L		65	0.000
> Lu	175		ug/L		631515	631515.344
Tl	205	46.443	ug/L	1.654	1192587	1.885
Pb	208	54.462	ug/L	2.067	2505112	3.966
Bi	209		ug/L		753	0.000
Th	232	51.448	ug/L	0.273	2906226	4.601
U	238	52.522	ug/L	1.676	3106822	4.919

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 05:00:05

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7	107.011				
Be	9	109.029				
B	11	99.038				
Na	23	92.325				
Mg	24	100.724				
Al	27	100.567				
P	31	91.849				
K	39	95.245				
Ca	43	96.942				
> Sc	45		76.7			
Ti	47	99.375				
V	51	101.126				
Cr	52	103.872				
Cr	53					
Mn	55	108.431				
Fe	57	95.489				
Co	59	106.105				
Ni	60	106.397				
Cu	63					
Cu	65	102.617				
Zn	66	99.546				
Zn	67					
Zn	68					
> Ge	74		78.9			
As	75	96.016				
Se	77					
Se	82	99.183				
Kr	83					
Sr	88	105.535				
Y	89					
Mo	98	97.976				
Ag	107	102.723				
Cd	111	100.424				
Cd	114					
> In	115		80.5			
Sn	120	103.799				
Sb	121	104.191				
Sb	123					
Ba	135					
Ba	137	95.401				
Ho	165					
> Lu	175		89.1			
Tl	205	92.886				
Pb	208	108.923				
Bi	209					
Th	232	102.896				
U	238	105.044				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
Ge 74 Int Std for QC	Ge	74	

QC Action

QC Action Line: Continue

Sample ID: QC Std 8
Report Date/Time: Thursday, February 25, 2010 05:00:05
Page 3

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 05:03:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 9.231

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.012	ug/L	7.011	65	-0.000
Be	9	0.018	ug/L	81.045	29	0.000
B	11	2.520	ug/L	20.602	1581	0.003
Na	23	1.317	ug/L	109.316	19347	0.014
Mg	24	-0.261	ug/L	317.906	2667	-0.002
Al	27	-0.580	ug/L	91.800	4001	-0.005
P	31	0.653	ug/L	186.201	4630	0.000
K	39	4.170	ug/L	428.340	451196	0.058
Ca	43	1.918	ug/L	39.840	303	0.000
Sc	45		ug/L		357906	357906.486
Ti	47	-0.014	ug/L	177.898	299	-0.000
V	51	-1.313	ug/L	9.952	-2185	-0.026
Cr	52	-0.637	ug/L	9.607	-145	-0.010
Cr	53		ug/L		103662	0.012
Mn	55	-0.012	ug/L	60.588	1158	-0.000
Fe	57	-2.516	ug/L	16.303	4785	-0.001
Co	59	0.005	ug/L	11.714	149	0.000
Ni	60	0.003	ug/L	57.184	112	0.000
Cu	63		ug/L		346	-0.000
Cu	65	0.006	ug/L	92.591	210	0.000
Zn	66	-0.091	ug/L	4.032	435	-0.000
Zn	67		ug/L		12332	0.000
Zn	68		ug/L		1377	0.000
Ge	74		ug/L		455989	455989.224
As	75	0.415	ug/L	33.315	-11	0.001
Se	77		ug/L		6238	-0.001
Se	82	0.102	ug/L	102.734	15	0.000
Kr	83		ug/L		125	-0.000
Sr	88	0.004	ug/L	21.231	308	0.000
Y	89		ug/L		59	-0.000
Mo	98	0.022	ug/L	28.215	216	0.000
Ag	107	0.004	ug/L	88.816	106	0.000
Cd	111	0.006	ug/L	78.285	39	0.000
Cd	114		ug/L		85	0.000
In	115		ug/L		318667	318667.410
Sn	120	0.016	ug/L	16.376	477	0.000
Sb	121	0.142	ug/L	18.622	1397	0.003
Sb	123		ug/L		1102	0.002
Ba	135		ug/L		65	0.000
Ba	137	-0.000	ug/L	3212.883	83	-0.000
Ho	165		ug/L		22	0.000
Lu	175		ug/L		652645	652644.906
Tl	205	1.016	ug/L	10.806	28833	0.041
Pb	208	0.005	ug/L	2.478	1156	0.000
Bi	209		ug/L		551	0.000
Th	232	0.027	ug/L	8.748	2327	0.002
U	238	0.006	ug/L	19.481	960	0.001

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 05:06:15

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|	Sc	45		76.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
|	Cu	65					
|	Zn	66					
|	Zn	67					
|	Zn	68					
|	Ge	74		79.7			
|	As	75					
|	Se	77					
|	Se	82					
|	Kr	83					
|	Sr	88					
|	Y	89					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|	In	115		83.9			
|	Sn	120					
|	Sb	121					
|	Sb	123					
|	Ba	135					
|	Ba	137					
|	Ho	165					
|	Lu	175		92.1			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
|	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	
QC Std 9	Tl		205CCB is out of limits (+/- PQL)

QC Action

Sample ID: QC Std 9
 Report Date/Time: Thursday, February 25, 2010 05:06:15
 Page 3

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1202032564

Sample Date/Time: Thursday, February 25, 2010 05:15:52

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032564.233

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.124	ug/L	3.159	347	0.001
Be	9	-0.001	ug/L	1434.911	21	-0.000
B	11	18.592	ug/L	1.446	8852	0.023
Na	23	251.160	ug/L	6.598	984201	2.676
Mg	24	9.424	ug/L	27.192	27360	0.066
Al	27	41.416	ug/L	11.427	142042	0.375
P	31	8.631	ug/L	15.302	6409	0.005
K	39	182.608	ug/L	5.241	1357995	2.546
Ca	43	57.893	ug/L	8.766	1034	0.002
> Sc	45		ug/L		362357	362357.332
Ti	47	1.030	ug/L	0.840	1014	0.002
V	51	-6.936	ug/L	16.071	-42796	-0.138
Cr	52	0.861	ug/L	29.754	8488	0.014
Cr	53		ug/L		307959	0.572
Mn	55	0.615	ug/L	0.837	6960	0.016
Fe	57	18.038	ug/L	7.781	9033	0.010
Co	59	0.004	ug/L	3.140	146	0.000
Ni	60	0.110	ug/L	11.094	296	0.001
Cu	63		ug/L		2657	0.006
Cu	65	0.543	ug/L	1.168	1308	0.003
Zn	66	1.349	ug/L	0.752	2194	0.004
Zn	67		ug/L		53014	0.098
Zn	68		ug/L		4405	0.007
> Ge	74		ug/L		425364	425364.422
As	75	-1.587	ug/L	30.338	-2626	-0.005
Se	77		ug/L		24785	0.044
Se	82	0.113	ug/L	126.016	15	0.000
Kr	83		ug/L		114	-0.000
Sr	88	0.222	ug/L	1.047	3507	0.012
Y	89		ug/L		359	0.001
Mo	98	0.012	ug/L	14.229	151	0.000
Ag	107	0.011	ug/L	24.348	139	0.000
Cd	111	0.001	ug/L	1063.766	26	0.000
Cd	114		ug/L		47	-0.000
> In	115		ug/L		280041	280040.501
Sn	120	0.276	ug/L	0.637	2189	0.007
Sb	121	0.011	ug/L	90.073	488	0.000
Sb	123		ug/L		386	0.000
Ba	135		ug/L		796	0.001
Ba	137	0.345	ug/L	4.685	1343	0.002
Ho	165		ug/L		45	0.000
> Lu	175		ug/L		600179	600178.698
Tl	205	0.274	ug/L	4.149	8469	0.011
Pb	208	0.137	ug/L	3.445	6828	0.010
Bi	209		ug/L		768	0.000
Th	232	0.014	ug/L	11.562	1439	0.001
U	238	0.007	ug/L	10.552	920	0.001

Sample ID: 1202032564

Report Date/Time: Thursday, February 25, 2010 05:18:37

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[	Li	7						
|	Be	9						
|	B	11						
|	Na	23						
|	Mg	24						
|	Al	27						
|	P	31						
|	K	39						
|	Ca	43						
>	Sc	45		77.6				
|	Ti	47						
|	V	51						
|	Cr	52						
|	Cr	53						
|	Mn	55						
|	Fe	57						
|	Co	59						
|	Ni	60						
|	Cu	63						
|	Cu	65						
|	Zn	66						
|	Zn	67						
|	Zn	68						
>	Ge	74		74.4				
|	As	75						
|	Se	77						
|	Se	82						
|	Kr	83						
|	Sr	88						
|	Y	89						
|	Mo	98						
|	Ag	107						
|	Cd	111						
|	Cd	114						
>	In	115		73.7				
|	Sn	120						
|	Sb	121						
|	Sb	123						
|	Ba	135						
|	Ba	137						
|	Ho	165						
>	Lu	175		84.7				
|	Tl	205						
|	Pb	208						
|	Bi	209						
|	Th	232						
|	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032565

Sample Date/Time: Thursday, February 25, 2010 05:22:04

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032565.234

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	46.348	ug/L	0.616	100386	0.265
Be	9	51.058	ug/L	1.288	23862	0.063
B	11	112.113	ug/L	3.218	53293	0.140
Na	23	2102.246	ug/L	1.918	8491428	22.396
Mg	24	2025.051	ug/L	9.582	5393717	14.232
Al	27	2096.404	ug/L	8.492	7192425	19.005
P	31	1776.591	ug/L	2.501	404903	1.058
K	39	1918.428	ug/L	2.266	10575946	26.744
Ca	43	1903.254	ug/L	3.144	26117	0.068
> Sc	45		ug/L		378395	378394.950
Ti	47	41.965	ug/L	2.097	30182	0.079
V	51	35.766	ug/L	2.849	276914	0.712
Cr	52	48.741	ug/L	1.558	296849	0.775
Cr	53		ug/L		334865	0.607
Mn	55	47.573	ug/L	2.893	459466	1.211
Fe	57	1784.687	ug/L	3.326	385228	1.004
Co	59	46.837	ug/L	3.092	360716	0.953
Ni	60	45.989	ug/L	2.969	81841	0.216
Cu	63		ug/L		194638	0.514
Cu	65	44.187	ug/L	1.800	94328	0.249
Zn	66	48.302	ug/L	2.556	61956	0.141
Zn	67		ug/L		65350	0.123
Zn	68		ug/L		47075	0.105
> Ge	74		ug/L		435812	435811.885
As	75	69.840	ug/L	2.673	92868	0.214
Se	77		ug/L		25509	0.044
Se	82	19.025	ug/L	4.187	2635	0.006
Kr	83		ug/L		139	0.000
Sr	88	51.998	ug/L	1.358	767904	2.758
Y	89		ug/L		361	0.001
Mo	98	49.210	ug/L	2.112	195647	0.702
Ag	107	52.208	ug/L	1.463	348760	1.253
Cd	111	10.250	ug/L	2.148	17377	0.062
Cd	114		ug/L		38530	0.138
> In	115		ug/L		278448	278447.753
Sn	120	50.999	ug/L	1.680	344926	1.238
Sb	121	196.030	ug/L	2.833	1100667	3.953
Sb	123		ug/L		889988	3.196
Ba	135		ug/L		90502	0.147
Ba	137	42.890	ug/L	1.118	161441	0.262
Ho	165		ug/L		363	0.001
> Lu	175		ug/L		616160	616160.306
Tl	205	58.182	ug/L	9.183	1455510	2.362
Pb	208	41.180	ug/L	0.863	1848411	2.999
Bi	209		ug/L		1068	0.001
Th	232	46.865	ug/L	2.967	2582182	4.191
U	238	47.673	ug/L	3.116	2750697	4.465

Sample ID: 1202032565

Report Date/Time: Thursday, February 25, 2010 05:24:49

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		81.1			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		76.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		73.3			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		87.0			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032565

Report Date/Time: Thursday, February 25, 2010 05:24:49

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ICPMS#5 - Summary Report

Sample ID: 1202032566

Sample Date/Time: Thursday, February 25, 2010 05:28:16

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948740|5|baj

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\1202032566.235

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	0.006	ug/L	54.667	104	0.000
Be	9	0.006	ug/L	35.881	24	0.000
B	11	5.792	ug/L	13.589	3137	0.007
Na	23	24.488	ug/L	2.682	111434	0.261
Mg	24	0.719	ug/L	72.606	5334	0.005
Al	27	6.155	ug/L	11.270	26692	0.056
P	31	0.485	ug/L	351.904	4746	0.000
K	39	38.380	ug/L	33.080	641813	0.535
Ca	43	15.310	ug/L	11.022	491	0.001
> Sc	45		ug/L		370232	370232.331
Ti	47	0.207	ug/L	11.588	463	0.000
V	51	-2.110	ug/L	32.082	-8236	-0.042
Cr	52	0.149	ug/L	116.356	4463	0.002
Cr	53		ug/L		162376	0.161
Mn	55	0.103	ug/L	10.337	2279	0.003
Fe	57	-0.969	ug/L	127.725	5267	-0.001
Co	59	0.000	ug/L	2365.380	117	0.000
Ni	60	0.023	ug/L	10.007	152	0.000
Cu	63		ug/L		665	0.001
Cu	65	0.071	ug/L	8.532	351	0.000
Zn	66	0.311	ug/L	4.184	961	0.001
Zn	67		ug/L		17816	0.013
Zn	68		ug/L		2050	0.002
> Ge	74		ug/L		451489	451488.745
As	75	-0.393	ug/L	65.339	-1130	-0.001
Se	77		ug/L		12404	0.013
Se	82	0.092	ug/L	176.230	13	0.000
Kr	83		ug/L		114	-0.000
Sr	88	0.043	ug/L	7.643	920	0.002
Y	89		ug/L		105	0.000
Mo	98	0.011	ug/L	20.574	161	0.000
Ag	107	0.000	ug/L	504.683	73	0.000
Cd	111	-0.002	ug/L	40.906	22	-0.000
Cd	114		ug/L		40	-0.000
> In	115		ug/L		303525	303525.381
Sn	120	0.059	ug/L	8.927	775	0.001
Sb	121	0.003	ug/L	180.420	486	0.000
Sb	123		ug/L		379	0.000
Ba	135		ug/L		167	0.000
Ba	137	0.056	ug/L	7.739	299	0.000
Ho	165		ug/L		32	0.000
> Lu	175		ug/L		636269	636269.192
Tl	205	3.215	ug/L	9.914	84931	0.130
Pb	208	0.015	ug/L	2.741	1592	0.001
Bi	209		ug/L		410	-0.000
Th	232	0.013	ug/L	9.472	1473	0.001
U	238	-0.000	ug/L	1010.928	572	-0.000

Sample ID: 1202032566

Report Date/Time: Thursday, February 25, 2010 05:31:02

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

Sample ID: 1202032566

Report Date/Time: Thursday, February 25, 2010 05:31:02

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QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution %	Duplicate	Rel. % Difference
Li	7						
Be	9						
B	11						
Na	23						
Mg	24						
Al	27						
P	31						
K	39						
Ca	43						
> Sc	45		79.3				
Ti	47						
V	51						
Cr	52						
Cr	53						
Mn	55						
Fe	57						
Co	59						
Ni	60						
Cu	63						
Cu	65						
Zn	66						
Zn	67						
Zn	68						
> Ge	74		78.9				
As	75						
Se	77						
Se	82						
Kr	83						
Sr	88						
Y	89						
Mo	98						
Ag	107						
Cd	111						
Cd	114						
> In	115		79.9				
Sn	120						
Sb	121						
Sb	123						
Ba	135						
Ba	137						
Ho	165						
> Lu	175		89.8				
Tl	205						
Pb	208						
Bi	209						
Th	232						
U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032566

Report Date/Time: Thursday, February 25, 2010 05:31:02

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 05:34:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 6.236

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	52.917	ug/L	1.868	108597	0.303
Be	9	54.344	ug/L	3.265	24062	0.067
B	11	98.597	ug/L	4.825	44462	0.123
Na	23	4364.899	ug/L	10.122	16677592	46.502
Mg	24	5166.651	ug/L	5.836	13022055	36.312
Al	27	5309.819	ug/L	5.270	17255876	48.136
P	31	4490.103	ug/L	3.876	962807	2.674
K	39	4761.044	ug/L	2.718	24229143	66.373
Ca	43	4781.332	ug/L	1.206	61786	0.172
> Sc	45		ug/L		358648	358648.450
Ti	47	49.162	ug/L	3.254	33457	0.092
V	51	48.521	ug/L	5.223	353326	0.966
Cr	52	51.502	ug/L	4.424	296952	0.819
Cr	53		ug/L		159249	0.166
Mn	55	53.828	ug/L	3.683	492501	1.370
Fe	57	4662.444	ug/L	3.954	945190	2.622
Co	59	52.524	ug/L	2.604	383384	1.069
Ni	60	51.967	ug/L	2.640	87643	0.244
Cu	63		ug/L		208193	0.580
Cu	65	51.065	ug/L	2.197	103281	0.288
Zn	66	50.165	ug/L	2.388	65743	0.146
Zn	67		ug/L		26546	0.033
Zn	68		ug/L		48197	0.105
> Ge	74		ug/L		445320	445319.542
As	75	47.833	ug/L	2.613	64826	0.147
Se	77		ug/L		13497	0.016
Se	82	50.120	ug/L	1.860	7094	0.016
Kr	83		ug/L		138	0.000
Sr	88	52.759	ug/L	3.617	862826	2.798
Y	89		ug/L		136	0.000
Mo	98	47.856	ug/L	2.730	210771	0.683
Ag	107	50.495	ug/L	4.061	373528	1.211
Cd	111	49.369	ug/L	3.327	92594	0.300
Cd	114		ug/L		215515	0.699
> In	115		ug/L		308474	308473.645
Sn	120	50.731	ug/L	1.832	380087	1.231
Sb	121	50.710	ug/L	3.139	315747	1.023
Sb	123		ug/L		248882	0.806
Ba	135		ug/L		103265	0.162
Ba	137	46.919	ug/L	2.371	183074	0.287
Ho	165		ug/L		62	0.000
> Lu	175		ug/L		638898	638898.483
Tl	205	46.584	ug/L	5.676	1208963	1.891
Pb	208	54.008	ug/L	2.258	2512712	3.933
Bi	209		ug/L		723	0.000
Th	232	50.785	ug/L	5.054	2899879	4.542
U	238	52.456	ug/L	4.393	3137205	4.913

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 05:37:10

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	105.835				
Be	9	108.687				
B	11	98.597				
Na	23	87.298				
Mg	24	103.333				
Al	27	105.145				
P	31	89.802				
K	39	95.221				
Ca	43	95.627				
> Sc	45		76.8			
Ti	47	98.324				
V	51	97.043				
Cr	52	103.003				
Cr	53					
Mn	55	107.655				
Fe	57	93.249				
Co	59	105.048				
Ni	60	103.935				
Cu	63					
Cu	65	102.130				
Zn	66	100.329				
Zn	67					
Zn	68					
> Ge	74		77.9			
As	75	95.665				
Se	77					
Se	82	100.239				
Kr	83					
Sr	88	105.518				
Y	89					
Mo	98	95.711				
Ag	107	100.990				
Cd	111	98.739				
Cd	114					
> In	115		81.2			
Sn	120	101.463				
Sb	121	101.420				
Sb	123					
Ba	135					
Ba	137	93.838				
Ho	165					
> Lu	175		90.2			
Tl	205	93.168				
Pb	208	108.016				
Bi	209					
Th	232	101.570				
U	238	104.911				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	P	31	CCV is out of limits (+/- 10%)
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 05:40:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\6020 2.mth

Dataset File: C:\elandata\Dataset\100224\QC Std 7.237

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	-0.008	ug/L	35.434	71	-0.000
Be	9	0.012	ug/L	44.342	26	0.000
B	11	2.894	ug/L	15.369	1738	0.004
Na	23	1.175	ug/L	54.758	18679	0.013
Mg	24	-0.791	ug/L	27.434	1333	-0.006
Al	27	1.002	ug/L	131.615	9003	0.009
P	31	-0.273	ug/L	450.430	4404	-0.000
K	39	5.024	ug/L	159.839	452058	0.070
Ca	43	1.755	ug/L	118.621	299	0.000
> Sc	45		ug/L		355897	355897.204
Ti	47	0.024	ug/L	59.762	323	0.000
V	51	-1.430	ug/L	43.242	-3078	-0.028
Cr	52	-0.546	ug/L	13.221	364	-0.009
Cr	53		ug/L		100757	0.005
Mn	55	-0.012	ug/L	22.218	1151	-0.000
Fe	57	-2.595	ug/L	49.371	4738	-0.001
Co	59	0.003	ug/L	75.329	136	0.000
Ni	60	0.006	ug/L	57.367	117	0.000
Cu	63		ug/L		374	0.000
Cu	65	0.001	ug/L	1267.111	198	0.000
Zn	66	-0.105	ug/L	6.230	414	-0.000
Zn	67		ug/L		11868	-0.001
Zn	68		ug/L		1291	-0.000
> Ge	74		ug/L		453770	453770.256
As	75	0.178	ug/L	92.795	-343	0.001
Se	77		ug/L		6176	-0.001
Se	82	-0.039	ug/L	402.610	-5	-0.000
Kr	83		ug/L		130	-0.000
Sr	88	0.002	ug/L	136.865	273	0.000
Y	89		ug/L		58	-0.000
Mo	98	0.027	ug/L	29.378	238	0.000
Ag	107	0.004	ug/L	72.977	103	0.000
Cd	111	0.006	ug/L	24.325	40	0.000
Cd	114		ug/L		74	0.000
> In	115		ug/L		316780	316780.065
Sn	120	0.009	ug/L	42.527	422	0.000
Sb	121	0.141	ug/L	22.448	1380	0.003
Sb	123		ug/L		1128	0.002
Ba	135		ug/L		52	0.000
Ba	137	-0.002	ug/L	173.345	75	-0.000
Ho	165		ug/L		32	0.000
> Lu	175		ug/L		652981	652980.698
Tl	205	2.263	ug/L	3.135	61943	0.092
Pb	208	0.005	ug/L	17.380	1143	0.000
Bi	209		ug/L		536	-0.000
Th	232	0.025	ug/L	6.004	2231	0.002
U	238	0.005	ug/L	19.730	901	0.000

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 05:43:19

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Li	7Linear Thru Zero	1.0000
Be	9Linear Thru Zero	1.0000
B	11Linear Thru Zero	1.0000
Na	23Linear Thru Zero	0.9999
Mg	24Linear Thru Zero	1.0000
Al	27Linear Thru Zero	0.9997
P	31Linear Thru Zero	1.0000
K	39Linear Thru Zero	1.0000
Ca	43Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ti	47Linear Thru Zero	1.0000
V	51Linear Thru Zero	1.0000
Cr	52Linear Thru Zero	1.0000
Cr	53Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Fe	57Linear Thru Zero	1.0000
Co	59Linear Thru Zero	0.9999
Ni	60Linear Thru Zero	1.0000
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Sr	88Linear Thru Zero	0.9999
Y	89Linear Thru Zero	
Mo	98Linear Thru Zero	1.0000
Ag	107Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Sn	120Linear Thru Zero	1.0000
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Ba	135Linear Thru Zero	
Ba	137Linear Thru Zero	1.0000
Ho	165Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
Bi	209Linear Thru Zero	
Th	232Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		76.2			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		79.3			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		83.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Lu	175		92.2			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC Sc		45	
Ge 74 Int Std for QC Ge		74	
QC Std 7	Tl		205CCB is out of limits (+/- PQL)

QC Action

Sample ID: QC Std 7
 Report Date/Time: Thursday, February 25, 2010 05:43:19
 Page 3

QC Action Line: Continue

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Thursday, February 25, 2010 10:21:12

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.587

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Number of Replicates: 5

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
Be	9.0	7667.7	7667.657	92.696	1.2
Mg	24.0	65438.4	65438.352	810.719	1.2
Co	58.9	148768.2	148768.250	1242.721	0.8
Rh	102.9	281248.6	281248.630	3259.965	1.2
In	114.9	364299.1	364299.123	3937.746	1.1
Pb	208.0	327198.7	327198.660	900.422	0.3
[> Ba	137.9	337284.3	337284.262	1053.536	0.3
[Ba++	69.0	6381.2	0.019	0.000	1.2
[> Ce	139.9	411857.7	411857.650	5034.814	1.2
[CeO	155.9	10883.8	0.026	0.000	1.5
Bkgd	220.0	24.6	24.600	6.358	25.8

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.75	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	5.8	7423.9
Co	59	13	6.3	140852.6
In	115	13	6.8	347281.8

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	589	2072	0.604
Be	9.0	9.0	2056	2088	0.598
Mg	24.0	24.0	5695	2100	0.591
Mg	25.0	25.0	5935	2100	0.577
Mg	26.0	26.0	6177	2100	0.596
Co	58.9	59.0	14189	2125	0.594
Rh	102.9	102.9	24878	2180	0.579
In	114.9	114.9	27792	2200	0.585
Ce	139.9	139.9	33864	2220	0.581
Pb	206.0	206.0	49948	2305	0.587
Pb	207.0	207.0	50159	2240	0.631
Pb	208.0	208.0	50451	2265	0.710
U	238.1	238.1	57732	2275	0.744

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 25, 2010 14:12:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\Blank.347

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		25	
|>	Sc	45		ug/L		668888	
[	Mn	55		ug/L		2291	
[>	Lu	175		ug/L		595837	
|	Tl	205		ug/L		883	
|	Pb	208		ug/L		475	
[U	238		ug/L		204	

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 14:12:52

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Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Mn	55	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45						
[	Mn	55						
|>	Lu	175						
|	Tl	205						
|	Pb	208						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 25, 2010 14:14:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\Standard 1.348

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
|	Be	9	10.000	ug/L	0.828	6540	0.010
|>	Sc	45		ug/L		676851	676850.534
|	Mn	55	10.000	ug/L	1.904	177072	0.258
|>	Lu	175		ug/L		589758	589757.524
|	Tl	205	10.000	ug/L	0.453	263884	0.446
|	Pb	208	10.000	ug/L	2.877	474859	0.805
|	U	238	10.000	ug/L	0.241	601643	1.020

Sample ID: Standard 1

Report Date/Time: Thursday, February 25, 2010 14:15:20

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
Pb	208Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45					
[	Mn	55					
|>	Lu	175					
|	Tl	205					
|	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 25, 2010 14:17:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani 0225.mth

Dataset File: c:\elandata\Dataset\100224\Standard 2.349

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	100.022	ug/L	1.049	63615	0.098
|>	Sc	45		ug/L		645973	645972.524
[	Mn	55	99.878	ug/L	2.401	1486823	2.298
[>	Lu	175		ug/L		584303	584303.328
|	Ti	205	99.812	ug/L	2.029	2189635	3.747
|	Pb	208	99.844	ug/L	1.355	4061519	6.951
[	U	238	99.831	ug/L	0.936	5089463	8.710

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 14:17:49

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate	Rel. % Difference
[	Be	9						
|>	Sc	45						
[	Mn	55						
|>	Lu	175						
|	Tl	205						
|	Pb	208						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 25, 2010 14:19:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 1.350

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	51.337 ug/L	0.831	31823	0.051
[>	Sc	45	ug/L		629483	629482.623
[	Mn	55	54.535 ug/L	2.129	791888	1.255
[>	Lu	175	ug/L		589274	589274.225
[	Ti	205	52.420 ug/L	0.813	1160354	1.968
[	Pb	208	53.310 ug/L	1.745	2187052	3.711
[	U	238	52.301 ug/L	0.705	2689274	4.563

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 14:20:18

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9	102.674				
|>	Sc	45		94.1			
[	Mn	55	109.069				
[>	Lu	175		98.9			
|	Tl	205	104.839				
|	Pb	208	106.620				
[	U	238	104.602				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 25, 2010 14:22:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 2.351

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.002	ug/L	214.675	24	-0.000
|>	Sc	45		ug/L		654529	654529.493
[	Mn	55	-0.004	ug/L	100.755	2183	-0.000
|>	Lu	175		ug/L		595331	595330.522
|	Tl	205	0.102	ug/L	6.118	3167	0.004
|	Pb	208	0.003	ug/L	26.105	579	0.000
[	U	238	0.008	ug/L	1.572	602	0.001

Sample ID: QC Std 2

Report Date/Time: Thursday, February 25, 2010 14:22:52

Page 1

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45			97.9			
[	Mn	55						
[>	Lu	175			99.9			
|	Tl	205						
|	Pb	208						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 25, 2010 14:24:50

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 3.352

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.557	ug/L	9.676	385	0.001
|>	Sc	45		ug/L		658791	658790.794
[	Mn	55	6.275	ug/L	4.301	97305	0.144
[>	Lu	175		ug/L		592978	592978.327
|	Tl	205	1.277	ug/L	1.263	29298	0.048
|	Pb	208	2.551	ug/L	2.809	105733	0.178
[U	238	0.290	ug/L	0.556	15199	0.025

Sample ID: QC Std 3

Report Date/Time: Thursday, February 25, 2010 14:25:22

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9	111.411					
|>	Sc	45		98.5				
[	Mn	55	125.508					
|>	Lu	175		99.5				
|	Tl	205	127.675					
|	Pb	208	127.538					
[	U	238	144.913					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	U	238	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 25, 2010 14:27:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 4.353

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.089	ug/L	12.417	70	0.000
|>	Sc	45		ug/L		556722	556721.917
[	Mn	55	6.374	ug/L	2.843	83520	0.147
[>	Lu	175		ug/L		546173	546173.398
|	Ti	205	0.027	ug/L	7.143	1352	0.001
|	Pb	208	0.239	ug/L	1.772	9511	0.017
[U	238	-0.001	ug/L	7.538	150	-0.000

Sample ID: QC Std 4

Report Date/Time: Thursday, February 25, 2010 14:27:52

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Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45			83.2		
[	Mn	55	109.892				
[>	Lu	175			91.7		
|	Tl	205					
|	Pb	208	126.313				
[	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 25, 2010 14:29:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 5.354

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.782	ug/L	1.989	10470	0.019
> Sc	45		ug/L		536856	536856.079
[Mn	55	28.447	ug/L	1.663	353252	0.655
> Lu	175		ug/L		544762	544762.461
[Tl	205	21.404	ug/L	1.003	438467	0.803
[Pb	208	21.975	ug/L	2.109	833709	1.530
[U	238	23.745	ug/L	0.446	1128817	2.072

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	0.9999
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998
Pb	208Linear Thru Zero	0.9999
U	238Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	98.910					
> Sc	45		80.3				
[Mn	55	110.258					
> Lu	175		91.4				
[Tl	205	107.019					
[Pb	208	108.847					
[U	238	118.723					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Thursday, February 25, 2010 14:30:23

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 14:32:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.355

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	53.548	ug/L	3.801	31989	0.053
Sc	45		ug/L		606838	606838.403
Mn	55	54.439	ug/L	2.137	762096	1.253
Lu	175		ug/L		601484	601484.197
Tl	205	51.997	ug/L	0.762	1174882	1.952
Pb	208	54.077	ug/L	2.248	2264396	3.765
U	238	53.307	ug/L	0.482	2797685	4.651

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	107.095					
Sc	45		90.7				
Mn	55	108.878					
Lu	175		100.9				
Tl	205	103.993					
Pb	208	108.154					
U	238	106.613					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 14:32:55

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 14:34:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.356

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	-0.001	ug/L	739.982	24	-0.000
|>	Sc	45		ug/L		649200	649199.690
[	Mn	55	-0.021	ug/L	1.269	1911	-0.000
[>	Lu	175		ug/L		625070	625069.607
|	Tl	205	0.087	ug/L	3.030	2978	0.003
|	Pb	208	0.000	ug/L	61.802	513	0.000
[	U	238	0.005	ug/L	17.144	503	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		97.1			
[	Mn	55					
[>	Lu	175		104.9			
|	Tl	205					
|	Pb	208					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 14:35:29

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Thursday, February 25, 2010 14:56:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 8.364

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	52.970	ug/L	1.302	31179	0.052
[>	Sc	45		ug/L		597786	597786.220
[	Mn	55	55.100	ug/L	1.866	759807	1.268
[>	Lu	175		ug/L		595134	595133.877
|	Tl	205	52.325	ug/L	0.329	1169829	1.964
|	Pb	208	53.592	ug/L	1.336	2220837	3.731
[	U	238	52.623	ug/L	2.770	2733100	4.591

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[	Be	9	105.941					
[>	Sc	45		89.4				
[	Mn	55	110.199					
[>	Lu	175		99.9				
|	Tl	205	104.651					
|	Pb	208	107.184					
[	U	238	105.247					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Mn	55	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 8

Report Date/Time: Thursday, February 25, 2010 14:57:27

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Thursday, February 25, 2010 14:59:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 9.365

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.001		ug/L	1466.131	23	0.000
>	Sc	45			ug/L		607338	607337.892
[	Mn	55	0.001		ug/L	693.699	2089	0.000
>	Lu	175			ug/L		599774	599774.272
|	Tl	205	0.874		ug/L	1.983	20554	0.033
|	Pb	208	0.003		ug/L	4.189	607	0.000
|	U	238	0.008		ug/L	2.310	641	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		90.8				
Mn	55						
Lu	175		100.7				
Tl	205						
Pb	208						
U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Thursday, February 25, 2010 15:00:00

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ICPMS#5 - Summary Report

Sample ID: 1202032562

Sample Date/Time: Thursday, February 25, 2010 15:13:21

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032562.370

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.005	ug/L	99.825	21	-0.000
> Sc	45		ug/L		643470	643470.488
[Mn	55	0.283	ug/L	5.774	6389	0.007
> Lu	175		ug/L		585134	585134.328
| Tl	205	0.483	ug/L	1.138	11475	0.018
| Pb	208	0.021	ug/L	5.320	1327	0.001
[U	238	-0.000	ug/L	198.800	193	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		96.2				
[Mn	55						
> Lu	175		98.2				
| Tl	205						
| Pb	208						
[U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032562

Report Date/Time: Thursday, February 25, 2010 15:13:55

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ICPMS#5 - Summary Report

Sample ID: 1202032563

Sample Date/Time: Thursday, February 25, 2010 15:15:56

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032563.371

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.625	ug/L	4.308	32048	0.049
Sc	45		ug/L		656083	656083.082
Mn	55	50.137	ug/L	2.054	758987	1.154
Lu	175		ug/L		589037	589037.009
Tl	205	42.034	ug/L	2.037	930318	1.578
Pb	208	52.764	ug/L	2.619	2163992	3.673
U	238	51.774	ug/L	0.516	2660967	4.517

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		98.1			
Mn	55					
Lu	175		98.9			
Tl	205					
Pb	208					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032563

Report Date/Time: Thursday, February 25, 2010 15:16:31

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 15:23:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.374

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	54.183	ug/L	1.937	31055	0.053
> Sc	45		ug/L		582090	582090.176
Mn	55	54.374	ug/L	3.736	730010	1.251
> Lu	175		ug/L		593497	593496.547
Tl	205	52.300	ug/L	3.630	1165289	1.963
Pb	208	54.421	ug/L	2.513	2248095	3.789
U	238	53.119	ug/L	0.451	2750767	4.635

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	108.365					
> Sc	45		87.0				
Mn	55	108.748					
> Lu	175		99.6				
Tl	205	104.601					
Pb	208	108.842					
U	238	106.238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 15:24:15

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 15:26:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.375

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.005	ug/L	23.854	26	0.000	
>	Sc	45		ug/L		602746	602745.952	
[	Mn	55	0.003	ug/L	113.169	2105	0.000	
>	Lu	175		ug/L		615579	615578.706	
|	Tl	205	0.490	ug/L	4.079	12233	0.018	
|	Pb	208	0.001	ug/L	113.914	533	0.000	
|	U	238	0.006	ug/L	6.248	549	0.001	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		90.1				
Mn	55						
Lu	175		103.3				
Tl	205						
Pb	208						
U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 15:26:49

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ICPMS#5 - Summary Report

Sample ID: 245981001

Sample Date/Time: Thursday, February 25, 2010 15:34:33

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948740|1|ba|

Method File: c:\elandata\Method\VanI 0225.mth

Dataset File: c:\elandata\Dataset\100224\245981001.378

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.003	ug/L		323.930	26	0.000
>	Sc	45		ug/L			641204	641204.217
[	Mn	55	1.001	ug/L		3.391	16963	0.023
>	Lu	175		ug/L			590828	590827.562
|	Tl	205	0.198	ug/L		3.594	5259	0.007
|	Pb	208	0.306	ug/L		3.934	13045	0.021
|	U	238	0.670	ug/L		0.680	34722	0.058

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9						
Sc	45		95.9				
Mn	55						
Lu	175		99.2				
Tl	205						
Pb	208						
U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 245981001

Report Date/Time: Thursday, February 25, 2010 15:35:07

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032564

Sample Date/Time: Thursday, February 25, 2010 15:39:45

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032564.380

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.003	ug/L	216.799	22	-0.000
> Sc	45		ug/L		643322	643321.984
[Mn	55	0.626	ug/L	2.225	11465	0.014
> Lu	175		ug/L		594600	594599.800
| Ti	205	0.097	ug/L	3.017	3045	0.004
| Pb	208	0.145	ug/L	1.845	6466	0.010
[U	238	0.013	ug/L	4.690	878	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Ti	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		96.2				
[Mn	55						
> Lu	175		99.8				
| Ti	205						
| Pb	208						
[U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032564

Report Date/Time: Thursday, February 25, 2010 15:40:19

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ICPMS#5 - Summary Report

Sample ID: 1202032565

Sample Date/Time: Thursday, February 25, 2010 15:42:21

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032565.381

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	47.665	ug/L	3.328	29818	0.047
Sc	45		ug/L		635371	635371.076
Mn	55	48.892	ug/L	0.732	717113	1.125
Lu	175		ug/L		588240	588240.219
Tl	205	57.057	ug/L	5.253	1260682	2.142
Pb	208	42.232	ug/L	0.828	1729953	2.940
U	238	51.407	ug/L	1.109	2638697	4.485

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
Sc	45		95.0			
Mn	55					
Lu	175		98.7			
Tl	205					
Pb	208					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032565

Report Date/Time: Thursday, February 25, 2010 15:42:56

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ICPMS#5 - Summary Report

Sample ID: 1202032566

Sample Date/Time: Thursday, February 25, 2010 15:44:58

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948740|5|baj

Method File: c:\elandata\Method\lanl 0225.mth

Dataset File: c:\elandata\Dataset\100224\1202032566.382

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.000	ug/L	11232.568	23	0.000
Sc	45		ug/L		614367	614367.315
Mn	55	0.101	ug/L	4.725	3533	0.002
Lu	175		ug/L		627621	627620.913
Tl	205	2.853	ug/L	3.675	68114	0.107
Pb	208	0.023	ug/L	6.465	1516	0.002
U	238	0.004	ug/L	2.553	424	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		91.8				
Mn	55						
Lu	175		105.3				
Tl	205						
Pb	208						
U	238						

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032566

Report Date/Time: Thursday, February 25, 2010 15:45:34

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 15:50:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.384

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.732	ug/L	4.848	29509	0.051
Sc	45		ug/L		579534	579534.140
Mn	55	53.551	ug/L	1.178	716125	1.232
Lu	175		ug/L		613922	613922.104
Tl	205	50.004	ug/L	1.850	1153173	1.877
Pb	208	52.325	ug/L	1.116	2236872	3.643
U	238	51.422	ug/L	0.906	2754482	4.487

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	103.463					
Sc	45		86.6				
Mn	55	107.101					
Lu	175		103.0				
Tl	205	100.009					
Pb	208	104.651					
U	238	102.844					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 15:50:57

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 15:52:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\VanI 0225.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.385

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.002		ug/L	176.091	23	0.000
>	Sc	45			ug/L		580751	580751.122
[	Mn	55	0.006		ug/L	93.107	2066	0.000
>	Lu	175			ug/L		608046	608045.886
|	Tl	205	1.444		ug/L	1.703	33844	0.054
|	Pb	208	0.002		ug/L	22.146	571	0.000
|	U	238	0.007		ug/L	7.541	605	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
> Sc	45		86.8				
[Mn	55						
> Lu	175		102.0				
[Tl	205						
[Pb	208						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Tl	205	CCB is out of limits (+/- PQL)

QC Action

QC Action Line: Continue

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 15:53:31

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ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 25, 2010 15:57:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\Blank.386

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		599602	
[U	238		ug/L		354	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Thursday, February 25, 2010 15:57:13

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ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 25, 2010 15:58:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\Standard 1.387

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		598286	598285.760
[	U	238	10.000	ug/L	1.095	639626	1.069

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 25, 2010 16:00:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\Standard 2.388

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		591647	591647.028
[U	238	99.816	ug/L	0.480	5330455	9.009

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175					
[U	238					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Thursday, February 25, 2010 16:00:26

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ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 25, 2010 16:01:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 1.389

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		594744	594744.465
[	U	238	52.109	ug/L	1.185	2797259	4.703

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			99.2			
[	U	238	104.217					

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Thursday, February 25, 2010 16:02:04

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ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 25, 2010 16:03:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 2.390

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		616563	616563.277
[	U	238	0.017	ug/L	6.946	1307	0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			102.8			
[	U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 25, 2010 16:05:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 3.391

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		600065	600064.857
[	U	238	0.244	ug/L	1.225	13546	0.022

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			100.1		
[U	238	121.797				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 25, 2010 16:07:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 4.392

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		544306	544305.822
[	U	238	-0.001	ug/L	6.362	248	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[>	Lu	175		90.8				
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 25, 2010 16:08:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\w only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 5.393

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		539792	539791.708
[	U	238	23.423	ug/L	0.126	1141451	2.114

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			90.0			
[U	238	117.115					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 16:10:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.394

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175			ug/L		596598	596598.137
[	U	238	51.765		ug/L	0.946	2787532	4.672

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			99.5			
[	U	238	103.530					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 16:10:31

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 16:12:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.395

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		594162	594161.567
[	U	238	0.010	ug/L	6.225	887	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			99.1		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032562

Sample Date/Time: Thursday, February 25, 2010 16:13:44

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\1202032562.396

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		561602	561602.446
[	U	238	-0.000	ug/L	231.891	321	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			93.7			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032563

Sample Date/Time: Thursday, February 25, 2010 16:15:27

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202032563.397

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		570802	570802.292
[	U	238	50.564	ug/L	1.023	2605073	4.564

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			95.2		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032563

Report Date/Time: Thursday, February 25, 2010 16:15:40

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 16:24:04

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.402

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		619346	619345.966
[	U	238	49.089	ug/L	0.403	2744254	4.430

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		103.3				
[U	238	98.177					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 16:25:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.403

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		622016	622015.783
[	U	238	0.010	ug/L	6.333	921	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175		103.7			
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 245981001

Sample Date/Time: Thursday, February 25, 2010 16:27:27

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948740[1|ba]

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\245981001.404

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		571663	571662.880
[	U	238	0.640	ug/L	1.084	33382	0.058

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			95.3		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032564

Sample Date/Time: Thursday, February 25, 2010 16:30:55

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202032564.406

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		587644	587643.561
[	U	238	0.010	ug/L	6.425	883	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
U	238Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			98.0		
[U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032564

Report Date/Time: Thursday, February 25, 2010 16:31:08

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032565

Sample Date/Time: Thursday, February 25, 2010 16:32:39

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\1202032565.407

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		587968	587967.926
[	U	238	49.454	ug/L	1.450	2624658	4.463

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			98.1			
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032565

Report Date/Time: Thursday, February 25, 2010 16:32:53

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032566

Sample Date/Time: Thursday, February 25, 2010 16:34:25

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948740[5]baj

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\1202032566.408

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		624063	624063.010
[	U	238	0.006	ug/L	8.896	693	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		104.1				
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 25, 2010 16:36:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 6.409

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		604405	604404.935
[	U	238	50.306	ug/L	0.810	2744319	4.540

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			100.8		
[	U	238	100.612				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Thursday, February 25, 2010 16:36:19

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 25, 2010 16:37:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lu only.mth

Dataset File: c:\elandata\Dataset\100224\QC Std 7.410

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175			ug/L		601216	601215.925
[	U	238	0.010		ug/L	9.203	908	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate	Rel. % Difference
[>	Lu	175		100.3				
[U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Thursday, February 25, 2010 16:38:01

Page 1

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Sunday, February 28, 2010 11:19:11

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.612

Tuning File: c:\elandata\Tuning\default2.tun

Optimization File: c:\elandata\Optimize\default.dac

Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35

Current Dead Time (ns): 35

Number of Replicates: 5

Summary

Analyte	Mass	Meas. Intens.	Mean	Net Intens.	Mean	Net Intens.	SD	Net Intens.	RSD
Be	9.0		6196.3		6196.344		143.347		2.3
Mg	24.0		67234.2		67234.247		309.860		0.5
Co	58.9		132558.2		132558.202		1103.361		0.8
Rh	102.9		258781.3		258781.341		1982.494		0.8
In	114.9		336320.1		336320.050		2837.596		0.8
Pb	208.0		320426.5		320426.537		1072.771		0.3
[> Ba	137.9		331832.6		331832.612		2204.656		0.7
[Ba++	69.0		5415.4		0.016		0.000		1.6
[> Ce	139.9		412164.8		412164.835		3829.750		0.9
[CeO	155.9		10667.4		0.026		0.001		3.8
Bkgd	220.0		21.3		21.300		4.604		21.6

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
6.00	Lens Voltage
1450.00	ICP RF Power
-1750.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
275.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	6.0	6925.3
Co	59	13	6.5	130705.5
In	115	13	7.3	340695.4

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	595	2050	0.661
Be	9.0	9.0	2061	2075	0.622
Mg	24.0	24.0	5689	2080	0.610
Mg	25.0	25.0	5941	2080	0.625
Mg	26.0	26.0	6167	2080	0.630
Co	58.9	58.9	14183	2110	0.614
Rh	102.9	102.9	24875	2160	0.629
In	114.9	114.9	27789	2180	0.626
Ce	139.9	139.9	33873	2200	0.627
Pb	206.0	206.0	49948	2295	0.581
Pb	207.0	207.0	50171	2240	0.628
Pb	208.0	208.0	50451	2265	0.688
U	238.1	238.1	57734	2275	0.722

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, February 28, 2010 11:32:41

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\Blank.001

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		677057	
[	Tl	205		ug/L		808	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Simple Linear	
Tl	205	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175					
[Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, February 28, 2010 11:35:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\11 only.mth

Dataset File: C:\elandata\Dataset\100228\Standard 1.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		667556	667556.025
|	Tl	205	10.000	ug/L	0.862	294295	0.440

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
>	Lu	175						
	Tl	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, February 28, 2010 11:38:57

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\Standard 2.003

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		659367	659366.978
[	Tl	205	99.812	ug/L	1.331	2437008	3.695

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175					
[Tl	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, February 28, 2010 11:42:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		673365	673364.882
[	TI	205	53.184	ug/L	1.645	1326362	1.969

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			99.5		
[	TI	205	106.368				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, February 28, 2010 11:45:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 2.005

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		681777	681776.982
[TI	205	0.030	ug/L	1.811	1560	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		100.7			
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, February 28, 2010 11:48:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 3.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		672467	672467.132
[	Tl	205	1.266	ug/L	0.670	32318	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Lu	175			99.3		
[	Tl	205	126.599				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, February 28, 2010 11:51:33

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\til only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		588832	588831.842
[	Tl	205	0.013	ug/L	10.715	984	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[>	Lu	175			87.0			
[	Tl	205						

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Sunday, February 28, 2010 11:51:44

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, February 28, 2010 11:54:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 5.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		590656	590656.176
[	TI	205	22.733	ug/L	1.043	497747	0.842

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			87.2		
[TI	205	113.667				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 11:57:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Ti only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175			ug/L		670145	670145.439
[	TI	205	53.996		ug/L	0.427	1340274	1.999

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			99.0		
[TI	205	107.992				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Sunday, February 28, 2010 11:58:03

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 28, 2010 12:01:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 7.010

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		686615	686614.820
[TI	205	0.021	ug/L	4.777	1342	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175		101.4			
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 12:20:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.016

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		686305	686304.568
[TI	205	52.972	ug/L	1.323	1346565	1.961

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Lu	175			101.4			
[TI	205	105.943					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 12:23:20

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\TI only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.017

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		688824	688824.054
|	TI	205	0.058	ug/L	1.241	2291	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175		101.7				
	TI	205						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, February 28, 2010 12:23:32

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 12:42:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.023

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		668337	668336.676
[	TI	205	53.656	ug/L	1.715	1328080	1.986

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			98.7		
[	TI	205	107.312				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 12:45:42

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.024

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		670679	670678.529
[	Tl	205	0.170	ug/L	2.585	5015	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			99.1			
[	Tl	205						

QC Out Of Limits

Measurement Type: Analyte Mass: Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 13:06:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.030

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		668176	668175.537
[TI	205	52.327	ug/L	0.462	1295066	1.937

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175		98.7			
[TI	205	104.655				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 13:09:48

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.031

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175	ug/L		649044	649044.468
[	Tl	205	0.080 ug/L	1.399	2707	0.003

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	0.9998

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175		95.9		
[	Tl	205				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, February 28, 2010 13:10:00

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 13:29:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.037

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		635047	635047.332
[	Tl	205	53.266	ug/L	1.058	1252817	1.972

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			93.8			
[Tl	205	106.531					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Sunday, February 28, 2010 13:29:11

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 13:32:11

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.038

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		653533	653533.489
[TI	205	0.138	ug/L	1.085	4121	0.005

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Lu	175Linear Thru Zero	
TI	205Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			96.5		
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, February 28, 2010 13:32:23

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 13:51:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l1 only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.044

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		630598	630597.877
[	TI	205	53.890	ug/L	0.285	1258712	1.995

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			93.1		
[	TI	205	107.780				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Sunday, February 28, 2010 13:51:38

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 13:54:38

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.045

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		655368	655368.483
[TI	205	0.124	ug/L	1.141	3781	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			96.8		
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, February 28, 2010 13:54:50

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 14:10:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.050

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		656527	656526.813
[TI	205	52.015	ug/L	0.912	1264760	1.925

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Ti	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175			97.0		
[TI	205	104.030				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 14:13:54

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Tl only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.051

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		633750	633749.781
[TI	205	0.304	ug/L	2.392	7889	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			93.6		
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Sunday, February 28, 2010 14:14:06

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032562

Sample Date/Time: Sunday, February 28, 2010 14:17:07

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\11 only.mth

Dataset File: C:\elandata\Dataset\1100228\1202032562.052

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		637279	637278.987
[	Tl	205	0.165	ug/L	0.459	4652	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			94.1		
[	Tl	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032562

Report Date/Time: Sunday, February 28, 2010 14:17:20

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032563

Sample Date/Time: Sunday, February 28, 2010 14:20:21

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\11 only.mth

Dataset File: C:\elandata\Dataset\100228\1202032563.053

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		618802	618801.549
[TI	205	52.260	ug/L	0.827	1197858	1.935

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			91.4		
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032563

Report Date/Time: Sunday, February 28, 2010 14:20:35

Page 1

ICPMS#5 - Summary Report

Sample ID: 245981001

Sample Date/Time: Sunday, February 28, 2010 14:36:36

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\245981001.058

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		616548	616548.066
[TI	205	0.069	ug/L	6.013	2323	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Ti	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			91.1		
[TI	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, February 28, 2010 14:39:45

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\l only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 8.059

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		636661	636661.313
[	Tl	205	51.753	ug/L	1.268	1220367	1.916

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Lu	175			94.0			
[	Tl	205	103.507					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Sunday, February 28, 2010 14:39:56

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, February 28, 2010 14:42:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 9.060

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		646420	646420.439
[TI	205	0.124	ug/L	3.474	3745	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			95.5		
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202032564

Sample Date/Time: Sunday, February 28, 2010 14:49:15

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\1202032564.062

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		606403	606402.736
[Ti	205	0.035	ug/L	8.276	1508	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Ti	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Duplicate Rel. % Difference
[> Lu	175			89.6		
[Ti	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032564

Report Date/Time: Sunday, February 28, 2010 14:49:25

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032565

Sample Date/Time: Sunday, February 28, 2010 14:52:24

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 948740|1|baj

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\1202032565.063

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		604264	604263.531
[TI	205	74.988	ug/L	1.789	1678038	2.776

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			89.2		
[TI	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032565

Report Date/Time: Sunday, February 28, 2010 14:52:35

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202032566

Sample Date/Time: Sunday, February 28, 2010 14:55:34

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 948740|5|baj

Method File: c:\elandata\Method\1 only.mth

Dataset File: C:\elandata\Dataset\100228\1202032566.064

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		622697	622697.219
[TI	205	1.665	ug/L	1.459	39115	0.062

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Ti	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[> Lu	175			92.0		
[TI	205					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202032566

Report Date/Time: Sunday, February 28, 2010 14:55:45

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, February 28, 2010 14:58:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 6.065

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		639572	639571.983
[	Tl	205	52.103	ug/L	0.346	1234316	1.929

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Lu	175			94.5		
[Tl	205	104.206				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Sunday, February 28, 2010 14:58:55

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, February 28, 2010 15:01:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\I only.mth

Dataset File: C:\elandata\Dataset\100228\QC Std 7.066

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Lu	175		ug/L		627865	627864.641
[TI	205	0.778	ug/L	1.776	18837	0.029

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Lu	175	Linear Thru Zero	
TI	205	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Lu	175			92.7		
[TI	205					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

=====

Analysis Begun

Logged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10

Sample Information File: C:\data-AA\Administrator\Sample Information\020510W1.SIF

Batch ID:

Results Data Set: 020510W1

Results Library: C:\data-AA\Administrator\Results\Results.mdb

=====

Method Loaded

Method Name: WATER

Method Last Saved: 12/28/2009 15:47:50

Method Description: 7470A, 245.2, ILM04 ANALYST JXL

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank

Date Collected: 2/5/2010 09:03:54

Analyst:

Data Type: Original

Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0003	0.0006	0.0003	09:04:56	Yes
2		[0.00]	0.0002	-0.0003	0.0002	09:05:30	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	20.18				

Auto-zero performed.

=====

Sequence No.: 2

Autosampler Location: 2

Sample ID: S0.2

Date Collected: 2/5/2010 09:05:49

Analyst:

Data Type: Original

Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0019	0.0085	0.0021	09:06:50	Yes
2		[0.2]	0.0019	0.0079	0.0021	09:07:24	Yes
Mean:		[0.2]	0.0019				
SD:		0.0	0.0000				
%RSD:		0.0	0.42				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.00933 Intercept: 0.00000

=====

Sequence No.: 3

Autosampler Location: 3

Sample ID: S0.5

Date Collected: 2/5/2010 09:07:43

Analyst:

Data Type: Original

Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0047	0.0201	0.0049	09:08:45	Yes
2		[0.5]	0.0048	0.0214	0.0050	09:09:19	Yes
Mean:		[0.5]	0.0047				
SD:		0.0	0.0001				
%RSD:		0.0	1.87				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999967 Slope: 0.00950 Intercept: -0.00001

=====

Sequence No.: 4

Autosampler Location: 4

Sample ID: S2.0

Date Collected: 2/5/2010 09:09:39

Analyst:

Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0191	0.0825	0.0194	09:10:40	Yes
2		[2.0]	0.0190	0.0814	0.0192	09:11:15	Yes
Mean:		[2.0]	0.0190				
SD:		0.0	0.0001				
%RSD:		0.0	0.73				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999998 Slope: 0.00953 Intercept: -0.00002

Sequence No.: 5

Sample ID: S5.0

Analyst:

Autosampler Location: 5

Date Collected: 2/5/2010 09:11:35

Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0473	0.2057	0.0476	09:12:37	Yes
2		[5.0]	0.0469	0.2028	0.0471	09:13:12	Yes
Mean:		[5.0]	0.0471				
SD:		0.0	0.0003				
%RSD:		0.0	0.72				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999989 Slope: 0.00942 Intercept: 0.00004

Sequence No.: 6

Sample ID: S10.0

Analyst:

Autosampler Location: 6

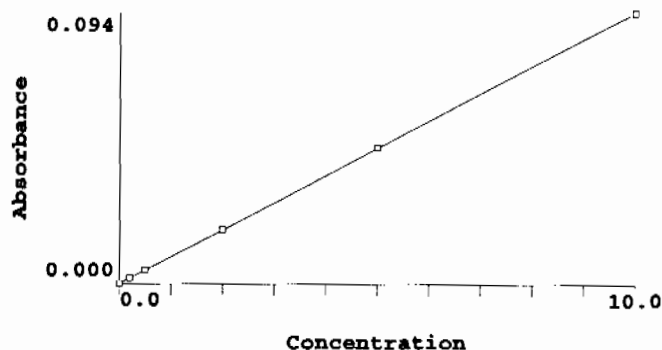
Date Collected: 2/5/2010 09:13:32

Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.0944	0.4143	0.0947	09:14:32	Yes
2		[10.0]	0.0937	0.4076	0.0940	09:15:07	Yes
Mean:		[10.0]	0.0941				
SD:		0.0	0.0005				
%RSD:		0.0	0.53				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999997 Slope: 0.00941 Intercept: 0.00006



Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.006	0.00	20.2
S0.2	0.0019	0.2	0.192	0.00	0.4
S0.5	0.0047	0.5	0.498	0.00	1.9
S2.0	0.0190	2.0	2.019	0.00	0.7

S5.0	0.0471	5.0	5.001	0.00	0.7
S10.0	0.0941	10.0	9.996	0.00	0.5

Correlation Coef.: 0.999997 Slope: 0.00941 Intercept: 0.00006

Sequence No.: 7

Autosampler Location: 9

Sample ID: ICV

Date Collected: 2/5/2010 09:15:26

Analyst:

Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.965	4.965	0.0468	0.2021	0.0470	09:16:27	Yes
2	4.945	4.945	0.0466	0.2010	0.0468	09:17:02	Yes
Mean:	4.955	4.955	0.0467				
SD:	0.014	0.014	0.0001				
%RSD:	0.281	0.281	0.28				

QC value within limits for Hg 253.7 Recovery = 99.10%
All analyte(s) passed QC.

Sequence No.: 8

Autosampler Location: 10

Sample ID: ICB

Date Collected: 2/5/2010 09:17:22

Analyst:

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0001	-0.0008	0.0002	09:18:23	Yes
2	-0.012	-0.012	-0.0000	-0.0006	0.0002	09:18:58	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	11.89	11.89	23.69				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9

Autosampler Location: 11

Sample ID: CRDL

Date Collected: 2/5/2010 09:19:18

Analyst:

Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.191	0.191	0.0019	0.0082	0.0021	09:20:19	Yes
2	0.191	0.191	0.0019	0.0082	0.0021	09:20:54	Yes
Mean:	0.191	0.191	0.0019				
SD:	0.000	0.000	0.0000				
%RSD:	0.034	0.034	0.03				

QC value within limits for Hg 253.7 Recovery = 95.30%
All analyte(s) passed QC.

Sequence No.: 10

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 09:21:14

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.014	5.014	0.0472	0.2051	0.0475	09:22:14	Yes
2	4.974	4.974	0.0468	0.2038	0.0471	09:22:50	Yes
Mean:	4.994	4.994	0.0470				
SD:	0.029	0.029	0.0003				
%RSD:	0.577	0.577	0.58				

QC value within limits for Hg 253.7 Recovery = 99.88%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 2/5/2010 09:23:09
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0000	-0.0002	0.0002	09:24:10	Yes
2	-0.006	-0.006	0.0000	0.0002	0.0002	09:24:45	Yes
Mean:	-0.009	-0.009	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	42.32	42.32	156.50				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202029931|947628|1
Analyst: JXL

Autosampler Location: 12
Date Collected: 2/5/2010 09:25:04
Data Type: Original

Replicate Data: 1202029931|947628|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0000	-0.0005	0.0002	09:26:06	Yes
2	-0.005	-0.005	0.0000	-0.0001	0.0002	09:26:40	Yes
Mean:	-0.008	-0.008	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	44.19	44.19	224.20				

Sequence No.: 13
Sample ID: 1202029932|947628|1
Analyst: JXL

Autosampler Location: 13
Date Collected: 2/5/2010 09:27:01
Data Type: Original

Replicate Data: 1202029932|947628|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.022	2.022	0.0191	0.0835	0.0193	09:28:02	Yes
2	2.026	2.026	0.0191	0.0827	0.0193	09:28:37	Yes
Mean:	2.024	2.024	0.0191				
SD:	0.003	0.003	0.0000				
%RSD:	0.144	0.144	0.14				

Sequence No.: 14
Sample ID: 245601001|947628|1
Analyst: JXL

Autosampler Location: 14
Date Collected: 2/5/2010 09:28:58
Data Type: Original

Replicate Data: 245601001|947628|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0002	0.0002	09:29:58	Yes
2	0.002	0.002	0.0001	0.0008	0.0003	09:30:33	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	299.4	299.4	87.21				

Sequence No.: 15
Sample ID: 245614001|947628|1
Analyst: JXL

Autosampler Location: 15
Date Collected: 2/5/2010 09:30:52
Data Type: Original

Replicate Data: 245614001|947628|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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Replicate Data: 1202029937|947628|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	-0.0000	0.0002	0.0002	09:41:26	Yes
2	-0.008	-0.008	-0.0000	-0.0004	0.0002	09:42:01	Yes
Mean:	-0.008	-0.008	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.270	1.270	5.82				

=====

Sequence No.: 21
Sample ID: 1202033203|949020|1
Analyst: JXLAutosampler Location: 21
Date Collected: 2/5/2010 09:42:20
Data Type: Original-----
Replicate Data: 1202033203|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	0.0001	0.0006	0.0003	09:43:21	Yes
2	0.003	0.003	0.0001	0.0014	0.0003	09:43:56	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	53.61	53.61	15.02				

=====

Sequence No.: 22
Sample ID: CCV
Analyst:Autosampler Location: 7
Date Collected: 2/5/2010 09:44:15
Data Type: Original-----
Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	4.947	4.947	0.0466	0.2056	0.0468	09:45:17	Yes
2	4.906	4.906	0.0462	0.2030	0.0464	09:45:52	Yes
Mean:	4.927	4.927	0.0464				
SD:	0.029	0.029	0.0003				
%RSD:	0.589	0.589	0.59				

QC value within limits for Hg 253.7 Recovery = 98.53%
All analyte(s) passed QC.

=====

Sequence No.: 23
Sample ID: CCB
Analyst:Autosampler Location: 8
Date Collected: 2/5/2010 09:46:11
Data Type: Original-----
Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.007	-0.007	-0.0000	0.0003	0.0002	09:47:12	Yes
2	0.006	0.006	0.0001	0.0006	0.0003	09:47:46	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.009	0.009	0.0001				
%RSD:	>999.9%	>999.9%	153.08				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 24
Sample ID: 1202033204|949020|1
Analyst: JXLAutosampler Location: 22
Date Collected: 2/5/2010 09:48:06
Data Type: Original-----
Replicate Data: 1202033204|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.013	2.013	0.0190	0.0852	0.0192	09:49:07	Yes
2	2.004	2.004	0.0189	0.0839	0.0191	09:49:42	Yes

Mean: 2.009 2.009 0.0190
SD: 0.006 0.006 0.0001
%RSD: 0.312 0.312 0.31

Sequence No.: 25

Sample ID: 245911001|949020|1

Analyst: JXL

Autosampler Location: 23

Date Collected: 2/5/2010 09:50:02

Data Type: Original

Replicate Data: 245911001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.015	0.015	0.0002	0.0022	0.0004	09:51:03	Yes
2	0.017	0.017	0.0002	0.0028	0.0005	09:51:38	Yes
Mean:	0.016	0.016	0.0002				
SD:	0.001	0.001	0.0000				
%RSD:	7.972	7.972	5.75				

Sequence No.: 26

Sample ID: 245922001|949020|1

Analyst: JXL

Autosampler Location: 24

Date Collected: 2/5/2010 09:51:58

Data Type: Original

Replicate Data: 245922001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.004	0.004	0.0001	0.0012	0.0003	09:53:00	Yes
2	0.007	0.007	0.0001	0.0009	0.0004	09:53:35	Yes
Mean:	0.006	0.006	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	44.12	44.12	20.60				

Sequence No.: 27

Sample ID: 245939001|949020|1

Analyst: JXL

Autosampler Location: 25

Date Collected: 2/5/2010 09:53:55

Data Type: Original

Replicate Data: 245939001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.018	0.018	0.0002	0.0030	0.0005	09:54:57	Yes
2	0.022	0.022	0.0003	0.0034	0.0005	09:55:32	Yes
Mean:	0.020	0.020	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	14.54	14.54	11.04				

Sequence No.: 28

Sample ID: 245939002|949020|1

Analyst: JXL

Autosampler Location: 26

Date Collected: 2/5/2010 09:55:52

Data Type: Original

Replicate Data: 245939002|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.002	0.002	0.0001	0.0010	0.0003	09:56:53	Yes
2	0.006	0.006	0.0001	0.0011	0.0003	09:57:28	Yes
Mean:	0.004	0.004	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	80.46	80.46	31.18				

Sequence No.: 29

Sample ID: 245953001|949020|1

Analyst: JXL

Autosampler Location: 27

Date Collected: 2/5/2010 09:57:47

Data Type: Original

Replicate Data: 245953001|949020|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	-0.0001	0.0003	09:58:48	Yes
2	0.005	0.005	0.0001	0.0008	0.0003	09:59:23	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	292.1	292.1	59.58				

Sequence No.: 30

Autosampler Location: 28

Sample ID: 245965001|949020|1

Date Collected: 2/5/2010 09:59:42

Analyst: JXL

Data Type: Original

Replicate Data: 245965001|949020|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0007	0.0003	10:00:43	Yes
2	0.004	0.004	0.0001	0.0002	0.0003	10:01:18	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	33.02	33.02	15.09				

Sequence No.: 31

Autosampler Location: 29

Sample ID: 245975001|949020|1

Date Collected: 2/5/2010 10:01:37

Analyst: JXL

Data Type: Original

Replicate Data: 245975001|949020|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0001	0.0010	0.0003	10:02:38	Yes
2	0.004	0.004	0.0001	0.0015	0.0003	10:03:12	Yes
Mean:	0.002	0.002	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	165.2	165.2	34.46				

Sequence No.: 32

Autosampler Location: 30

Sample ID: 245981001|949020|1

Date Collected: 2/5/2010 10:03:32

Analyst: JXL

Data Type: Original

Replicate Data: 245981001|949020|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.010	0.010	0.0002	0.0021	0.0004	10:04:32	Yes
2	0.019	0.019	0.0002	0.0034	0.0005	10:05:07	Yes
Mean:	0.015	0.015	0.0002				
SD:	0.006	0.006	0.0001				
%RSD:	43.49	43.49	30.52				

Sequence No.: 33

Autosampler Location: 31

Sample ID: 246000001|949020|1

Date Collected: 2/5/2010 10:05:26

Analyst: JXL

Data Type: Original

Replicate Data: 246000001|949020|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0018	0.0003	10:06:27	Yes
2	0.012	0.012	0.0002	0.0024	0.0004	10:07:02	Yes
Mean:	0.009	0.009	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	42.51	42.51	25.13				

Sequence No.: 34

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 10:07:22

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.069	5.069	0.0477	0.2135	0.0480	10:08:22	Yes
2	5.033	5.033	0.0474	0.2110	0.0476	10:08:58	Yes
Mean:	5.051	5.051	0.0476				
SD:	0.025	0.025	0.0002				
%RSD:	0.502	0.502	0.50				

QC value within limits for Hg 253.7 Recovery = 101.01%
All analyte(s) passed QC.

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/5/2010 10:09:16

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	0.0000	0.0004	0.0003	10:10:17	Yes
2	0.005	0.005	0.0001	0.0009	0.0003	10:10:52	Yes
Mean:	0.001	0.001	0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	>999.9%	>999.9%	94.99				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36

Autosampler Location: 32

Sample ID: 246010001|949020|1

Date Collected: 2/5/2010 10:11:11

Analyst: JXL

Data Type: Original

Replicate Data: 246010001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.005	-0.005	0.0000	0.0003	0.0002	10:12:12	Yes
2	-0.004	-0.004	0.0000	0.0007	0.0002	10:12:47	Yes
Mean:	-0.005	-0.005	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	17.81	17.81	51.51				

Sequence No.: 37

Autosampler Location: 33

Sample ID: 246056001|949020|1

Date Collected: 2/5/2010 10:13:07

Analyst: JXL

Data Type: Original

Replicate Data: 246056001|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.003	-0.003	0.0000	0.0004	0.0003	10:14:08	Yes
2	0.002	0.002	0.0001	0.0012	0.0003	10:14:43	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	>999.9%	>999.9%	65.75				

Sequence No.: 38

Autosampler Location: 34

Sample ID: 1202033205|949020|1

Date Collected: 2/5/2010 10:15:03

Analyst: JXL

Data Type: Original

Replicate Data: 1202033205|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	0.0000	0.0008	0.0002	10:16:04	Yes

2	0.005	0.005	0.0001	0.0017	0.0003	10:16:39	Yes
Mean:	0.000	0.000	0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	>999.9%	>999.9%	95.21				

Sequence No.: 39

Sample ID: 1202033206|949020|1

Analyst: JXL

Autosampler Location: 35

Date Collected: 2/5/2010 10:16:59

Data Type: Original

Replicate Data: 1202033206|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.503	1.503	0.0142	0.0680	0.0144	10:18:00	Yes
2	1.495	1.495	0.0141	0.0670	0.0143	10:18:35	Yes
Mean:	1.499	1.499	0.0142				
SD:	0.006	0.006	0.0001				
%RSD:	0.393	0.393	0.39				

Sequence No.: 40

Sample ID: 1202033207|949020|5

Analyst: JXL

Autosampler Location: 36

Date Collected: 2/5/2010 10:18:55

Data Type: Original

Replicate Data: 1202033207|949020|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	-0.0000	0.0002	0.0002	10:19:57	Yes
2	-0.002	-0.002	0.0000	0.0011	0.0003	10:20:32	Yes
Mean:	-0.005	-0.005	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	84.26	84.26	326.78				

Sequence No.: 41

Sample ID: 246056002|949020|1

Analyst: JXL

Autosampler Location: 37

Date Collected: 2/5/2010 10:20:52

Data Type: Original

Replicate Data: 246056002|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	0.0000	0.0010	0.0003	10:21:54	Yes
2	-0.003	-0.003	0.0000	0.0008	0.0003	10:22:29	Yes
Mean:	-0.002	-0.002	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	8.003	8.003	5.22				

Sequence No.: 42

Sample ID: 246056003|949020|1

Analyst: JXL

Autosampler Location: 38

Date Collected: 2/5/2010 10:22:49

Data Type: Original

Replicate Data: 246056003|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.019	0.019	0.0002	0.0024	0.0005	10:23:50	Yes
2	0.023	0.023	0.0003	0.0022	0.0005	10:24:25	Yes
Mean:	0.021	0.021	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	10.47	10.47	8.06				

Sequence No.: 43

Sample ID: 246056004|949020|1

Analyst: JXL

Autosampler Location: 39

Date Collected: 2/5/2010 10:24:44

Data Type: Original

Replicate Data: 246056004|949020|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.037	0.037	0.0004	0.0044	0.0006	10:25:45	Yes
2	0.016	0.016	0.0002	0.0017	0.0004	10:26:21	Yes
Mean:	0.026	0.026	0.0003				
SD:	0.015	0.015	0.0001				
%RSD:	56.65	56.65	45.73				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202033224|949028|1

Date Collected: 2/5/2010 10:26:40

Analyst: JXL

Data Type: Original

Replicate Data: 1202033224|949028|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.021	0.021	0.0003	0.0022	0.0005	10:27:41	Yes
2	0.017	0.017	0.0002	0.0020	0.0005	10:28:17	Yes
Mean:	0.019	0.019	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	11.82	11.82	8.89				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202033226|949028|1

Date Collected: 2/5/2010 10:28:36

Analyst: JXL

Data Type: Original

Replicate Data: 1202033226|949028|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.106	2.106	0.0199	0.0883	0.0201	10:29:37	Yes
2	2.076	2.076	0.0196	0.0876	0.0198	10:30:12	Yes
Mean:	2.091	2.091	0.0197				
SD:	0.022	0.022	0.0002				
%RSD:	1.033	1.033	1.03				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 2/5/2010 10:30:32

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.111	5.111	0.0481	0.2129	0.0484	10:31:32	Yes
2	5.088	5.088	0.0479	0.2132	0.0481	10:32:08	Yes
Mean:	5.099	5.099	0.0480				
SD:	0.016	0.016	0.0001				
%RSD:	0.309	0.309	0.31				

QC value within limits for Hg 253.7 Recovery = 101.99%
All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 2/5/2010 10:32:26

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	0.0000	0.0010	0.0002	10:33:27	Yes
2	-0.005	-0.005	0.0000	0.0011	0.0002	10:34:02	Yes
Mean:	-0.004	-0.004	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	7.051	7.051	16.61				

QC value within limits for Hg 253.7 Recovery = Not calculated

Miscellaneous

Prep LogBook

Analyst: FGA Verified by: _____

Batch: 948730

Lab SOP: GL-MA-E-006 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202032557		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
LCS	1202032558		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245939001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245939002		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245965001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245975001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	245981001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SAMPLE	246000001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
DUP	1202032559	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
MS	1202032560	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL
SDILT	1202032561	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.25	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
1265209	2.5 mL	HYDROCHLORIC ACID
1264396	1 mL	Nitric Acid CONC.

Prep LogBook

Analyst: FGA Verified by: _____

Batch: 948739

Lab SOP: GL-MA-E-006 REV# 9

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix	Spike Amount	Spike Units
MB	1202032562		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
LCS	1202032563		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245939001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245939002		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245965001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245975001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	245981001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SAMPLE	246000001		SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
DUP	1202032564	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
MS	1202032565	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL
SDILT	1202032566	246000001	SW846 3005A	10-FEB-2010 13:30	<2	50 mL	50 mL	1	WATER	.5	mL

Comments

Reagent/Solvent Lot ID	Amount	Description
1265209	2.5 mL	HYDROCHLORIC ACID
1264396	1 mL	Nitric Acid CONC.

Prep LogBook

Analyst: TXB3
 Batch: 949018
 Lab SOP: GL-MA-E-010 REV# 23

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202033203		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
LCS	1202033204		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1	2	mL
SAMPLE	245911001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245922001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245939001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245939002		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245953001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245965001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245975001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	245981001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246000001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246010001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246056001		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
DUP	1202033205	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
MS	1202033206	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SDILT	1202033207	246056001	SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246056002		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246056003		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		
SAMPLE	246056004		SW846 7470A Prep	04-FEB-2010 12:15	<2	20 mL	20 mL	1		

Comments Digestion Start Date: 04-FEB-10 12:15
 Digestion End Date: 04-FEB-10 14:15

Reagent/Solvent Lot ID	Amount	Description
1176183	1 mL	Sulfuric Acid, Concentrated
1257474-1	.5 mL	NITRIC ACID
1261483-C	1.5 mL	5% Potassium Persulfate
1264984-C	3 mL	5% KMnO4 solution
125532-C	1 mL	Hg reducing agent
WHG100204-06	500 uL	Mercury Working 2nd Source 5.0/CCV
WHG100204-01a	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG100204-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG100204-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG100204-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG100204-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

DATA EXCEPTION REPORT

Mo. Day Yr.
01-MAR-10

Division:
Industrial

Quality Criteria:
Specifications

Type:
Process

Instrument Type:
ICP/MS

Test / Method:
SW846 3005/6020

Matrix Type:
Liquid

Client Code:
LANL

Batch ID:
948740

Sample Numbers:
See Below

Potentially affected work order(s)(SDG): 245939(10-1506-1),245965(10-1511-1),245975(10-1512-1),245981(10-1514-1),246000(10-1517-1)

Application Issues:

Failed Recovery for MS/PS

**Specification and Requirements
Exception Description:**

1. Failed Recovery for MS/PS:

QC 1202032565MS

DER Disposition:

The matrix spike recovery failed outside of the control limits for TI due to possible matrix interferences and/or non-homogeneity. Per GEL's accredited methods and SOPs, a corrective action is not required and the data is qualified and reported.

Originator's Name:

Elizabeth Janssen 01-MAR-10

Data Validator/Group Leader:

Samantha Jacobs 01-MAR-10

Standard Logbook

Serial ID: UHG1167639-01 **Opened:** 13-AUG-09 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-AUG-09 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 15-37HG
Employee: Bryan Davis **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UHG1167641-02 **Opened:** 13-AUG-09 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-AUG-09 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-AUG-10 **Lot Number :** 4905530
Employee: Bryan Davis **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UI090422-40 **Opened:** 04-MAY-09 **Amount :** 500 mL
Name: TRACE ICP ICSA SOLN A **Received:** 22-APR-09 **Catalog Number :** 160005-01-03
Type: Source Material **Expires:** 04-MAY-10 **Lot Number :** 1013357
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: o2si
Description: TRACE ICP ICSA SOLN A mg/L +/-0.5%IN5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090610-03 **Opened:** 10-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **Received:** 10-JUN-09 **Lot Number :** 1016338
Type: Source Material **Expires:** 10-JUN-10 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Standard Logbook

Serial ID: UI090701-09 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 01-JUL-09 **Catalog Number :** 160044-09-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016477
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02Si
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	25 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	15 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	1 mg/L
Thorium	1 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI090701-10 **Opened:** 01-JUL-09 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 01-JUL-09 **Catalog Number :** 160044-08-02
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016476
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02Si
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	2 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI090701-40 **Opened:** 01-JUL-09 **Amount :** 500 mL
Name: TRACE ICP Stock PQL St **Received:** 30-JUN-09 **Catalog Number :** 160543-01-03
Type: Source Material **Expires:** 01-JUL-10 **Lot Number :** 1016475
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3+TrHF
Supplier: 02si
Description: TRACE ICP Stock PQL Standard
Comments: None

Analyte	Concentration	Analyte	Concentration
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: UI090828-42 **Opened:** 16-SEP-09 **Amount :** 500 mL
Name: TRACE ICP Na-1000SOUR **Received:** 27-AUG-09 **Catalog Number :** 060011-02-03
Type: Source Material **Expires:** 16-SEP-10 **Lot Number :** 1017098
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: 02SI
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

Serial ID: UI090925-40 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX38-500N
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909129
Employee: Helen Camello **Solvent :** 5%HNO3
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1A 5%HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Arsenic	100 mg/L
Barium	100 mg/L	Boron	100 mg/L
Cadmium	100 mg/L	Calcium	1000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	1000 mg/L
Lead	100 mg/L	Phosphorous	500 mg/L
Potassium	500 mg/L	Selenium	500 mg/L
Sodium	500 mg/L	Strontium	100 mg/L

Standard Logbook

Serial ID: UI090925-41 **Opened:** 23-OCT-09 **Amount :** 500 mL
Name: SECOND SOURCE STD -1 **Received:** 25-SEP-09 **Catalog Number :** SGELMX39-500B
Type: Source Material **Expires:** 30-SEP-10 **Lot Number :** 4909130
Employee: Helen Camello **Solvent :** 5%HNO3,TR.HF
Supplier: SPECTRO PURE
Description: SECOND SOURCE STD #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 mg/L	Beryllium	50 mg/L
Magnesium	1000 mg/L	Manganese	100 mg/L
Molybdenum	100 mg/L	Nickel	100 mg/L
Silver	50 mg/L	Sulfur	500 mg/L
Thallium	100 mg/L	Tin	100 mg/L
Titanium	100 mg/L	Uranium	100 mg/L
Vanadium	100 mg/L	Zinc	100 mg/L

Serial ID: UI090930-A **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE liquid Spike Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	8 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Boron	10 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	4 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorus, Total as P	200 mg/L	Potassium	200 mg/L
Selenium	2 mg/L	Silicon	200 mg/L
Sodium	200 mg/L	Strontium	5 mg/L
Thallium	10 mg/L	Thorium	5 mg/L
Total Uranium	5 mg/L	Uranium	5 mg/L
Uranium-235	.0364 mg/L	Uranium-238	4.96 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Standard Logbook

Serial ID: UI090930-B **Opened:** 30-SEP-09 **Catalog Number :** 160067-02
Name: ICP-MS DOE Liquid SPIKE **Received:** 28-SEP-09 **Lot Number :** 1017141
Type: Source Material **Expires:** 30-SEP-10
Employee: Francena Armstrong **Verified:** 21-NOV-08
Supplier: O2Si
Description: ICP-MS DOE Liquid Spike Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI091015-42 **Opened:** 28-OCT-09 **Amount :** 500 mL
Name: SI 1000mg/L **Received:** 15-OCT-09 **Catalog Number :** 060014-02-03
Type: Source Material **Expires:** 28-OCT-10 **Lot Number :** 1017581
Employee: Helen Camello **Solvent :** 0.3%H₂O(NH₄)₂SiF₆
Supplier: o2si
Description: Silicon 1000mg/L+/-0.3%in H₂O(NH₄)₂SiF₆
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091102-40 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1A SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-1-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930215
Employee: Helen Camello **Solvent :** HNO₃
Supplier: Environmental Express
Description: Trace Calibration Std #1A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2000 mg/L	Arsenic	200 mg/L
Barium	200 mg/L	Beryllium	200 mg/L
Boron	200 mg/L	Cadmium	200 mg/L
Calcium	2000 mg/L	Chromium	200 mg/L
Cobalt	200 mg/L	Copper	200 mg/L
Iron	2000 mg/L	Lead	200 mg/L
Magnesium	2000 mg/L	Manganese	200 mg/L
Nickel	200 mg/L	Phosphorous	1000 mg/L
Potassium	2000 mg/L	Selenium	200 mg/L
Sodium	2000 mg/L	Strontium	200 mg/L
Thallium	200 mg/L	Uranium	200 mg/L
Vanadium	200 mg/L	Zinc	200 mg/L

Standard Logbook

Serial ID: UI091102-41 **Opened:** 16-NOV-09 **Amount :** 500 mL
Name: TRACE CALSTD#1B SOUF **Received:** 02-NOV-09 **Catalog Number :** HP2270-2-500
Type: Source Material **Expires:** 31-OCT-10 **Lot Number :** 0930216
Employee: Helen Camello **Solvent :** HNO3
Supplier: Environmental Express
Description: Trace Calibration Standard #1B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI091217-06 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-DEC-09 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018209
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI091217-07 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-DEC-09 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018210
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI091217-08 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-DEC-09 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018211
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI091217-12 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 17-DEC-09 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1018212
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Standard Logbook

Serial ID: UI091217-13 **Opened:** 17-DEC-09 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 17-DEC-09 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 17-DEC-10 **Lot Number :** 1016926
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: O2SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI100114-48 **Opened:** 22-JAN-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 18-JAN-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 22-JAN-11 **Lot Number :** 1018466
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100114-49.16 **Opened:** 11-FEB-10 **Amount :** 100 ml
Name: Trace ICP ICSAB **Received:** 18-JAN-10 **Catalog Number :** 160066-04
Type: Source Material **Expires:** 12-FEB-10 **Lot Number :** 1018458
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard AB
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Antimony	500 ug/L
Arsenic	500 ug/L	Barium	500 ug/L
Beryllium	250 ug/L	Boron	500 ug/L
Cadmium	500 ug/L	Calcium	500000 ug/L
Chromium	500 ug/L	Cobalt	500 ug/L
Copper	500 ug/L	Iron	200000 ug/L
Lead	500 ug/L	Magnesium	500000 ug/L
Manganese	500 ug/L	Molybdenum	500 ug/L
Nickel	500 ug/L	Phosphorous	2500 ug/L
Potassium	5000 ug/L	Selenium	2500 ug/L
Silica	10696.5 ug/L	Silicon	5000 ug/L
Silver	250 ug/L	Sodium	5000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	500 ug/L	Sulfur	2500 ug/L
Thallium	500 ug/L	Tin	500 ug/L
Titanium	500 ug/L	Uranium	500 ug/L
Vanadium	500 ug/L	Zinc	500 ug/L

Serial ID: UI100120-01 **Opened:** 20-JAN-10 **Lot Number :** 1018095
Name: METALSPIKE-1 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix I
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 ug/mL	Arsenic	100 ug/mL
Barium	100 ug/mL	Beryllium	100 ug/mL
Boron	100 ug/mL	Cadmium	100 ug/mL
Calcium	1000 ug/mL	Cobalt	100 ug/mL
Iron	1000 ug/mL	Lead	100 ug/mL
Magnesium	1000 ug/mL	Phosphorous	100 ug/mL
Potassium	1000 ug/mL	Silver	100 ug/mL
Sodium	1000 ug/mL	Strontium	100 ug/mL

Serial ID: UI100120-06 **Opened:** 20-JAN-10 **Lot Number :** 1018096
Name: METALSPIKE-2 **Received:** 20-JAN-10
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: OS2I
Description: Metals Spike Mix II
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	100 ug/mL	Chromium	100 ug/mL
Copper	100 ug/mL	Manganese	100 ug/mL
Molybdenum	100 ug/mL	Nickel	100 ug/mL
Selenium	100 ug/mL	Silica	2141 ug/mL
Silicon	1000 ug/mL	Sulfur	1000 ug/mL
Thallium	100 ug/mL	Tin	100 ug/mL
Titanium	100 ug/mL	Uranium	100 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Standard Logbook

Serial ID: UI100120-A **Opened:** 20-JAN-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 20-JAN-10 **Lot Number :** 1018097
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI100120-B **Opened:** 20-JAN-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 20-JAN-10 **Lot Number :** 1017644
Type: Source Material **Expires:** 20-JAN-11
Employee: Bryan Davis
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UI100128-40 **Opened:** 28-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 28-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-JAN-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2Si
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100128-41 **Opened:** 28-JAN-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 28-JAN-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 28-JAN-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2SI
Description: ICP HIGH RANGE STD SOLUTION B
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100210-48 **Opened:** 11-FEB-10 **Amount :** 1000 mL
Name: Trace ICP ICSEA **Received:** 10-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018807
Employee: Helen Camello **Solvent :** 3% HCl + 1% HNO3
Supplier: o2si
Description: Trace ICP Interferent Check Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 UG/L	Calcium	500000 UG/L
Iron	200000 UG/L	Magnesium	500000 UG/L

Serial ID: UI100211-40 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: O2SI

Standard Logbook

Description: ICP HIGH RANGE STD SOLUTION A

Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Serial ID: UI100211-41 **Opened:** 11-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 10-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 11-FEB-11 **Lot Number :** 1018409
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI

Description: ICP HIGH RANGE STD SOLUTION B

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	500000 ug/L	Calcium	500000 ug/L
Iron	500000 ug/L	Magnesium	500000 ug/L
Sodium	500000 ug/L	Uranium	15000 ug/L

Serial ID: UI100219-11 **Opened:** 19-FEB-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 19-FEB-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI

Description: ICP-MS ICSA Master A

Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Standard Logbook

Serial ID: UI100219-60 **Opened:** 19-FEB-10 **Amount :** 5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI100219-61 **Opened:** 19-FEB-10 **Amount :** 5 mL
Name: ICPMS High Range Standard **Received:** 19-FEB-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 19-FEB-11 **Lot Number :** 1018890
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UMS090303-01 **Opened:** 03-MAR-09 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 03-MAR-09 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 14-81JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS090303-02 **Opened:** 03-MAR-09 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 03-MAR-09 **Lot Number :** 14-83JB
Type: Source Material **Expires:** 28-FEB-10
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS090303-03 **Opened:** 03-MAR-09 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 03-MAR-09 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-10 **Lot Number :** 15-199JB
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Serial ID: IHG100204-01 **Opened:** 04-FEB-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 04-FEB-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 05-FEB-10 **Solvent :** 1mL HNO3 + TypeI H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG100204-02 **Opened:** 04-FEB-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Intermediate **Expires:** 05-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167641-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WHG100204-01a **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100204-02 **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100204-03 **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100204-04 **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL 5.0/CCV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100204-05 **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury Working 1st Source CAL 10.0

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100204-06 **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin
Supplier: GEL

Description: Mercury Working 2nd Source 5.0/ICV

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100204-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100204-13 **Opened:** 04-FEB-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 04-FEB-10 **Solvent :** 2% HNO3-1257474
Type: Working **Expires:** 11-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL

Description: Mercury working intermediate standard for LCS/MS

Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1167639-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WI100211-42 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1266496
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.1 PPM CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100211-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100211-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100211-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100211-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100211-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100211-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100211-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Serial ID: WI100211-43 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1266496
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP 0.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090828-42	Sodium	1000 ug/mL	5 mL	1000 mL	5000 UG/L
UI091015-42	Silica	2139 mg/L	2.5 mL	1000 mL	5348.25 UG/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Barium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Boron	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Chromium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Copper	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Iron	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Lead	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Manganese	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Nickel	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	1000 mL	2500 UG/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Selenium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	1000 mL	5000 UG/L
UI091102-40	Strontium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Thallium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Uranium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-40	Zinc	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Antimony	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Silver	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	1000 mL	1000 UG/L
UI091102-41	Tin	200 mg/L	2.5 mL	1000 mL	500 UG/L
UI091102-41	Titanium	200 mg/L	2.5 mL	1000 mL	500 UG/L

Standard Logbook

Serial ID: WI100211-44 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL and 1 %HNO3-1266496
Employee: Helen Camello
Supplier: o2si
Description: Trace ICP Calibration Standard 1.0ppm
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091015-42	Silica	2139 mg/L	2.5 mL	500 mL	10698 ug/L
UI091015-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Aluminum	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Arsenic	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Barium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Beryllium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Boron	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cadmium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Calcium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Chromium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Cobalt	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Copper	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Iron	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Lead	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Magnesium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Manganese	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Nickel	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Phosphorous	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI091102-40	Potassium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Selenium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Sodium	2000 mg/L	2.5 mL	500 mL	10000 ug/L
UI091102-40	Strontium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Thallium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Uranium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Vanadium	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-40	Zinc	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Antimony	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Molybdenum	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Silver	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Sulfur	400 mg/L	2.5 mL	500 mL	2000 ug/L
UI091102-41	Tin	200 mg/L	2.5 mL	500 mL	1000 ug/L
UI091102-41	Titanium	200 mg/L	2.5 mL	500 mL	1000 ug/L

Standard Logbook

Serial ID: WI100211-45 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL and 1%HNO3 -1266496
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090422-40	Aluminum	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Calcium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090422-40	Iron	2000 mg/L	5 mL	500 mL	20000 UG/L
UI090422-40	Magnesium	5000 mg/L	5 mL	500 mL	50000 UG/L
UI090828-42	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L

Serial ID: WI100211-46 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL AND 1%HNO3-1266496
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Copper	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Iron	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Lead	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Phosphorous	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Potassium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Selenium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Sodium	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-40	Strontium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Antimony	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Beryllium	50 mg/L	2.5 mL	500 mL	250 ug/L
UI090925-41	Magnesium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-41	Manganese	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Molybdenum	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Nickel	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Silver	50 mg/L	2.5 mL	500 mL	250 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-41	Sulfur	500 mg/L	2.5 mL	500 mL	2500 ug/L
UI090925-41	Thallium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Tin	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Titanium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Uranium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Vanadium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-41	Zinc	100 mg/L	2.5 mL	500 mL	500 ug/L
UI091102-42	Silica	2139 mg/L	2.5 mL	500 mL	10695 ug/L
UI091102-42	Silicon	1000 mg/L	2.5 mL	500 mL	5000 ug/L

Serial ID: WI100211-47 **Opened:** 11-FEB-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 12-FEB-10 **Solvent :** 3%HCL &1%HNO3-1266496
Employee: Helen Camello
Supplier: Q2si
Description: PQL Working Standard
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Aluminum	100 mg/L	2 mL	1000 mL	200 ug/L
UI090701-40	Antimony	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Arsenic	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Barium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Beryllium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Boron	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Cadmium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Calcium	100 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Chromium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Cobalt	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Copper	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Iron	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Lead	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Magnesium	150 mg/L	2 mL	1000 mL	300 ug/L
UI090701-40	Manganese	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Molybdenum	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Nickel	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Phosphorous	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Potassium	75 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Selenium	15 mg/L	2 mL	1000 mL	15 ug/L
UI090701-40	Silicon	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Silver	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sodium	150 mg/L	2 mL	1000 mL	150 ug/L
UI090701-40	Strontium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Sulfur	50 mg/L	2 mL	1000 mL	100 ug/L
UI090701-40	Thallium	10 mg/L	2 mL	1000 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-40	Tin	5 mg/L	2 mL	1000 mL	10 ug/L
UI090701-40	Titanium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Uranium	25 mg/L	2 mL	1000 mL	50 ug/L
UI090701-40	Vanadium	2.5 mg/L	2 mL	1000 mL	5 ug/L
UI090701-40	Zinc	5 mg/L	2 mL	1000 mL	10 ug/L

Serial ID: WMS100224-04 **Opened:** 24-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 25-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100224-04A **Opened:** 24-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 24-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100224-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100224-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: <u>WMS100224-04B</u>	Opened: <u>24-FEB-10</u>	Amount: <u>50 mL</u>
Name: <u>ICPMS Cal Standard 100</u>	Received: <u>24-FEB-10</u>	Balance Id: <u>40245216</u>
Type: <u>Working</u>	Expires: <u>25-FEB-10</u>	Pipet Id: <u>1758088</u>
Employee: <u>Rose Jenkins</u>	Solvent: <u>2%<chem>HNO3</chem>/1%<chem>HCl</chem>-</u>	<u>1272768</u>

Supplier: GEL

Description: ICPMS Calibration Standard (100 ppb)

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Serial ID: WMS100224-05 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 24-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Serial ID: WMS100224-06 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 24-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Serial ID: WMS100224-07 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 24-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 25-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100224-08 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 24-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100224-70 **Opened:** 24-FEB-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 24-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 25-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100219-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100219-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100219-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100219-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100219-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100219-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100219-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS100225-04 **Opened:** 25-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 25-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100225-04A **Opened:** 25-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 25-FEB-10 **Pipet Id :** 3541598 .
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100224-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100224-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100224-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100224-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100224-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100225-05 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 25-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100225-06 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 25-FEB-10 **Pipet Id :** 3820544
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100225-07 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 25-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 26-FEB-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100225-08 **Opened:** 25-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 25-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 26-FEB-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100228-04 **Opened:** 28-FEB-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 28-FEB-10 **Balance Id :** 4025216
Type: Working **Expires:** 01-MAR-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl-1272768
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090610-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS090303-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS090303-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS090303-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS090303-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS090303-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100228-04A **Opened:** 28-FEB-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 28-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 01-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100228-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100228-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100228-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100228-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100228-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100228-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100228-05 **Opened:** 28-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 28-FEB-10 **Pipet Id :** 3541598
Type: Working **Expires:** 01-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI091217-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI091217-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI091217-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI091217-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100228-06

Opened: 28-FEB-10

Balance Id : 40245216

Name: ICPMS CRDL

Received: 28-FEB-10

Pipet Id : 3820544

Type: Working

Expires: 01-MAR-10

Solvent : 2%HNO3/1%HCl - 1272768

Employee: Elizabeth Janssen

Supplier: GEL

Description: ICPMS CRDL

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Thallium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Thorium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI090701-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Antimony	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-10	Tin	2 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L

Serial ID: WMS100228-07 **Opened:** 28-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 28-FEB-10 **Lot Number :** 1010773
Type: Working **Expires:** 01-MAR-10 **Pipet Id :** 3541598
Employee: Elizabeth Janssen **Solvent :** 2%HNO3/1%HCl - 1272768
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: WMS100228-08 **Opened:** 28-FEB-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 28-FEB-10 **Pipet Id :** 1758088
Type: Working **Expires:** 01-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1272768
Employee: Elizabeth Janssen
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI091217-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI091217-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI091217-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI091217-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI091217-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI091217-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI091217-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI091217-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI091217-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI091217-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100219-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100219-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100219-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100219-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Standard Logbook

Serial ID: 100202 Opened: 02-FEB-10 Lot Number : 200930201
Name: I-HCL Received: 02-FEB-10
Type: Reagent/Solvent Expires: 02-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1100721TCLP Opened: 16-APR-09 Lot Number : H02026 L
Name: I-HNO3 Received: 02-APR-09
Type: Reagent/Solvent Expires: 02-APR-10
Employee: Clifford Postell
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1156689-A Opened: 20-JUL-09 Lot Number : 41226920
Name: B-KMnO4(VWR)-MER Received: 20-JUL-09
Type: Reagent/Solvent Expires: 20-JUL-10
Employee: Tara Griffin Verified: 07-AUG-07
Supplier: VWR
Description: Potassium Permanganate
Comments: None

Serial ID: 1176183 Opened: 24-AUG-09 Lot Number : H20001
Name: B-H2SO4-MER Received: 24-AUG-09
Type: Reagent/Solvent Expires: 24-AUG-10
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1215906 Opened: 06-NOV-09 Lot Number : H44465
Name: B-K2S2O8S-MER Received: 06-NOV-09
Type: Reagent/Solvent Expires: 06-NOV-10
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Standard Logbook

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1257474-1 **Opened:** 20-JAN-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 20-JAN-10 **Lot Number :** H20053
Type: Reagent/Solvent **Expires:** 20-JAN-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1261483-C **Opened:** 28-JAN-10 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 28-JAN-10
Type: Reagent/Solvent **Expires:** 28-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1215906	B-K2S2O8S-MER	N/A	50 g	1000 mL	N/A

Serial ID: 1264396 **Opened:** 03-FEB-10 **Lot Number :** H51025 L
Name: I-HNO3 **Received:** 02-FEB-10
Type: Reagent/Solvent **Expires:** 03-FEB-11
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.

Standard Logbook

Comments: None

Serial ID: 1264984-C Opened: 04-FEB-10 Balance Id : BAL-002
 Name: B-KMnO4-MER Received: 04-FEB-10
 Type: Reagent/Solvent Expires: 20-JUL-10
 Employee: Tara Griffin
 Supplier: GEL
 Description: 5% KMnO4 solution
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1156689-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	3%

Serial ID: 1265209 Opened: 04-FEB-10 Lot Number : J02039
 Name: I-HCL Received: 04-FEB-10 Preservative_Id : 5 none
 Type: Reagent/Solvent Expires: 04-FEB-11
 Employee: Bryan Davis
 Supplier: J.T. BAKER
 Description: HYDROCHLORIC ACID
 Comments: None

Serial ID: 1266496 Opened: 08-FEB-10 Amount : 20 L
 Name: B-ICP-RINSE SOLN Received: 20-JAN-10 Lot Number : H04040+G34050
 Type: Reagent/Solvent Expires: 14-FEB-10 Solvent : 3%HCL+1%HNO3
 Employee: Helen Camello
 Supplier: GEL
 Description: 3%HCL+1%HNO3 RINSE SOLN.
 Comments: None

Serial ID: 1272768 Opened: 22-FEB-10 Solvent : Type I Water
 Name: B-2%HNO3/1%HCl-ICPMS Received: 22-FEB-10
 Type: Reagent/Solvent Expires: 01-MAR-10
 Employee: Paul Boyd
 Supplier: GEL
 Description: 2%HNO3/1%HCl Solution (Type I Water)
 Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
100202	I-HCL	36.5-38.0	90 mL	9 l	N/A
1100721TCLP	I-HNO3	69.0-70.0	180 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1514**

Method/Analysis Information

Product:	Cyanide, Total		
Analytical Batch:	948610	Method:	SW9012A Cyanide and Total
Prep Batch :	948609	Method:	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
245979001	RE15-10-7980
245979002	RE15-10-7958
245979003	RE15-10-7960
245979004	RE15-10-7979
245979005	RE15-10-7972
245979006	RE15-10-7957
245979007	RE15-10-7974
245979008	RE15-10-7961
245979009	RE15-10-7971
245979010	RE15-10-7966
245979011	RE15-10-7959
245979012	RE15-10-7969
245979013	RE15-10-8061
245979014	RE15-10-8063
245979015	RE15-10-8062
1202032221	Method Blank (MB)
1202032222	245979001(RE15-10-7980) Sample Duplicate (DUP)
1202032223	245979002(RE15-10-7958) Sample Duplicate (DUP)
1202032224	245979001(RE15-10-7980) Matrix Spike (MS)
1202032225	245979002(RE15-10-7958) Matrix Spike (MS)
1202032226	245979001(RE15-10-7980) Matrix Spike Duplicate (MSD)
1202032227	245979002(RE15-10-7958) Matrix Spike Duplicate (MSD)
1202032228	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information**Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 245979001 (RE15-10-7980) and 245979002 (RE15-10-7958).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The spike duplicate recovery falls outside of the client specified acceptance limits. Since both the spike recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported. 1202032227 (RE15-10-7958).

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202032222 (RE15-10-7980), 1202032223 (RE15-10-7958), 245979001 (RE15-10-7980) and 245979002 (RE15-10-7958).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The following sample in this sample group was diluted due to high concentration: 1202032228 (LCS).

Sample Re-analysis

The following samples were reanalyzed due to PS failure: 1202032223 (RE15-10-7958), 1202032225 (RE15-10-7958), 1202032227 (RE15-10-7958) and 245979002 (RE15-10-7958).

Miscellaneous Information**Data Exception (DER) Documentation**

The following DERs were generated for this SDG: 791335 1202032227 (RE15-10-7958).

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

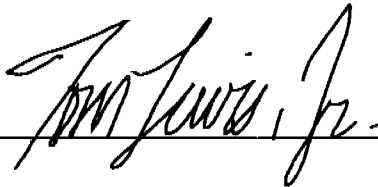
Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer:  Date: 27Feb10

Sample Data Summary

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Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1514 GEL Work Order: 245979

The Qualifiers in this report are defined as follows:

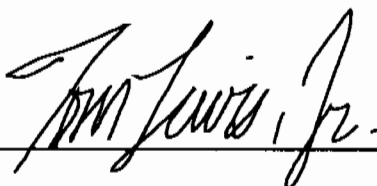
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read "Tom Lewis, Jr.", is written over a horizontal line.

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7980
Sample ID: 245979001
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 4.62%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	71.3	262	ug/kg	1	AXC2	02/10/10	1537	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7958
Sample ID: 245979002
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 19.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	J	114	75.5	278	ug/kg	1	AXC2	02/10/10	1619	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7960
Sample ID: 245979003
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 6.69%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	72.9	268	ug/kg	1	AXC2	02/10/10	1548	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7979
Sample ID: 245979004
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 25.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	91.7	337	ug/kg	1	AXC2	02/10/10	1549	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7972
Sample ID: 245979005
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 8.75%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	67.7	249	ug/kg	1	AXC2	02/10/10	1550	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7957
Sample ID: 245979006
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 22.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	J	139	84.7	311	ug/kg	1	AXC2	02/10/10	1551	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7974
Sample ID: 245979007
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 5.14%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	61.8	227	ug/kg	1	AXC2	02/10/10	1552	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7961
Sample ID: 245979008
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 14.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	73.8	271	ug/kg	1	AXC2	02/10/10	1553	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7971
Sample ID: 245979009
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 25.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	91.8	338	ug/kg	1	AXC2	02/10/10	1554	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7966
Sample ID: 245979010
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 9.56%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	73.7	271	ug/kg	1	AXC2	02/10/10	1554	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7959
Sample ID: 245979011
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 20.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	75.4	277	ug/kg	1	AXC2	02/10/10	1555	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-7969
Sample ID: 245979012
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 9.6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.3	266	ug/kg	1	AXC2	02/10/10	1600	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst	Comments
1	SW846 9012A		

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANLER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-8061
Sample ID: 245979013
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 14.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	101	75.2	277	ug/kg	1	AXC2	02/10/10	1601	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-8063
Sample ID: 245979014
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 18.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	80.2	295	ug/kg	1	AXC2	02/10/10	1602	948610	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 18, 2010

Client SDG: 10-1514

Client Sample ID: RE15-10-8062
Sample ID: 245979015
Matrix: R
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client
Moisture: 9.48%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.6	256	ug/kg	1	AXC2	02/10/10	1603	948610	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/09/10	1529	948609

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

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QC Summary

Report Date: February 18, 2010

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Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico

Contact: Ms. Joylene Valdez

Workorder: 245979

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	948610										
QC1202032222	245979001	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/10/10	15:38
QC1202032223	245979002	DUP									
Cyanide, Total		J	114	U	ND	ug/kg	200 ^			02/10/10	16:20
QC1202032228	LCS										
Cyanide, Total	67900				66300	ug/kg	97.6	(32%-157%)		02/10/10	15:28
QC1202032221	MB										
Cyanide, Total				U	250	ug/kg				02/10/10	15:28
QC1202032224	245979001	MS									
Cyanide, Total	5040	U	ND		5040	ug/kg	100	(26%-158%)		02/10/10	15:39
QC1202032225	245979002	MS									
Cyanide, Total	5650	J	114		5380	ug/kg	93.2	(26%-158%)		02/10/10	16:21
QC1202032226	245979001	MSD									
Cyanide, Total	5240	U	ND		4520	ug/kg	10.9	86.2	(0%-30%)	02/10/10	15:40
QC1202032227	245979002	MSD									
Cyanide, Total	5550	J	114		4250	ug/kg	23.6	74.4	(0%-30%)	02/10/10	16:22

Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based

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QC Summary

Workorder: 245979

Page 2 of 2

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
	on nearest internal standard response factor										
N/A	RPD or %Recovery limits do not apply.										
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
UI	Gamma Spectroscopy--Uncertain identification										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 18-FEB-2010 09:55

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1514

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	10-FEB-2010 14:15:06	OM_2-10-2010_14-04-36	156	150	104	(90%-110%)	Yes
CCV	10-FEB-2010 15:19:11	OM_2-10-2010_14-04-36	108	100	108	(90%-110%)	Yes
CCV	10-FEB-2010 15:31:37	OM_2-10-2010_14-04-36	108	100	108	(90%-110%)	Yes
CCV	10-FEB-2010 15:44:11	OM_2-10-2010_14-04-36	109	100	109	(90%-110%)	Yes
CCV	10-FEB-2010 15:56:44	OM_2-10-2010_14-04-36	108	100	108	(90%-110%)	Yes
CCV	10-FEB-2010 16:03:56	OM_2-10-2010_14-04-36	109	100	109	(90%-110%)	Yes
CCV	10-FEB-2010 16:15:45	OM_2-10-2010_16-14-59	99.7	100	99.7	(90%-110%)	Yes
CCV	10-FEB-2010 16:22:56	OM_2-10-2010_16-14-59	101	100	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	10-FEB-2010 14:16:57	OM_2-10-2010_14-04-36	-0.169	10	Yes
CCB	10-FEB-2010 15:21:01	OM_2-10-2010_14-04-36	-0.159	10	Yes
CCB	10-FEB-2010 15:33:27	OM_2-10-2010_14-04-36	-0.351	10	Yes
CCB	10-FEB-2010 15:46:02	OM_2-10-2010_14-04-36	2.38	10	Yes
CCB	10-FEB-2010 15:58:34	OM_2-10-2010_14-04-36	2.42	10	Yes
CCB	10-FEB-2010 16:05:47	OM_2-10-2010_14-04-36	2.38	10	Yes
CCB	10-FEB-2010 16:17:35	OM_2-10-2010_16-14-59	2.25	10	Yes
CCB	10-FEB-2010 16:24:46	OM_2-10-2010_16-14-59	2.83	10	Yes

Cyanide, Total

Prep LogBook

Analyst: AXSS
Batch: 948609
Lab SOP: GL-GC-E-067 REV# 13

Verified by: _____

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202032221		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.5 g	25 mL	50	25	g
LCS	1202032228		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.25 g	25 mL	100	.025	mL
SAMPLE	245950001		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.52 g	25 mL	48.07692	.025	mL
SAMPLE	245950002		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.51 g	25 mL	49.01961	.025	mL
SAMPLE	245950003		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.53 g	25 mL	47.16981	.025	mL
SAMPLE	245950004		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.58 g	25 mL	43.10345	.025	mL
SAMPLE	245950005		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.5 g	25 mL	50	.025	mL
SAMPLE	245979001		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.5 g	25 mL	50	.025	mL
DUP	1202032222	245979001	SW846 9010B Prep	09-FEB-2010 15:29	>12	0.53 g	25 mL	47.16981		
MS	1202032224	245979001	SW846 9010B Prep	09-FEB-2010 15:29	>12	0.52 g	25 mL	48.07692		
MSD	1202032226	245979001	SW846 9010B Prep	09-FEB-2010 15:29	>12	0.5 g	25 mL	50		
SAMPLE	245979002		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.56 g	25 mL	44.64286		
DUP	1202032223	245979002	SW846 9010B Prep	09-FEB-2010 15:29	>12	0.51 g	25 mL	49.01961		
MS	1202032225	245979002	SW846 9010B Prep	09-FEB-2010 15:29	>12	0.55 g	25 mL	45.45455		
MSD	1202032227	245979002	SW846 9010B Prep	09-FEB-2010 15:29	>12	0.56 g	25 mL	44.64286		
SAMPLE	245979003		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.5 g	25 mL	50		
SAMPLE	245979004		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.5 g	25 mL	50		
SAMPLE	245979005		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.55 g	25 mL	45.45455		
SAMPLE	245979006		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.52 g	25 mL	48.07692		
SAMPLE	245979007		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.58 g	25 mL	43.10345		
SAMPLE	245979008		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.54 g	25 mL	46.2963		
SAMPLE	245979009		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.5 g	25 mL	50		
SAMPLE	245979010		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.51 g	25 mL	49.01961		
SAMPLE	245979011		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.57 g	25 mL	43.85965		
SAMPLE	245979012		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.52 g	25 mL	48.07692		
SAMPLE	245979013		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.53 g	25 mL	47.16981		
SAMPLE	245979014		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.52 g	25 mL	48.07692		
SAMPLE	245979015		SW846 9010B Prep	09-FEB-2010 15:29	>12	0.54 g	25 mL	46.2963		

Prep Data Logbook Version 1.1

GEL Laboratories LLC

Page#

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100209-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1238142-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/10/2010 14:07:58	OM_2-10-2010_14-04-36
150 ppb		1	axc2	2/10/2010 14:08:49	OM_2-10-2010_14-04-36
100 ppb		1	axc2	2/10/2010 14:09:42	OM_2-10-2010_14-04-36
50 ppb		1	axc2	2/10/2010 14:10:35	OM_2-10-2010_14-04-36
10 ppb		1	axc2	2/10/2010 14:11:28	OM_2-10-2010_14-04-36
CRDL 5.0 ppb		1	axc2	2/10/2010 14:12:22	OM_2-10-2010_14-04-36
ICAL-00		1	axc2	2/10/2010 14:13:16	OM_2-10-2010_14-04-36
ICV		1	axc2	2/10/2010 14:15:06	OM_2-10-2010_14-04-36
ICB		1	axc2	2/10/2010 14:16:57	OM_2-10-2010_14-04-36
		1	axc2	2/10/2010 14:18:46	OM_2-10-2010_14-04-36
1202032189	948603	1	axc2	2/10/2010 14:20:36	OM_2-10-2010_14-04-36
1202032196	948603	25	axc2	2/10/2010 14:21:30	OM_2-10-2010_14-04-36
246002001	948603	1	axc2	2/10/2010 14:22:23	OM_2-10-2010_14-04-36
1202032190	948603	1	axc2	2/10/2010 14:23:16	OM_2-10-2010_14-04-36
1202032192	948603	1	axc2	2/10/2010 14:24:09	OM_2-10-2010_14-04-36
1202032194	948603	1	axc2	2/10/2010 14:25:02	OM_2-10-2010_14-04-36
246002002	948603	1	axc2	2/10/2010 14:25:54	OM_2-10-2010_14-04-36
1202032191	948603	1	axc2	2/10/2010 14:26:47	OM_2-10-2010_14-04-36
1202032193	948603	1	axc2	2/10/2010 14:27:39	OM_2-10-2010_14-04-36
1202032195	948603	1	axc2	2/10/2010 14:28:31	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010 14:29:24	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010 14:31:14	OM_2-10-2010_14-04-36
246003001	948603	1	axc2	2/10/2010 14:33:02	OM_2-10-2010_14-04-36
246003002	948603	1	axc2	2/10/2010 14:33:55	OM_2-10-2010_14-04-36
246003003	948603	1	axc2	2/10/2010 14:34:46	OM_2-10-2010_14-04-36
246003004	948603	1	axc2	2/10/2010 14:35:38	OM_2-10-2010_14-04-36
246003005	948603	1	axc2	2/10/2010 14:36:29	OM_2-10-2010_14-04-36
246003006	948603	1	axc2	2/10/2010 14:37:23	OM_2-10-2010_14-04-36
246003007	948603	1	axc2	2/10/2010 14:38:17	OM_2-10-2010_14-04-36
246003008	948603	1	axc2	2/10/2010 14:39:10	OM_2-10-2010_14-04-36
246003009	948603	1	axc2	2/10/2010 14:40:03	OM_2-10-2010_14-04-36
246003010	948603	1	axc2	2/10/2010 14:40:57	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010 14:41:49	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010 14:43:39	OM_2-10-2010_14-04-36
246003011	948603	1	axc2	2/10/2010 14:45:28	OM_2-10-2010_14-04-36
246003012	948603	1	axc2	2/10/2010 14:46:21	OM_2-10-2010_14-04-36
246003013	948603	1	axc2	2/10/2010 14:47:14	OM_2-10-2010_14-04-36
246003014	948603	1	axc2	2/10/2010 14:48:06	OM_2-10-2010_14-04-36
246006001	948603	1	axc2	2/10/2010 14:48:58	OM_2-10-2010_14-04-36
246006002	948603	1	axc2	2/10/2010 14:49:51	OM_2-10-2010_14-04-36
246006003	948603	1	axc2	2/10/2010 14:50:43	OM_2-10-2010_14-04-36
246006004	948603	1	axc2	2/10/2010 14:51:35	OM_2-10-2010_14-04-36
1202032205	948607	1	axc2	2/10/2010 14:52:27	OM_2-10-2010_14-04-36
1202032212	948607	25	axc2	2/10/2010 14:53:20	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010 14:54:11	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010 14:56:01	OM_2-10-2010_14-04-36
245969001	948607	1	axc2	2/10/2010 14:57:51	OM_2-10-2010_14-04-36
245969002	948607	1	axc2	2/10/2010 14:58:45	OM_2-10-2010_14-04-36
245969003	948607	1	axc2	2/10/2010 14:59:39	OM_2-10-2010_14-04-36
245969004	948607	1	axc2	2/10/2010 15:00:32	OM_2-10-2010_14-04-36
245969005	948607	1	axc2	2/10/2010 15:01:25	OM_2-10-2010_14-04-36
245969006	948607	1	axc2	2/10/2010 15:02:18	OM_2-10-2010_14-04-36
245969007	948607	1	axc2	2/10/2010 15:03:11	OM_2-10-2010_14-04-36
245969008	948607	1	axc2	2/10/2010 15:04:05	OM_2-10-2010_14-04-36
245969009	948607	1	axc2	2/10/2010 15:04:57	OM_2-10-2010_14-04-36
245969010	948607	1	axc2	2/10/2010 15:05:49	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010 15:06:42	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010 15:08:32	OM_2-10-2010_14-04-36

245969011	948607	1	axc2	2/10/2010	15:10:21	OM_2-10-2010_14-04-36
245969012	948607	1	axc2	2/10/2010	15:11:13	OM_2-10-2010_14-04-36
245969013	948607	1	axc2	2/10/2010	15:12:05	OM_2-10-2010_14-04-36
245969014	948607	1	axc2	2/10/2010	15:12:57	OM_2-10-2010_14-04-36
245969015	948607	1	axc2	2/10/2010	15:13:49	OM_2-10-2010_14-04-36
246006005	948607	1	axc2	2/10/2010	15:14:43	OM_2-10-2010_14-04-36
1202032206	948607	1	axc2	2/10/2010	15:15:37	OM_2-10-2010_14-04-36
1202032208	948607	1	axc2	2/10/2010	15:16:32	OM_2-10-2010_14-04-36
1202032210	948607	1	axc2	2/10/2010	15:17:25	OM_2-10-2010_14-04-36
246006006	948607	1	axc2	2/10/2010	15:18:19	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010	15:19:11	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010	15:21:01	OM_2-10-2010_14-04-36
1202032207	948607	1	axc2	2/10/2010	15:22:50	OM_2-10-2010_14-04-36
1202032209	948607	1	axc2	2/10/2010	15:23:43	OM_2-10-2010_14-04-36
1202032211	948607	1	axc2	2/10/2010	15:24:36	OM_2-10-2010_14-04-36
246006007	948607	1	axc2	2/10/2010	15:25:29	OM_2-10-2010_14-04-36
246006008	948607	1	axc2	2/10/2010	15:26:22	OM_2-10-2010_14-04-36
246006009	948607	1	axc2	2/10/2010	15:27:14	OM_2-10-2010_14-04-36
1202032221	948610	1	axc2	2/10/2010	15:28:07	OM_2-10-2010_14-04-36
1202032228	948610	25	axc2	2/10/2010	15:28:59	OM_2-10-2010_14-04-36
245950001	948610	1	axc2	2/10/2010	15:29:52	OM_2-10-2010_14-04-36
245950002	948610	1	axc2	2/10/2010	15:30:43	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010	15:31:37	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010	15:33:27	OM_2-10-2010_14-04-36
245950003	948610	1	axc2	2/10/2010	15:35:17	OM_2-10-2010_14-04-36
245950004	948610	1	axc2	2/10/2010	15:36:11	OM_2-10-2010_14-04-36
245950005	948610	1	axc2	2/10/2010	15:37:05	OM_2-10-2010_14-04-36
245979001	948610	1	axc2	2/10/2010	15:37:59	OM_2-10-2010_14-04-36
1202032222	948610	1	axc2	2/10/2010	15:38:53	OM_2-10-2010_14-04-36
1202032224	948610	1	axc2	2/10/2010	15:39:46	OM_2-10-2010_14-04-36
1202032226	948610	1	axc2	2/10/2010	15:40:39	OM_2-10-2010_14-04-36
245979002*	948610	1	axc2	2/10/2010	15:41:33	OM_2-10-2010_14-04-36
1202032223*	948610	1	axc2	2/10/2010	15:42:26	OM_2-10-2010_14-04-36
1202032225*	948610	1	axc2	2/10/2010	15:43:18	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010	15:44:11	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010	15:46:02	OM_2-10-2010_14-04-36
1202032227*	948610	1	axc2	2/10/2010	15:47:52	OM_2-10-2010_14-04-36
245979003	948610	1	axc2	2/10/2010	15:48:44	OM_2-10-2010_14-04-36
245979004	948610	1	axc2	2/10/2010	15:49:36	OM_2-10-2010_14-04-36
245979005	948610	1	axc2	2/10/2010	15:50:28	OM_2-10-2010_14-04-36
245979006	948610	1	axc2	2/10/2010	15:51:21	OM_2-10-2010_14-04-36
245979007	948610	1	axc2	2/10/2010	15:52:16	OM_2-10-2010_14-04-36
245979008	948610	1	axc2	2/10/2010	15:53:10	OM_2-10-2010_14-04-36
245979009	948610	1	axc2	2/10/2010	15:54:03	OM_2-10-2010_14-04-36
245979010	948610	1	axc2	2/10/2010	15:54:58	OM_2-10-2010_14-04-36
245979011	948610	1	axc2	2/10/2010	15:55:52	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010	15:56:44	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010	15:58:34	OM_2-10-2010_14-04-36
245979012	948610	1	axc2	2/10/2010	16:00:24	OM_2-10-2010_14-04-36
245979013	948610	1	axc2	2/10/2010	16:01:17	OM_2-10-2010_14-04-36
245979014	948610	1	axc2	2/10/2010	16:02:11	OM_2-10-2010_14-04-36
245979015	948610	1	axc2	2/10/2010	16:03:04	OM_2-10-2010_14-04-36
CCV		1	axc2	2/10/2010	16:03:56	OM_2-10-2010_14-04-36
CCB		1	axc2	2/10/2010	16:05:47	OM_2-10-2010_14-04-36

Original Run Filename: OM_2-10-2010_14-04-36.OMN created 2/10/2010 14:04:36
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-10-2010_14-04-36.OMN last modified 2/10/2010 16:06:51
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE Conc. (ug/L)	Area (Vs)				
WCN100210-01	1	S1	200	8.11	2/10/2010@14:07:58			200 ppb
WCN100210-02	1	S2	150	6.18	2/10/2010@14:08:49			150 ppb
WCN100210-03	1	S3	100	3.79	2/10/2010@14:09:42			100 ppb
WCN100210-04	1	S4	50.0	2.07	2/10/2010@14:10:35			50 ppb
WCN100210-05	1	S5	10.0	0.503	2/10/2010@14:11:28			10 ppb
WCN100210-06	1	S6	5.00	0.320	2/10/2010@14:12:22			CRDL 5.0 ppb
WCN100210-08	1	S7	0.00	0.0294	2/10/2010@14:13:16			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99924 > 0.99500					
Message			Passed due to...					
Action			...Rerun Peak Detection					
WCN100210-07	1	S8	156	6.34	2/10/2010@14:15:06			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			4.2 < 10.0					
Message			Passed due to...					
Action			...Rerun Peak Detection					
DQM Test: < - Percent Relative Difference								
Result:			4.2 < 10.0					
Message			Passed due to...					
Action			...Rerun Peak Detection					
Calibration:			Table/Fig. 1					
WCN102010-08	1	S7	-0.194	0.0361	2/10/2010@14:16:57			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.194 < 5.01					
Message			Passed due to...					
Action			...Rerun Peak Detection					
DQM Test: < - Concentration Limit								
Result:			-0.194 > -5.01					
Message			Passed due to...					
Action			...Rerun Peak Detection					
WCN102010-06	1	S6	7.28	0.337	2/10/2010@14:18:46			
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			7.28 < 7.50					
Message			Passed due to...					
Action			...Rerun Peak Detection					
DQM Test: < - Concentration Limit								
Result:			7.28 > 2.50					
Message			Passed due to...					
Action			...Rerun Peak Detection					
1202032189|948603|MB	1	1	-1.09	0.00	2/10/2010@14:20:36			
1202032196|LCS	1	2	33.0	1.37	2/10/2010@14:21:30		25.00	
246002001	1	3	1.62	0.109	2/10/2010@14:22:23			
1202032190|DUP	1	4	1.99	0.124	2/10/2010@14:23:16			
1202032192|MS	1	5	97.5	3.97	2/10/2010@14:24:09			
1202032194|MSD	1	6	99.7	4.06	2/10/2010@14:25:02			
246002002	1	7	1.70	0.112	2/10/2010@14:25:54			
1202032191|DUP	1	8	2.22	0.133	2/10/2010@14:26:47			
1202032193|MS	1	9	102	4.13	2/10/2010@14:27:39			
1202032195|MSD	1	10	102	4.13	2/10/2010@14:28:31			
WCN100210-03	1	S3	100	4.08	2/10/2010@14:29:24			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			0.2 < 10.0					

			Message	Passed due to...				
			Action	...Rerun Peak Detection				
			DQM Test: < - Percent Relative Difference					
			Result:	0.2 < 10.0				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
WCN100210-08	1	S7		-0.269	0.0331	2/10/2010@14:31:14		CCB
			Known Conc:	0.00				
			DQM Test: > + Concentration Limit					
			Result:	-0.269 < 5.00				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
			DQM Test: < - Concentration Limit					
			Result:	-0.269 > -5.00				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
246003001	1	11		-0.111	0.0395	2/10/2010@14:33:02		
246003002	1	12		-1.09	-1.28e-4	2/10/2010@14:33:55		
246003003	1	13		1.32	0.0970	2/10/2010@14:34:46		
246003004	1	14		0.318	0.0567	2/10/2010@14:35:38		
246003005	1	15		-0.445	0.0260	2/10/2010@14:36:29		
246003006	1	16		-0.165	0.0373	2/10/2010@14:37:23		
246003007	1	17		0.339	0.0576	2/10/2010@14:38:17		
246003008	1	18		0.353	0.0581	2/10/2010@14:39:10		
246003009	1	19		3.94	0.203	2/10/2010@14:40:03		
246003010	1	20		1.48	0.104	2/10/2010@14:40:57		
WCN100210-03	1	S3		101	4.11	2/10/2010@14:41:49		CCV
			Known Conc:	100				
			DQM Test: > + Percent Relative Difference					
			Result:	1.1 < 10.0				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
			DQM Test: < - Percent Relative Difference					
			Result:	1.1 < 10.0				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
WCN100210-08	1	S7		-0.371	0.0290	2/10/2010@14:43:39		CCB
			Known Conc:	0.00				
			DQM Test: > + Concentration Limit					
			Result:	-0.371 < 5.00				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
			DQM Test: < - Concentration Limit					
			Result:	-0.371 > -5.00				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
246003011	1	21		0.586	0.0675	2/10/2010@14:45:28		
246003012	1	22		1.60	0.108	2/10/2010@14:46:21		
246003013	1	23		0.847	0.0781	2/10/2010@14:47:14		
246003014	1	24		0.720	0.0729	2/10/2010@14:48:06		
246006001	1	25		0.215	0.0526	2/10/2010@14:48:58		
246006002	1	26		-0.0642	0.0414	2/10/2010@14:49:51		
246006003	1	27		-0.371	0.0290	2/10/2010@14:50:43		
246006004	1	28		0.506	0.0643	2/10/2010@14:51:35		
1202032205|948607|MB	1	29		-0.179	0.0367	2/10/2010@14:52:27		
1202032212|LCS	1	30		29.1	1.22	2/10/2010@14:53:20	25.00	
WCN100210-03	1	S3		101	4.13	2/10/2010@14:54:11		CCV
			Known Conc:	100				
			DQM Test: > + Percent Relative Difference					
			Result:	1.5 < 10.0				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
			DQM Test: < - Percent Relative Difference					
			Result:	1.5 < 10.0				
			Message	Passed due to...				
			Action	...Rerun Peak Detection				
WCN10210-08	1	S7		-1.09	0.00	2/10/2010@14:56:01		CCB
			Known Conc:	0.00				

DQM Test: > + Concentration Limit					
Result:		-1.09 < 5.00			
Message		Passed due to...			
Action		...Rerun Peak Detection			
DQM Test: < - Concentration Limit					
Result:		-1.09 > -5.00			
Message		Passed due to...			
Action		...Rerun Peak Detection			
245969001	1	31	-0.344	0.0301	2/10/2010@14:57:51
245969002	1	32	0.181	0.0512	2/10/2010@14:58:45
245969003	1	33	0.0454	0.0458	2/10/2010@14:59:39
245969004	1	34	0.326	0.0571	2/10/2010@15:00:32
245969005	1	35	1.10	0.0883	2/10/2010@15:01:25
245969006	1	36	-0.466	0.0252	2/10/2010@15:02:18
245969007	1	37	1.86	0.119	2/10/2010@15:03:11
245969008	1	38	0.328	0.0572	2/10/2010@15:04:05
245969009	1	39	1.57	0.107	2/10/2010@15:04:57
245969010	1	40	-0.378	0.0287	2/10/2010@15:05:49
WCN100210-03	1	S3	101	4.12	2/10/2010@15:06:42
Known Conc:			100		CCV
DQM Test: > + Percent Relative Difference					
Result:		1.4 < 10.0			
Message		Passed due to...			
Action		...Rerun Peak Detection			
DQM Test: < - Percent Relative Difference					
Result:		1.4 < 10.0			
Message		Passed due to...			
Action		...Rerun Peak Detection			
WCN100210-08	1	S7	-1.80	-0.0286	2/10/2010@15:08:32
Known Conc:			0.00		CCB
DQM Test: > + Concentration Limit					
Result:		-1.80 < 5.00			
Message		Passed due to...			
Action		...Rerun Peak Detection			
DQM Test: < - Concentration Limit					
Result:		-1.80 > -5.00			
Message		Passed due to...			
Action		...Rerun Peak Detection			
245969011	1	41	-0.00516	0.0437	2/10/2010@15:10:21
245969012	1	42	0.323	0.0569	2/10/2010@15:11:13
245969013	1	43	0.257	0.0543	2/10/2010@15:12:05
245969014	1	44	0.0155	0.0446	2/10/2010@15:12:57
245969015	1	45	1.87	0.119	2/10/2010@15:13:49
246006005	1	46	-0.221	0.0350	2/10/2010@15:14:43
1202032206||DUP	1	47	-0.0437	0.0422	2/10/2010@15:15:37
1202032208||MS	1	48	94.9	3.86	2/10/2010@15:16:32
1202032210||MSD	1	49	99.5	4.05	2/10/2010@15:17:25
246006006	1	50	0.451	0.0621	2/10/2010@15:18:19
WCN100210-03	1	S3	108	4.40	2/10/2010@15:19:11
Known Conc:			100		CCV
DQM Test: > + Percent Relative Difference					
Result:		8.3 < 10.0			
Message		Passed due to...			
Action		...Rerun Peak Detection			
DQM Test: < - Percent Relative Difference					
Result:		8.3 < 10.0			
Message		Passed due to...			
Action		...Rerun Peak Detection			
WCN100210-08	1	S7	-0.159	0.0375	2/10/2010@15:21:01
Known Conc:			0.00		CCB
DQM Test: > + Concentration Limit					
Result:		-0.159 < 5.00			
Message		Passed due to...			
Action		...Rerun Peak Detection			
DQM Test: < - Concentration Limit					
Result:		-0.159 > -5.00			
Message		Passed due to...			
Action		...Rerun Peak Detection			

1202032207	DUP	1	51	0.263	0.0545	2/10/2010@15:22:50		
1202032209	MS	1	52	96.0	3.91	2/10/2010@15:23:43		
1202032211	MSD	1	53	93.5	3.81	2/10/2010@15:24:36		
246006007		1	54	-0.123	0.0390	2/10/2010@15:25:29		
246006008		1	55	0.00499	0.0441	2/10/2010@15:26:22		
246006009		1	56	0.464	0.0626	2/10/2010@15:27:14		
1202032221	948610/MB	1	57	-1.09	-1.37e-4	2/10/2010@15:28:07		
1202032228	LCS	1	58	26.5	1.11	2/10/2010@15:28:59	25.00	
245950001		1	59	0.981	0.0834	2/10/2010@15:29:52		
245950002		1	60	17.8	0.761	2/10/2010@15:30:43		
WCN100210-03		1	S3	108	4.40	2/10/2010@15:31:37		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				8.3 < 10.0				
Message				Passed due to...				
Action				...Rerun Peak Detection				
DQM Test: < - Percent Relative Difference								
Result:				8.3 < 10.0				
Message				Passed due to...				
Action				...Rerun Peak Detection				
WCN100210-08		1	S7	-0.351	0.0298	2/10/2010@15:33:27		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				-0.351 < 5.00				
Message				Passed due to...				
Action				...Rerun Peak Detection				
DQM Test: < - Concentration Limit								
Result:				-0.351 > -5.00				
Message				Passed due to...				
Action				...Rerun Peak Detection				
245950003		1	61	4.26	0.216	2/10/2010@15:35:17		
245950004		1	62	73.8	3.01	2/10/2010@15:36:11		
245950005		1	63	7.40	0.342	2/10/2010@15:37:05		
245979001		1	64	0.0300	0.0452	2/10/2010@15:37:59		
1202032222	DUP	1	65	-0.391	0.0282	2/10/2010@15:38:53		
1202032224	MS	1	66	100	4.07	2/10/2010@15:39:46		
1202032226	MSD	1	67	86.1	3.51	2/10/2010@15:40:39		
245979002		1	68	4.38	0.220	2/10/2010@15:41:33		
1202032223	DUP	1	69	1.14	0.0899	2/10/2010@15:42:26		
1202032225	MS	1	70	2.19	0.132	2/10/2010@15:43:18		
WCN100210-03		1	S3	109	4.44	2/10/2010@15:44:11		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				9.2 < 10.0				
Message				Passed due to...				
Action				...Rerun Peak Detection				
DQM Test: < - Percent Relative Difference								
Result:				9.2 < 10.0				
Message				Passed due to...				
Action				...Rerun Peak Detection				
WCN100210-08		1	S7	2.37	0.139	2/10/2010@15:46:02		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				2.37 < 5.00				
Message				Passed due to...				
Action				...Rerun Peak Detection				
DQM Test: < - Concentration Limit								
Result:				2.37 > -5.00				
Message				Passed due to...				
Action				...Rerun Peak Detection				
1202032227	MSD	1	71	3.43	0.182	2/10/2010@15:47:52		
245979003		1	72	1.19	0.0920	2/10/2010@15:48:44		
245979004		1	73	0.791	0.0758	2/10/2010@15:49:36		
245979005		1	74	0.465	0.0627	2/10/2010@15:50:28		
245979006		1	75	2.23	0.134	2/10/2010@15:51:21		
245979007		1	76	0.0544	0.0461	2/10/2010@15:52:16		
245979008		1	77	0.979	0.0834	2/10/2010@15:53:10		
245979009		1	78	-0.116	0.0393	2/10/2010@15:54:03		

245979010	1	79	0.190	0.0516	2/10/2010@15:54:58	
245979011	1	80	0.279	0.0552	2/10/2010@15:55:52	
WCN100210-03	1	S3	108	4.41	2/10/2010@15:56:44	CCV
Known Conc:			100			
DQM Test: > + Percent Relative Difference						
Result:			8.4 < 10.0			
Message			Passed due to...			
Action			...Rerun Peak Detection			
DQM Test: < - Percent Relative Difference						
Result:			8.4 < 10.0			
Message			Passed due to...			
Action			...Rerun Peak Detection			
WCN100210-08	1	S7	2.42	0.141	2/10/2010@15:58:34	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:			2.42 < 5.00			
Message			Passed due to...			
Action			...Rerun Peak Detection			
DQM Test: < - Concentration Limit						
Result:			2.42 > -5.00			
Message			Passed due to...			
Action			...Rerun Peak Detection			
245979012	1	81	0.0293	0.0451	2/10/2010@16:00:24	
245979013	1	82	1.77	0.115	2/10/2010@16:01:17	
245979014	1	83	0.378	0.0592	2/10/2010@16:02:11	
245979015	1	84	0.159	0.0503	2/10/2010@16:03:04	
WCN100210-03	1	S3	109	4.43	2/10/2010@16:03:56	CCV
Known Conc:			100			
DQM Test: > + Percent Relative Difference						
Result:			8.9 < 10.0			
Message			Passed due to...			
Action			...Rerun Peak Detection			
DQM Test: < - Percent Relative Difference						
Result:			8.9 < 10.0			
Message			Passed due to...			
Action			...Rerun Peak Detection			
WCN100210-08	1	S7	2.52	0.145	2/10/2010@16:05:47	CCB
Known Conc:			0.00			
DQM Test: > + Concentration Limit						
Result:			2.52 < 5.00			
Message			Passed due to...			
Action			...Rerun Peak Detection			
DQM Test: < - Concentration Limit						
Result:			2.52 > -5.00			
Message			Passed due to...			
Action			...Rerun Peak Detection			

Analyte Properties Table for OM_2-10-2010_14-04-36.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

The chromatogram displays a series of peaks corresponding to different samples and concentrations. Key labels include:

- Peaks and Labels:** WCN100210-03, WCN100210-08, WCN100210-07, WCN100210-06, WCN100210-05, WCN100210-04, WCN100210-02, WCN100210-01, WCN100210-00, WCN100210-09, WCN100210-10, WCN100210-11, WCN100210-12, WCN100210-13, WCN100210-14, WCN100210-15, WCN100210-16, WCN100210-17, WCN100210-18, WCN100210-19, WCN100210-20, WCN100210-21, WCN100210-22, WCN100210-23, WCN100210-24, WCN100210-25, WCN100210-26, WCN100210-27, WCN100210-28, WCN100210-29, WCN100210-30, WCN100210-31, WCN100210-32, WCN100210-33, WCN100210-34, WCN100210-35, WCN100210-36, WCN100210-37, WCN100210-38, WCN100210-39, WCN100210-40, WCN100210-41, WCN100210-42, WCN100210-43, WCN100210-44, WCN100210-45, WCN100210-46, WCN100210-47, WCN100210-48, WCN100210-49, WCN100210-50, WCN100210-51, WCN100210-52, WCN100210-53, WCN100210-54, WCN100210-55, WCN100210-56, WCN100210-57, WCN100210-58, WCN100210-59, WCN100210-60, WCN100210-61, WCN100210-62, WCN100210-63, WCN100210-64, WCN100210-65, WCN100210-66, WCN100210-67, WCN100210-68, WCN100210-69, WCN100210-70, WCN100210-71, WCN100210-72, WCN100210-73, WCN100210-74, WCN100210-75, WCN100210-76, WCN100210-77, WCN100210-78, WCN100210-79, WCN100210-80, WCN100210-81, WCN100210-82, WCN100210-83, WCN100210-84, WCN100210-85, WCN100210-86, WCN100210-87, WCN100210-88, WCN100210-89, WCN100210-90, WCN100210-91, WCN100210-92, WCN100210-93, WCN100210-94, WCN100210-95, WCN100210-96, WCN100210-97, WCN100210-98, WCN100210-99, WCN100210-100.

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.14	0.526	-0.6	2/10/2010	14:09:00
2	150	1	6.18	0.400	-1.7	2/10/2010	14:09:52
3	100	1	3.80	0.247	6.5	2/10/2010	14:10:45
4	50.0	1	2.06	0.133	-0.1	2/10/2010	14:11:38
5	10.0	1	0.506	0.0315	-12.4	2/10/2010	14:12:31
6	5.00	1	0.322	0.0192	-29.2	2/10/2010	14:13:25
7	0.00	1	0.0294	0.00117		2/10/2010	14:14:19

Area = 0.0402 * Conc + 0.0484
 Conc = 24.8 * Area - 1.09
 Correlation Coefficient (r) = 0.99924
 No Weighting

TCYANIDE concentration, ug/L	Peak Area (V.s)
0.00	0.00
~10	~0.1
~20	~0.2
~50	~0.5
~100	~1.0
~200	~2.0

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	2/10/2010 16:15:45	OM_2-10-2010_16-14-59
CCB		1	axc2	2/10/2010 16:17:35	OM_2-10-2010_16-14-59
245979002	948610	1	axc2	2/10/2010 16:19:24	OM_2-10-2010_16-14-59
1202032223	948610	1	axc2	2/10/2010 16:20:17	OM_2-10-2010_16-14-59
1202032225	948610	1	axc2	2/10/2010 16:21:11	OM_2-10-2010_16-14-59
1202032227	948610	1	axc2	2/10/2010 16:22:03	OM_2-10-2010_16-14-59
CCV		1	axc2	2/10/2010 16:22:56	OM_2-10-2010_16-14-59
CCB		1	axc2	2/10/2010 16:24:46	OM_2-10-2010_16-14-59

Original Run Filename: OM_2-10-2010_16-14-59.OMN created 2/10/2010 16:14:59
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-10-2010_16-14-59.OMN last modified 2/10/2010 16:25:50
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE	Area (Vs)				
WCN100210-03	1	S3	99.7	4.06	2/10/2010@16:15:45			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-0.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.3 < 10.0					
Message			CCV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100210-08	1	S7	2.25	0.134	2/10/2010@16:17:35			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			2.25 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			2.25 > -5.00					
Message			CCB Passed					
Action			Continue					
245979002|948610|	1	68	2.06	0.127	2/10/2010@16:19:24			
1202032223|DUP	1	69	1.10	0.0882	2/10/2010@16:20:17			
1202032225|MS	1	70	95.2	3.88	2/10/2010@16:21:11			
1202032227|MSD	1	71	76.5	3.12	2/10/2010@16:22:03			
WCN100210-03	1	S3	101	4.11	2/10/2010@16:22:56			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.1 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.1 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100210-08	1	S7	2.83	0.158	2/10/2010@16:24:46			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			2.83 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			2.83 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_2-10-2010_16-14-59.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True

% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

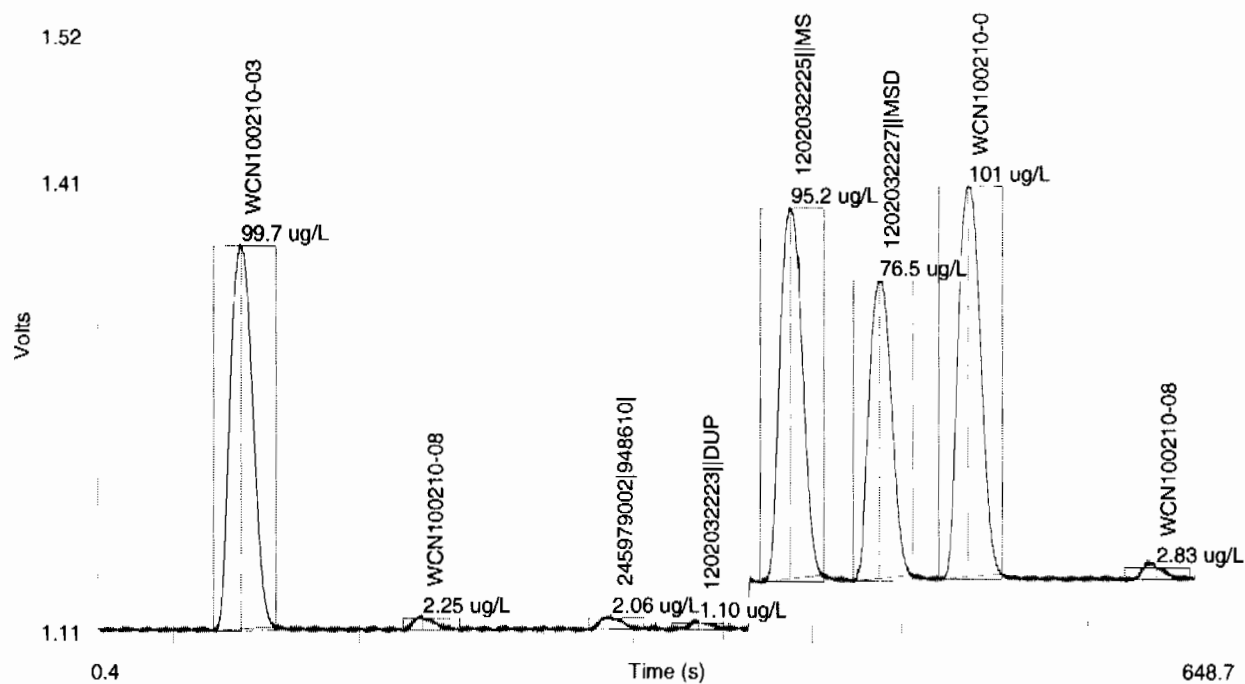
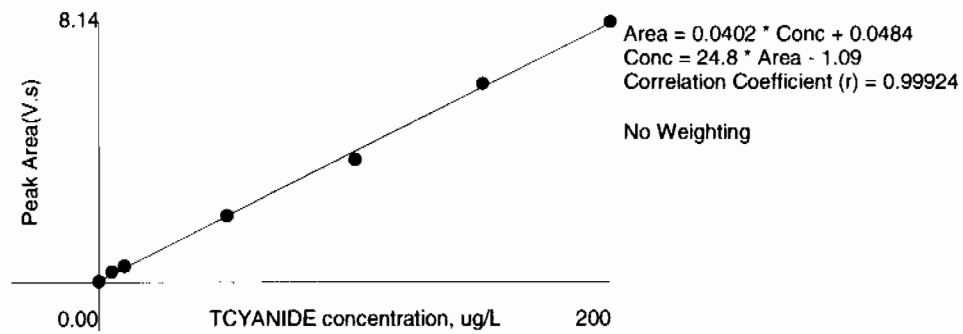


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.14	0.526	-0.6	2/10/2010	14:09:00
2	150	1	6.18	0.400	-1.7	2/10/2010	14:09:52
3	100	1	3.80	0.247	6.5	2/10/2010	14:10:45
4	50.0	1	2.06	0.133	-0.1	2/10/2010	14:11:38
5	10.0	1	0.506	0.0315	-12.4	2/10/2010	14:12:31
6	5.00	1	0.322	0.0192	-29.2	2/10/2010	14:13:25
7	0.00	1	0.0294	0.00117		2/10/2010	14:14:19

Figure 1: TCYANIDE



Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr.
16-FEB-10

Division:

Quality Criteria:

Type:

Instrument Type:

Test / Method:
SW846 9012A

Matrix Type:
Solid

Client Code:
LANL

Batch ID:
948610

Sample Numbers:
See Below

Potentially affected work order(s)(SDG): 245950(10-1508),245979(10-1514)

Application Issues: -

Failed Recovery for MSD/PSD

Specification and Requirements
Exception Description:

1. Failed Recovery for MSD:

QC 1202032227MSD

DER Disposition:

1. The matrix spike duplicate falls outside of the client specified acceptance limits. Since the spike recovery and the RPD between the spike and spike duplicate are within acceptance limits, the data is reported.

Originator's Name:

Ashley Earl

16-FEB-10

Data Validator/Group Leader:

Elzbieta Szulc

17-FEB-10

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1514-1**

Method/Analysis Information

Product:	Cyanide, Total		
Analytical Batch:	948940	Method:	SW9012A Cyanide and Total
Prep Batch :	948939	Method:	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
245981001	RE15-10-8083
1202033006	Method Blank (MB)
1202033007	246004001(RE16-10-11766) Sample Duplicate (DUP)
1202033008	245926003(CAMO-10-9289) Sample Duplicate (DUP)
1202033009	246004001(RE16-10-11766) Matrix Spike (MS)
1202033010	245926003(CAMO-10-9289) Matrix Spike (MS)
1202033011	246004001(RE16-10-11766) Matrix Spike Duplicate (MSD)
1202033012	245926003(CAMO-10-9289) Matrix Spike Duplicate (MSD)
1202033013	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Y Intercept Rule

The absolute value of the intercept is less than 3 times the MDL.

Quality Control (QC) Information**Method Blank (MB) Statement**

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following samples were selected for QC analysis: 245926003 (CAMO-10-9289) and 246004001 (RE16-10-11766).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202033008 (CAMO-10-9289).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information

Data Exception (DER) Documentation

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer:  Date: 27Feb10

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1514-1 GEL Work Order: 245981

The Qualifiers in this report are defined as follows:

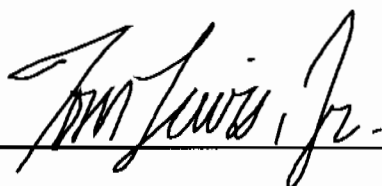
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, reading "Tom Lewis, Jr.", is written over a horizontal line.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 12, 2010

Client SDG: 10-1514-1

Client Sample ID: RE15-10-8083
Sample ID: 245981001
Matrix: W
Collect Date: 27-JAN-10 12:00
Receive Date: 02-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "As Received"

Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	02/08/10	1459	948940	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/05/10	1408	948939

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: February 12, 2010

Page 1 of 2

Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico
Contact: Ms. Joylene Valdez

Contact:

Workorder: 245981

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	948940										
QC1202033007	246004001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	02/08/10	15:01
QC1202033008	245926003	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A			02/08/10	14:44
QC1202033013	LCS										
Cyanide, Total	50.0				51.4	ug/L		103 (90%-110%)		02/08/10	14:37
QC1202033006	MB										
Cyanide, Total				U	5.00	ug/L				02/08/10	14:36
QC1202033009	246004001	MS									
Cyanide, Total	100	U	ND		96.2	ug/L		96.2 (60%-144%)		02/08/10	15:02
QC1202033010	245926003	MS									
Cyanide, Total	100	U	ND		93.6	ug/L		92.2 (60%-144%)		02/08/10	14:45
QC1202033011	246004001	MSD									
Cyanide, Total	100	U	ND		94.3	ug/L	1.99	94.3 (0%-20%)		02/08/10	15:03
QC1202033012	245926003	MSD									
Cyanide, Total	100	U	ND		94.0	ug/L	0.426	92.6 (0%-20%)		02/08/10	14:46

Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 245981

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-FEB-2010 13:09

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1514-1

Flow Injection Analysis

Method: SW846 9012A

Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+ 8000 Series

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	08-FEB-2010 13:22:34	OM_2-8-2010_13-14-40	151	150	101	(90%-110%)	Yes
CCV	08-FEB-2010 14:26:41	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 14:39:11	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 14:51:47	OM_2-8-2010_13-14-40	105	100	105	(90%-110%)	Yes
CCV	08-FEB-2010 15:04:19	OM_2-8-2010_13-14-40	104	100	104	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	08-FEB-2010 13:24:24	OM_2-8-2010_13-14-40	-1.45	10	Yes
CCB	08-FEB-2010 14:28:32	OM_2-8-2010_13-14-40	-1.47	10	Yes
CCB	08-FEB-2010 14:41:01	OM_2-8-2010_13-14-40	-1.57	10	Yes
CCB	08-FEB-2010 14:53:37	OM_2-8-2010_13-14-40	-1.83	10	Yes
CCB	08-FEB-2010 15:06:09	OM_2-8-2010_13-14-40	-1.82	10	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by: _____

Batch: 948939

Lab SOP: GL-GC-E-067 REV# 13

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Spike Amount	Spike Units
MB	1202033006		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
LCS	1202033013		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	245926001		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
SAMPLE	245926002		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
SAMPLE	245926003		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
DUP	1202033008	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
MS	1202033010	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
MSD	1202033012	245926003	EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
SAMPLE	245926004		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
SAMPLE	245926005		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
SAMPLE	245926006		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
SAMPLE	245926007		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	GROUND WATER	mL
SAMPLE	245939001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	245939002		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	245953001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	245965001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	245975001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	245981001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	246000001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	246004001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
DUP	1202033007	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
MS	1202033009	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
MSD	1202033011	246004001	SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	246056001		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	246056002		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	246056003		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	246056004		SW846 9010B Prep	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL
SAMPLE	246080001		EPA 335.4	05-FEB-2010 14:08	>12	25 mL	25 mL	1	WATER	mL

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
091211-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100205-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1176724-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1176778-C	1 mL	51% MgCl2 Soln	
1238142-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/8/2010 13:15:25	OM_2-8-2010_13-14-40
150 ppb		1	axc2	2/8/2010 13:16:17	OM_2-8-2010_13-14-40
100 ppb		1	axc2	2/8/2010 13:17:10	OM_2-8-2010_13-14-40
50 ppb		1	axc2	2/8/2010 13:18:03	OM_2-8-2010_13-14-40
10 ppb		1	axc2	2/8/2010 13:18:56	OM_2-8-2010_13-14-40
CRDL 5.0 ppb		1	axc2	2/8/2010 13:19:50	OM_2-8-2010_13-14-40
ICAL-00		1	axc2	2/8/2010 13:20:43	OM_2-8-2010_13-14-40
ICV		1	axc2	2/8/2010 13:22:34	OM_2-8-2010_13-14-40
ICB		1	axc2	2/8/2010 13:24:24	OM_2-8-2010_13-14-40
CRDL		1	axc2	2/8/2010 13:26:14	OM_2-8-2010_13-14-40
1202029242*	947315	1	axc2	2/8/2010 13:28:03	OM_2-8-2010_13-14-40
1202029249	947315	25	axc2	2/8/2010 13:28:57	OM_2-8-2010_13-14-40
245682001	947315	1	axc2	2/8/2010 13:29:50	OM_2-8-2010_13-14-40
245682002	947315	1	axc2	2/8/2010 13:30:43	OM_2-8-2010_13-14-40
245682003	947315	1	axc2	2/8/2010 13:31:36	OM_2-8-2010_13-14-40
245682004	947315	1	axc2	2/8/2010 13:32:29	OM_2-8-2010_13-14-40
245682005	947315	1	axc2	2/8/2010 13:33:21	OM_2-8-2010_13-14-40
245682006	947315	1	axc2	2/8/2010 13:34:14	OM_2-8-2010_13-14-40
245682007	947315	1	axc2	2/8/2010 13:35:07	OM_2-8-2010_13-14-40
245682008	947315	1	axc2	2/8/2010 13:35:58	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 13:36:51	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 13:38:42	OM_2-8-2010_13-14-40
1202029242	947315	1	axc2	2/8/2010 13:40:30	OM_2-8-2010_13-14-40
245682009	947315	1	axc2	2/8/2010 13:41:23	OM_2-8-2010_13-14-40
245682010	947315	1	axc2	2/8/2010 13:42:15	OM_2-8-2010_13-14-40
245688011	947315	1	axc2	2/8/2010 13:43:06	OM_2-8-2010_13-14-40
1202029243	947315	1	axc2	2/8/2010 13:43:58	OM_2-8-2010_13-14-40
1202029245	947315	1	axc2	2/8/2010 13:44:50	OM_2-8-2010_13-14-40
1202029247	947315	1	axc2	2/8/2010 13:45:44	OM_2-8-2010_13-14-40
245688012	947315	1	axc2	2/8/2010 13:46:37	OM_2-8-2010_13-14-40
1202029244	947315	1	axc2	2/8/2010 13:47:31	OM_2-8-2010_13-14-40
1202029246	947315	1	axc2	2/8/2010 13:48:24	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 13:49:17	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 13:51:07	OM_2-8-2010_13-14-40
1202029248	947315	1	axc2	2/8/2010 13:52:56	OM_2-8-2010_13-14-40
245688013	947315	1	axc2	2/8/2010 13:53:50	OM_2-8-2010_13-14-40
245688014	947315	1	axc2	2/8/2010 13:54:42	OM_2-8-2010_13-14-40
245797001	947315	1	axc2	2/8/2010 13:55:35	OM_2-8-2010_13-14-40
245797002	947315	1	axc2	2/8/2010 13:56:27	OM_2-8-2010_13-14-40
245797003	947315	1	axc2	2/8/2010 13:57:20	OM_2-8-2010_13-14-40
245797004	947315	1	axc2	2/8/2010 13:58:12	OM_2-8-2010_13-14-40
245797005	947315	1	axc2	2/8/2010 13:59:04	OM_2-8-2010_13-14-40
245797006	947315	1	axc2	2/8/2010 13:59:57	OM_2-8-2010_13-14-40
1202029230	947312	1	axc2	2/8/2010 14:00:48	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 14:01:41	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 14:03:31	OM_2-8-2010_13-14-40
1202029237	947312	25	axc2	2/8/2010 14:05:20	OM_2-8-2010_13-14-40
245612007	947312	1	axc2	2/8/2010 14:06:13	OM_2-8-2010_13-14-40
1202029231	947312	1	axc2	2/8/2010 14:07:07	OM_2-8-2010_13-14-40
1202029233	947312	1	axc2	2/8/2010 14:08:01	OM_2-8-2010_13-14-40
1202029235	947312	1	axc2	2/8/2010 14:08:54	OM_2-8-2010_13-14-40
245612008	947312	1	axc2	2/8/2010 14:09:48	OM_2-8-2010_13-14-40
1202029232	947312	1	axc2	2/8/2010 14:10:41	OM_2-8-2010_13-14-40
1202029234	947312	1	axc2	2/8/2010 14:11:33	OM_2-8-2010_13-14-40
1202029236	947312	1	axc2	2/8/2010 14:12:26	OM_2-8-2010_13-14-40
245612009	947312	1	axc2	2/8/2010 14:13:19	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010 14:14:12	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010 14:16:04	OM_2-8-2010_13-14-40

245612010	947312	1	axc2	2/8/2010	14:17:52	OM_2-8-2010_13-14-40
245612011	947312	1	axc2	2/8/2010	14:18:45	OM_2-8-2010_13-14-40
245612012	947312	1	axc2	2/8/2010	14:19:37	OM_2-8-2010_13-14-40
245612013	947312	1	axc2	2/8/2010	14:20:29	OM_2-8-2010_13-14-40
245612014	947312	1	axc2	2/8/2010	14:21:22	OM_2-8-2010_13-14-40
245612015	947312	1	axc2	2/8/2010	14:22:13	OM_2-8-2010_13-14-40
245612016	947312	1	axc2	2/8/2010	14:23:07	OM_2-8-2010_13-14-40
245688001	947312	1	axc2	2/8/2010	14:24:02	OM_2-8-2010_13-14-40
245688002	947312	1	axc2	2/8/2010	14:24:55	OM_2-8-2010_13-14-40
245688003	947312	1	axc2	2/8/2010	14:25:50	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:26:41	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:28:32	OM_2-8-2010_13-14-40
245688004	947312	1	axc2	2/8/2010	14:30:23	OM_2-8-2010_13-14-40
245688005	947312	1	axc2	2/8/2010	14:31:15	OM_2-8-2010_13-14-40
245688006	947312	1	axc2	2/8/2010	14:32:08	OM_2-8-2010_13-14-40
245688007	947312	1	axc2	2/8/2010	14:33:01	OM_2-8-2010_13-14-40
245688008	947312	1	axc2	2/8/2010	14:33:55	OM_2-8-2010_13-14-40
245688009	947312	1	axc2	2/8/2010	14:34:47	OM_2-8-2010_13-14-40
245688010	947312	1	axc2	2/8/2010	14:35:40	OM_2-8-2010_13-14-40
1202033006	948940	1	axc2	2/8/2010	14:36:34	OM_2-8-2010_13-14-40
1202033013	948940	1	axc2	2/8/2010	14:37:26	OM_2-8-2010_13-14-40
245926001	948940	1	axc2	2/8/2010	14:38:19	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:39:11	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:41:01	OM_2-8-2010_13-14-40
245926002	948940	1	axc2	2/8/2010	14:42:50	OM_2-8-2010_13-14-40
245926003	948940	1	axc2	2/8/2010	14:43:43	OM_2-8-2010_13-14-40
1202033008	948940	1	axc2	2/8/2010	14:44:35	OM_2-8-2010_13-14-40
1202033010	948940	1	axc2	2/8/2010	14:45:29	OM_2-8-2010_13-14-40
1202033012	948940	1	axc2	2/8/2010	14:46:24	OM_2-8-2010_13-14-40
245926004	948940	1	axc2	2/8/2010	14:47:19	OM_2-8-2010_13-14-40
245926005	948940	1	axc2	2/8/2010	14:48:12	OM_2-8-2010_13-14-40
245926006	948940	1	axc2	2/8/2010	14:49:06	OM_2-8-2010_13-14-40
245926007	948940	1	axc2	2/8/2010	14:50:01	OM_2-8-2010_13-14-40
245939001	948940	1	axc2	2/8/2010	14:50:54	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	14:51:47	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	14:53:37	OM_2-8-2010_13-14-40
245939002*	948940	1	axc2	2/8/2010	14:55:27	OM_2-8-2010_13-14-40
245953001*	948940	1	axc2	2/8/2010	14:56:21	OM_2-8-2010_13-14-40
245965001*	948940	1	axc2	2/8/2010	14:57:14	OM_2-8-2010_13-14-40
245975001	948940	1	axc2	2/8/2010	14:58:06	OM_2-8-2010_13-14-40
245981001	948940	1	axc2	2/8/2010	14:59:00	OM_2-8-2010_13-14-40
246000001	948940	1	axc2	2/8/2010	14:59:52	OM_2-8-2010_13-14-40
246004001	948940	1	axc2	2/8/2010	15:00:45	OM_2-8-2010_13-14-40
1202033007	948940	1	axc2	2/8/2010	15:01:38	OM_2-8-2010_13-14-40
1202033009	948940	1	axc2	2/8/2010	15:02:32	OM_2-8-2010_13-14-40
1202033011	948940	1	axc2	2/8/2010	15:03:27	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:04:19	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:06:09	OM_2-8-2010_13-14-40
245939002	948940	1	axc2	2/8/2010	15:07:59	OM_2-8-2010_13-14-40
245953001	948940	1	axc2	2/8/2010	15:08:53	OM_2-8-2010_13-14-40
245965001	948940	1	axc2	2/8/2010	15:09:46	OM_2-8-2010_13-14-40
246056001	948940	1	axc2	2/8/2010	15:10:41	OM_2-8-2010_13-14-40
246056002	948940	1	axc2	2/8/2010	15:11:35	OM_2-8-2010_13-14-40
246056003	948940	1	axc2	2/8/2010	15:12:29	OM_2-8-2010_13-14-40
246056004	948940	1	axc2	2/8/2010	15:13:23	OM_2-8-2010_13-14-40
246080001	948940	1	axc2	2/8/2010	15:14:17	OM_2-8-2010_13-14-40
1202029252	947318	1	axc2	2/8/2010	15:15:10	OM_2-8-2010_13-14-40
1202029259	947318	25	axc2	2/8/2010	15:16:03	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:16:55	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:18:45	OM_2-8-2010_13-14-40

245797007	947318	1	axc2	2/8/2010	15:20:34	OM_2-8-2010_13-14-40
1202029253	947318	1	axc2	2/8/2010	15:21:26	OM_2-8-2010_13-14-40
1202029255	947318	1	axc2	2/8/2010	15:22:20	OM_2-8-2010_13-14-40
1202029257	947318	1	axc2	2/8/2010	15:23:14	OM_2-8-2010_13-14-40
245797008	947318	1	axc2	2/8/2010	15:24:08	OM_2-8-2010_13-14-40
1202029254	947318	1	axc2	2/8/2010	15:25:02	OM_2-8-2010_13-14-40
1202029256	947318	1	axc2	2/8/2010	15:25:56	OM_2-8-2010_13-14-40
1202029258	947318	1	axc2	2/8/2010	15:26:50	OM_2-8-2010_13-14-40
245797009	947318	1	axc2	2/8/2010	15:27:43	OM_2-8-2010_13-14-40
245797010	947318	1	axc2	2/8/2010	15:28:36	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:29:29	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:31:18	OM_2-8-2010_13-14-40
245797011	947318	1	axc2	2/8/2010	15:33:08	OM_2-8-2010_13-14-40
245797012	947318	1	axc2	2/8/2010	15:34:00	OM_2-8-2010_13-14-40
245797013	947318	1	axc2	2/8/2010	15:34:53	OM_2-8-2010_13-14-40
245797014	947318	1	axc2	2/8/2010	15:35:46	OM_2-8-2010_13-14-40
245797015	947318	1	axc2	2/8/2010	15:36:38	OM_2-8-2010_13-14-40
245797016	947318	1	axc2	2/8/2010	15:37:31	OM_2-8-2010_13-14-40
245797017	947318	1	axc2	2/8/2010	15:38:23	OM_2-8-2010_13-14-40
245797018	947318	1	axc2	2/8/2010	15:39:17	OM_2-8-2010_13-14-40
245797019	947318	1	axc2	2/8/2010	15:40:11	OM_2-8-2010_13-14-40
245806001	947318	1	axc2	2/8/2010	15:41:06	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:41:58	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:43:48	OM_2-8-2010_13-14-40
245806002	947318	1	axc2	2/8/2010	15:45:38	OM_2-8-2010_13-14-40
245806003	947318	1	axc2	2/8/2010	15:46:33	OM_2-8-2010_13-14-40
245806004	947318	1	axc2	2/8/2010	15:47:26	OM_2-8-2010_13-14-40
245806005	947318	1	axc2	2/8/2010	15:48:19	OM_2-8-2010_13-14-40
245806006	947318	1	axc2	2/8/2010	15:49:13	OM_2-8-2010_13-14-40
245806007	947318	1	axc2	2/8/2010	15:50:06	OM_2-8-2010_13-14-40
1202034313	949504	1	axc2	2/8/2010	15:51:00	OM_2-8-2010_13-14-40
1202034315	949504	250	axc2	2/8/2010	15:51:53	OM_2-8-2010_13-14-40
246078001	949504	1	axc2	2/8/2010	15:52:47	OM_2-8-2010_13-14-40
1202034314	949504	1	axc2	2/8/2010	15:53:40	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	15:54:33	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	15:56:23	OM_2-8-2010_13-14-40
246078002	949504	1	axc2	2/8/2010	15:58:12	OM_2-8-2010_13-14-40
246078003	949504	1	axc2	2/8/2010	15:59:05	OM_2-8-2010_13-14-40
246078004	949504	1	axc2	2/8/2010	15:59:58	OM_2-8-2010_13-14-40
CCV		1	axc2	2/8/2010	16:00:51	OM_2-8-2010_13-14-40
CCB		1	axc2	2/8/2010	16:02:41	OM_2-8-2010_13-14-40

Original Run Filename: OM_2-8-2010_13-14-40.OMN created 2/8/2010 13:14:40
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_2-8-2010_13-14-40.OMN last modified 2/8/2010 16:03:46
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100208-01	1	S1	200	8.74	2/8/2010@13:15:25			200 ppb
WCN100208-02	1	S2	150	6.63	2/8/2010@13:16:17			150 ppb
WCN100208-03	1	S3	100	4.52	2/8/2010@13:17:10			100 ppb
WCN100208-04	1	S4	50.0	2.28	2/8/2010@13:18:03			50 ppb
WCN100208-05	1	S5	10.0	0.511	2/8/2010@13:18:56			10 ppb
WCN100208-06	1	S6	5.00	0.321	2/8/2010@13:19:50			CRDL 5.0 ppb
WCN100208-08	1	S7	0.00	0.00906	2/8/2010@13:20:43			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99989 > 0.99500					
Message			Pass					
Action			Continue					
WCN100208-07	1	S8	151	6.65	2/8/2010@13:22:34			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			0.6 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			0.6 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100208-08	1	S7	-1.45	0.0181	2/8/2010@13:24:24			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.45 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.45 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100208-06	1	S6	5.53	0.322	2/8/2010@13:26:14			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			5.53 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			5.53 > 2.50					
Message			CRDL Passed					
Action			Continue					
1202029242|947315|MB	1	1	441	19.3	2/8/2010@13:28:03			
1202029249|LCS	1	2	26.6	1.24	2/8/2010@13:28:57		25.00	
245682001	1	3	-0.713	0.0500	2/8/2010@13:29:50			
245682002	1	4	-0.651	0.0528	2/8/2010@13:30:43			
245682003	1	5	0.833	0.117	2/8/2010@13:31:36			
245682004	1	6	-1.86	-1.22e-4	2/8/2010@13:32:29			
245682005	1	7	-0.452	0.0614	2/8/2010@13:33:21			
245682006	1	8	-0.944	0.0400	2/8/2010@13:34:14			
245682007	1	9	-1.19	0.0293	2/8/2010@13:35:07			
245682008	1	10	6.00	0.343	2/8/2010@13:35:58			
WCN100208-03	1	S3	105	4.68	2/8/2010@13:36:51			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.4 < 10.0					

			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	5.4 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100208-08	1	S7		-1.40	0.0203	2/8/2010@13:38:42			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.40 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.40 > -5.00					
			Message	CCB Passed					
			Action	Continue					
1202029242|947315|MB	1	1		-1.06	0.0348	2/8/2010@13:40:30			
245682009	1	11		-0.822	0.0453	2/8/2010@13:41:23			
245682010	1	12		1.86	0.162	2/8/2010@13:42:15			
245688011	1	13		-0.777	0.0473	2/8/2010@13:43:06			
1202029243||DUP	1	14		-2.01	-0.00640	2/8/2010@13:43:58			
1202029245||MS	1	15		86.6	3.85	2/8/2010@13:44:50			
1202029247||MSD	1	16		78.4	3.50	2/8/2010@13:45:44			
245688012	1	17		0.261	0.0925	2/8/2010@13:46:37			
1202029244||DUP	1	18		0.738	0.113	2/8/2010@13:47:31			
1202029246||MS	1	19		69.2	3.10	2/8/2010@13:48:24			
WCN100208-03	1	S3		105	4.67	2/8/2010@13:49:17			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	5.2 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	5.2 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100208-08	1	S7		-1.92	-0.00263	2/8/2010@13:51:07			CCB
			Known Conc:	0.00					
DQM Test: > + Concentration Limit									
			Result:	-1.92 < 5.00					
			Message	CCB Passed					
			Action	Continue					
DQM Test: < - Concentration Limit									
			Result:	-1.92 > -5.00					
			Message	CCB Passed					
			Action	Continue					
1202029248||MSD	1	20		71.4	3.19	2/8/2010@13:52:56			
245688013	1	21		-1.01	0.0373	2/8/2010@13:53:50			
245688014	1	22		0.338	0.0958	2/8/2010@13:54:42			
245797001	1	23		-0.979	0.0385	2/8/2010@13:55:35			
245797002	1	24		-0.863	0.0435	2/8/2010@13:56:27			
245797003	1	25		-0.309	0.0676	2/8/2010@13:57:20			
245797004	1	26		0.938	0.122	2/8/2010@13:58:12			
245797005	1	27		2.23	0.178	2/8/2010@13:59:04			
245797006	1	28		-0.105	0.0766	2/8/2010@13:59:57			
1202029230|947312|MB	1	29		-1.23	0.0277	2/8/2010@14:00:48			
WCN100208-03	1	S3		105	4.66	2/8/2010@14:01:41			CCV
			Known Conc:	100					
DQM Test: > + Percent Relative Difference									
			Result:	5.1 < 10.0					
			Message	CCV Passed					
			Action	Continue					
DQM Test: < - Percent Relative Difference									
			Result:	5.1 < 10.0					
			Message	CCV Passed					
			Action	Continue					
WCN100208-08	1	S7		-1.86	0.00	2/8/2010@14:03:31			CCB
			Known Conc:	0.00					

DQM Test: > + Concentration Limit						
Result:	-1.86 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	-1.86 > -5.00					
Message	CCB Passed					
Action	Continue					
1202029237||LCS	1	30	28.0	1.30	2/8/2010@14:05:20	25.00
245612007	1	31	-0.913	0.0414	2/8/2010@14:06:13	
1202029231||DUP	1	32	-1.27	0.0256	2/8/2010@14:07:07	
1202029233||MS	1	33	89.8	3.99	2/8/2010@14:08:01	
1202029235||MSD	1	34	85.3	3.80	2/8/2010@14:08:54	
245612008	1	35	-0.535	0.0578	2/8/2010@14:09:48	
1202029232||DUP	1	36	-1.07	0.0347	2/8/2010@14:10:41	
1202029234||MS	1	37	86.4	3.85	2/8/2010@14:11:33	
1202029236||MSD	1	38	84.8	3.78	2/8/2010@14:12:26	
245612009	1	39	-0.656	0.0526	2/8/2010@14:13:19	
WCN100208-03	1	S3	105	4.65	2/8/2010@14:14:12	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:	4.9 < 10.0					
Message	CCV Passed					
Action	Continue					
DQM Test: < - Percent Relative Difference						
Result:	4.9 < 10.0					
Message	CCV Passed					
Action	Continue					
WCN100208-08	1	S7	-1.95	-0.00373	2/8/2010@14:16:04	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:	-1.95 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	-1.95 > -5.00					
Message	CCB Passed					
Action	Continue					
245612010	1	40	-0.280	0.0689	2/8/2010@14:17:52	
245612011	1	41	-1.09	0.0336	2/8/2010@14:18:45	
245612012	1	42	-1.19	0.0295	2/8/2010@14:19:37	
245612013	1	43	1.77	0.158	2/8/2010@14:20:29	
245612014	1	44	-0.868	0.0433	2/8/2010@14:21:22	
245612015	1	45	-0.814	0.0457	2/8/2010@14:22:13	
245612016	1	46	-1.07	0.0344	2/8/2010@14:23:07	
245688001	1	47	0.570	0.106	2/8/2010@14:24:02	
245688002	1	48	-0.480	0.0602	2/8/2010@14:24:55	
245688003	1	49	-0.404	0.0635	2/8/2010@14:25:50	
WCN100208-03	1	S3	105	4.64	2/8/2010@14:26:41	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:	4.6 < 10.0					
Message	CCV Passed					
Action	Continue					
DQM Test: < - Percent Relative Difference						
Result:	4.6 < 10.0					
Message	CCV Passed					
Action	Continue					
WCN100208-08	1	S7	-1.47	0.0172	2/8/2010@14:28:32	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:	-1.47 < 5.00					
Message	CCB Passed					
Action	Continue					
DQM Test: < - Concentration Limit						
Result:	-1.47 > -5.00					
Message	CCB Passed					
Action	Continue					

245688004	1	50	-0.636	0.0534	2/8/2010@14:30:23		
245688005	1	51	-0.336	0.0665	2/8/2010@14:31:15		
245688006	1	52	1.16	0.131	2/8/2010@14:32:08		
245688007	1	53	-0.543	0.0575	2/8/2010@14:33:01		
245688008	1	54	-1.27	0.0259	2/8/2010@14:33:55		
245688009	1	55	-0.570	0.0563	2/8/2010@14:34:47		
245688010	1	56	-0.384	0.0644	2/8/2010@14:35:40		
1202033006|948940|MB	1	85	-1.45	0.0179	2/8/2010@14:36:34		
1202033013|LCS	1	86	51.4	2.32	2/8/2010@14:37:26		
245926001	1	87	14.3	0.704	2/8/2010@14:38:19		
WCN100208-03	1	S3	105	4.67	2/8/2010@14:39:11		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 5.4 < 10.0							
Message CCV Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 5.4 < 10.0							
Message CCV Passed							
Action Continue							
WCN100208-08	1	S7	-1.57	0.0127	2/8/2010@14:41:01		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -1.57 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -1.57 > -5.00							
Message CCB Passed							
Action Continue							
245926002	1	88	13.4	0.665	2/8/2010@14:42:50		
245926003	1	89	1.37	0.141	2/8/2010@14:43:43		
1202033008|DUP	1	90	-1.19	0.0293	2/8/2010@14:44:35		
1202033010|MS	1	91	93.6	4.16	2/8/2010@14:45:29		
1202033012|MSD	1	92	94.0	4.18	2/8/2010@14:46:24		
245926004	1	93	-1.04	0.0356	2/8/2010@14:47:19		
245926005	1	94	-1.86	-1.28e-4	2/8/2010@14:48:12		
245926006	1	95	-1.99	-0.00557	2/8/2010@14:49:06		
245926007	1	96	-1.18	0.0298	2/8/2010@14:50:01		
245939001	1	97	-1.20	0.0290	2/8/2010@14:50:54		
WCN100208-03	1	S3	105	4.66	2/8/2010@14:51:47		CCV
Known Conc: 100							
DQM Test: > + Percent Relative Difference							
Result: 5.0 < 10.0							
Message CCV Passed							
Action Continue							
DQM Test: < - Percent Relative Difference							
Result: 5.0 < 10.0							
Message CCV Passed							
Action Continue							
WCN100208-08	1	S7	-1.83	0.00132	2/8/2010@14:53:37		CCB
Known Conc: 0.00							
DQM Test: > + Concentration Limit							
Result: -1.83 < 5.00							
Message CCB Passed							
Action Continue							
DQM Test: < - Concentration Limit							
Result: -1.83 > -5.00							
Message CCB Passed							
Action Continue							
245939002	1	98	81.1	3.62	2/8/2010@14:55:27		
245953001	1	99	-11.0	-0.399	2/8/2010@14:56:21		
245965001	1	100	257	11.3	2/8/2010@14:57:14		
245975001	1	101	-1.84	9.46e-4	2/8/2010@14:58:06		
245981001	1	102	-1.72	0.00598	2/8/2010@14:59:00		
246000001	1	103	-1.86	2.83e-4	2/8/2010@14:59:52		
246004001	1	104	-2.03	-0.00731	2/8/2010@15:00:45		
1202033007|DUP	1	105	-1.87	-2.30e-4	2/8/2010@15:01:38		

1202033009	MS	1	106	96.2	4.27	2/8/2010@15:02:32			
1202033011	MSD	1	107	94.3	4.19	2/8/2010@15:03:27			
WCN100208-03		1	S3	104	4.63	2/8/2010@15:04:19			CCV
Known Conc:				100					
DQM Test: > + Percent Relative Difference									
Result:				4.5 < 10.0					
Message				CCV Passed					
Action				Continue					
DQM Test: < - Percent Relative Difference									
Result:				4.5 < 10.0					
Message				CCV Passed					
Action				Continue					
WCN100208-08		1	S7	-1.82	0.00202	2/8/2010@15:06:09			CCB
Known Conc:				0.00					
DQM Test: > + Concentration Limit									
Result:				-1.82 < 5.00					
Message				CCB Passed					
Action				Continue					
DQM Test: < - Concentration Limit									
Result:				-1.82 > -5.00					
Message				CCB Passed					
Action				Continue					
245939002		1	98	-1.86	1.33e-4	2/8/2010@15:07:59			
245953001		1	99	-1.90	-0.00162	2/8/2010@15:08:53			
245965001		1	100	-1.86	-1.03e-4	2/8/2010@15:09:46			
246056001		1	108	-1.29	0.0251	2/8/2010@15:10:41			
246056002		1	109	-2.00	-0.00595	2/8/2010@15:11:35			
246056003		1	110	-1.42	0.0194	2/8/2010@15:12:29			
246056004		1	111	-2.00	-0.00588	2/8/2010@15:13:23			
246080001		1	112	-1.45	0.0179	2/8/2010@15:14:17			
1202029252	947318|MB	1	57	-1.86	-1.18e-4	2/8/2010@15:15:10			
1202029259	LCS	1	58	29.0	1.35	2/8/2010@15:16:03	25.00		
WCN100208-03		1	S3	104	4.62	2/8/2010@15:16:55			CCV
Known Conc:				100					
DQM Test: > + Percent Relative Difference									
Result:				4.1 < 10.0					
Message				CCV Passed					
Action				Continue					
DQM Test: < - Percent Relative Difference									
Result:				4.1 < 10.0					
Message				CCV Passed					
Action				Continue					
WCN100208-08		1	S7	-1.49	0.0161	2/8/2010@15:18:45			CCB
Known Conc:				0.00					
DQM Test: > + Concentration Limit									
Result:				-1.49 < 5.00					
Message				CCB Passed					
Action				Continue					
DQM Test: < - Concentration Limit									
Result:				-1.49 > -5.00					
Message				CCB Passed					
Action				Continue					
245797007		1	59	-0.787	0.0468	2/8/2010@15:20:34			
1202029253	DUP	1	60	-0.616	0.0543	2/8/2010@15:21:26			
1202029255	MS	1	61	83.5	3.72	2/8/2010@15:22:20			
1202029257	MSD	1	62	84.4	3.76	2/8/2010@15:23:14			
245797008		1	63	3.82	0.248	2/8/2010@15:24:08			
1202029254	DUP	1	64	1.23	0.135	2/8/2010@15:25:02			
1202029256	MS	1	65	89.1	3.96	2/8/2010@15:25:56			
1202029258	MSD	1	66	78.7	3.51	2/8/2010@15:26:50			
245797009		1	67	-0.647	0.0529	2/8/2010@15:27:43			
245797010		1	68	-0.409	0.0633	2/8/2010@15:28:36			
WCN100208-03		1	S3	105	4.66	2/8/2010@15:29:29			CCV
Known Conc:				100					
DQM Test: > + Percent Relative Difference									
Result:				5.1 < 10.0					
Message				CCV Passed					
Action				Continue					

DQM Test: < - Percent Relative Difference						
Result:		5.1 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100208-08	1	S7	-1.86	2.47e-4	2/8/2010@15:31:18	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.86 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.86 > -5.00				
Message		CCB Passed				
Action		Continue				
245797011	1	69	1.59	0.150	2/8/2010@15:33:08	
245797012	1	70	-0.296	0.0682	2/8/2010@15:34:00	
245797013	1	71	-0.166	0.0739	2/8/2010@15:34:53	
245797014	1	72	5.34	0.314	2/8/2010@15:35:46	
245797015	1	73	0.400	0.0985	2/8/2010@15:36:38	
245797016	1	74	0.789	0.115	2/8/2010@15:37:31	
245797017	1	75	0.157	0.0880	2/8/2010@15:38:23	
245797018	1	76	3.07	0.215	2/8/2010@15:39:17	
245797019	1	77	-0.779	0.0472	2/8/2010@15:40:11	
245806001	1	78	-1.11	0.0326	2/8/2010@15:41:06	
WCN100208-03	1	S3	105	4.65	2/8/2010@15:41:58	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		4.9 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		4.9 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100208-08	1	S7	-1.82	0.00186	2/8/2010@15:43:48	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.82 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-1.82 > -5.00				
Message		CCB Passed				
Action		Continue				
245806002	1	79	0.0705	0.0842	2/8/2010@15:45:38	
245806003	1	80	-0.264	0.0696	2/8/2010@15:46:33	
245806004	1	81	-0.767	0.0477	2/8/2010@15:47:26	
245806005	1	82	-0.805	0.0461	2/8/2010@15:48:19	
245806006	1	83	-0.580	0.0559	2/8/2010@15:49:13	
245806007	1	84	0.973	0.124	2/8/2010@15:50:06	
1202034313|949504|MB	1	113	-1.24	0.0270	2/8/2010@15:51:00	
1202034315|LCS	1	114	107	4.74	2/8/2010@15:51:53	250.00
246078001	1	115	-1.01	0.0370	2/8/2010@15:52:47	
1202034314|DUP	1	116	-1.86	1.40e-4	2/8/2010@15:53:40	
WCN100208-03	1	S3	105	4.67	2/8/2010@15:54:33	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		5.3 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		5.3 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100208-08	1	S7	-1.93	-0.00287	2/8/2010@15:56:23	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-1.93 < 5.00				

		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.93 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246078002	1	117	-0.783	0.0470	2/8/2010@15:58:12			
246078003	1	118	-1.88	-6.47e-4	2/8/2010@15:59:05			
246078004	1	119	17.8	0.856	2/8/2010@15:59:58			
WCN100208-03	1	S3	105	4.64	2/8/2010@16:00:51			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	4.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100208-08	1	S7	-1.52	0.0147	2/8/2010@16:02:41			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.52 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.52 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_2-8-2010_13-14-40.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

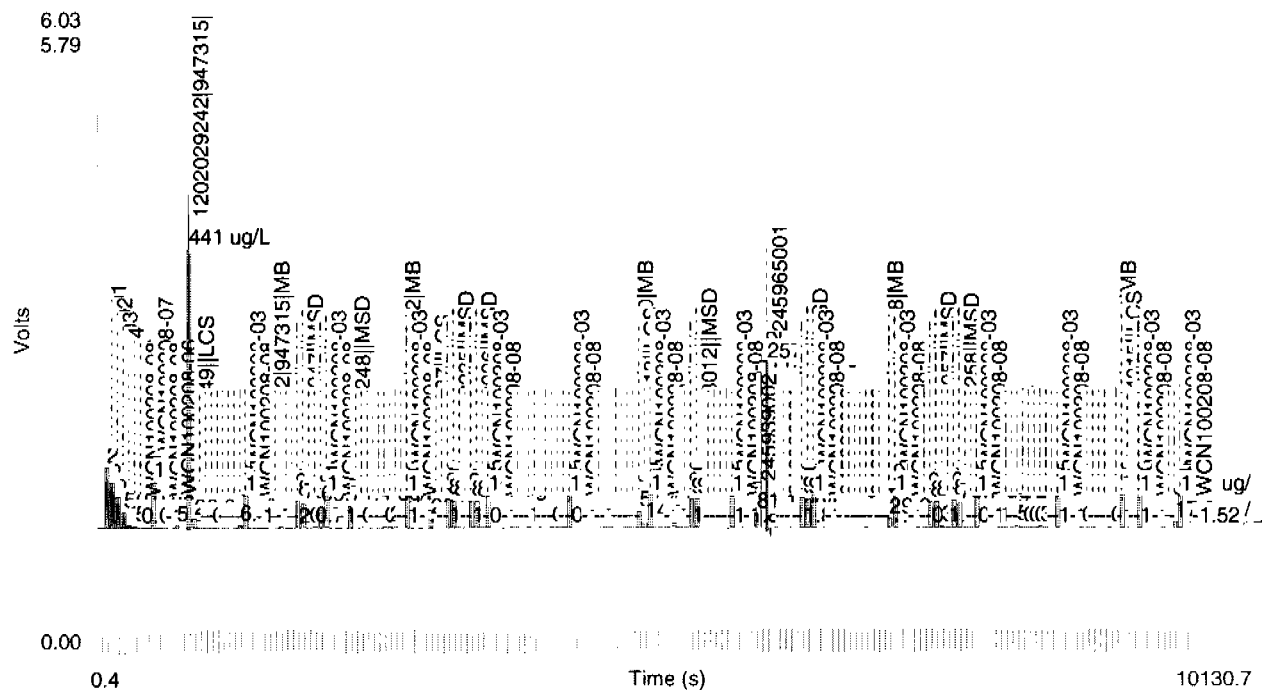
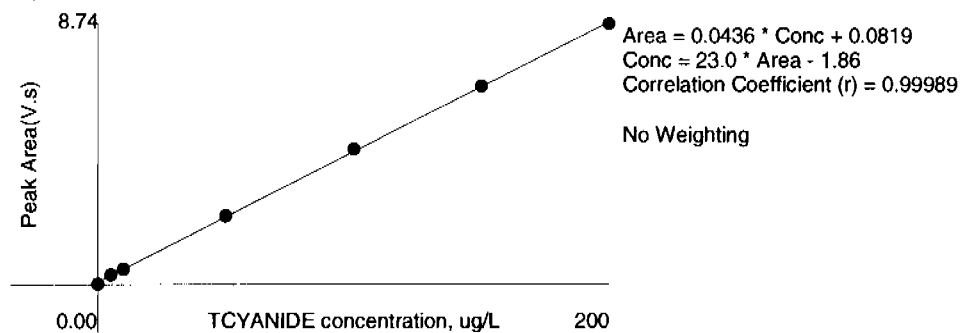


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.74	0.574	0.7	2/8/2010	13:16:28
2	150	1	6.63	0.438	-0.3	2/8/2010	13:17:20
3	100	1	4.52	0.298	-1.8	2/8/2010	13:18:12
4	50.0	1	2.28	0.149	-0.9	2/8/2010	13:19:05
5	10.0	1	0.511	0.0326	1.3	2/8/2010	13:19:59
6	5.00	1	0.321	0.0198	-7.0	2/8/2010	13:20:52
7	0.00	1	0.00906	0.00212		2/8/2010	13:21:47

Figure 1: TCYANIDE



RADIOLOGICAL ANALYSIS

**Radiochemistry Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1514**

Method/Analysis Information

Procedure: **Dry Weight-Percent Moisture**

Analytical Method:

Analytical Batch Number: 948543

Sample ID	Client ID
245979001	RE15-10-7980
245979002	RE15-10-7958
245979003	RE15-10-7960
245979004	RE15-10-7979
245979005	RE15-10-7972
245979006	RE15-10-7957
245979007	RE15-10-7974
245979008	RE15-10-7961
245979009	RE15-10-7971
245979010	RE15-10-7966
245979011	RE15-10-7959
245979012	RE15-10-7969
1202032014	245978008(RE15-10-7975) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 9.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Designated QC

The following sample was used for QC: 245978008 (RE15-10-7975). The QC was from LANL work order

245978.

QC Information

All of the QC samples met the required acceptance limits.

CSU

Not Applicable. The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Additional Comments

Additional comments were not required for this sample set.

Blank Decision Level

Not Applicable. The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Procedure: Dry Weight-Percent Moisture

Analytical Method:

Analytical Batch Number: 948544

Sample ID	Client ID
245979013	RE15-10-8061
245979014	RE15-10-8063
245979015	RE15-10-8062
1202032015	246020013(RE15-10-8061) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 9.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Designated QC

The following sample was used for QC: 246020013 (RE15-10-8061). The QC was from LANL work order 246020.

QC Information

All of the QC samples met the required acceptance limits.

CSU

Not Applicable. The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Additional Comments

Additional comments were not required for this sample set.

Blank Decision Level

Not Applicable. The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	H3
Analytical Method:	GL-RAD-A-002
Analytical Batch Number:	950495

Sample ID	Client ID
245979015	RE15-10-8062
1202036900	Method Blank (MB)
1202036901	245978001(RE15-10-7880) Sample Duplicate (DUP)
1202036902	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 18.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

Designated QC

The following sample was used for QC: 245978001 (RE15-10-7880). The QC was from LANL work order 245978.

QC Information

All of the QC samples met the required acceptance limits.

CSU

The blank result is less than 1.65 times the CSU.

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

Data Exception (DER) Documentation

Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Additional Comments

Additional comments were not required for this sample set.

Blank Decision Level

The blank result is less than the decision level.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date: _____

 7/24/10

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report for

LANL010 Los Alamos National Laboratory (72733-001-09)

Client SDG: 10-1514 GEL Work Order: 245979

The Qualifiers in this report are defined as follows:

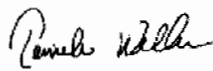
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by



GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 23, 2010

Client Sample ID: RE15-10-8062
Sample ID: 245979015
Matrix: R
Collect Date: 27-JAN-10
Receive Date: 02-FEB-10
Collector: Client
Moisture: 9.48%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Gravimetric Solids												
<i>"As Received"</i>												
Rad Liquid Scintillation Analysis												
<i>H3 "As Received"</i>												
Tritium		7980	195	+/-571	250	pCi/L		KXK2	02/14/10	0913	950495	2

The following Analytical Methods were performed

Method	Description
--------	-------------

- | | |
|---|------------------------|
| 1 | ASTM D 2216 (Modified) |
| 2 | GL-RAD-A-002 |

Notes:

TPU is calculated at the 67% confidence level (1-sigma).

The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
 - BD Results are either below the MDC or tracer recovery is low
 - C Analyte has been confirmed by GC/MS analysis
 - D Results are reported from a diluted aliquot of the sample
 - E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
 - E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
 - E Organics--Concentration of the target analyte exceeds the instrument calibration range
 - F Estimated Value
 - H Analytical holding time was exceeded
 - J Value is estimated
 - M M if above MDC and less than LLD
 - M Matrix Related Failure
 - N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC).
- Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 23, 2010

Client Sample ID: RE15-10-8062
Sample ID: 245979015
Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time Batch	Mtd.
-----------	-----------	--------	----	-----	----	-------	----	---------	------	------------	------

NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

R Sample results are rejected

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Client : Los Alamos National Laboratory
PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm
Los Alamos, New Mexico
Contact: Ms. Joylene Valdez
Workorder: 245979

Report Date: February 23, 2010
Page 1 of 2

Parname	NOM	Sample	Qual	QC	Units	RER	REC %	Range	Anlst	Date	Time
Rad Liquid Scintillation											
Batch	950495										
QC1202036901	245978001	DUP									
Tritium		202	U	188	pCi/L	0.0556		(0-1)	KXK2	02/14/10	12:30
		TPU:	+/-61.7	+/-62.1							
QC1202036902	LCS										
Tritium	5560			5590	pCi/L		100	(75%-125%)		02/14/10	14:07
		TPU:		+/-474							
QC1202036900	MB										
Tritium		U		-27.8	pCi/L					02/14/10	10:51
		TPU:		+/-56.5							

Notes:

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- M Matrix Related Failure
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 245979

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

** Indicates analyte is a surrogate compound.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev10

Batch#

950495

Product:

Tritium

Date:

2/23/10

Criteria:	Yes	No	Comments
Sample Solids are less than or equal to 100 mg for GAB.			NA
Samples have been blank corrected (if required)			NA
If activity less 10* MDA/ MDC, error is 150% or less of sample activity. If greater 10* MDA/ MDC, error is 40% or less. If below the MDA/ MDC, error is okay.	✓		
Instrument source check is within limits.	✓		
Instrument bkg check is within limits.	✓		
Method RDL/ LLD has been met.	✓		
If duplicate activities are less 5* MDA/ MDC, then RPD is 100% or less. If greater 5* MDA/ MDC, then RPD 20% or less. If below the MDA/ MDC, the RPD is 0%.	✓		
Or meets the client's required RER acceptance criteria.			
Tracer yield is 15-125% . Carrier yield 25-125%.			NA
Or meets the client's contract acceptance criteria.			
Method blank is less than the RDL/ LLD.	✓		
(If rad samples. < 5% of lowest activity)	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms.	✓		
All line outs initialed and dated.	✓		
No transcription errors are apparent.			NA
Aux data is correct.			NA
Client Special requirements page has been checked.	✓		
Raw Data and/ or spectrum are included and properly statused.	✓		
QC data entered into QC database and batch is in REVW	✓		
Hit notification complete (if necessary)			NA
Batch entered into Case Narrative.	✓		
Batch Data Exception Reports (DER) completed, if applicable.			NA
Batch Data Exception Reports (DER) second reviewed and disposition verified to be completed.			NA
Aliquot Correction completed if required.			NA
Review sample historical results if available (If REMP, results above MDC have been verified by historical results, recount or re-analysis.)	✓		

GEL Laboratories, LLC

RADchecklistrev10, revised 1/13/2010

Primary Review Performed By:

Dipindsey Pave

Secondary Review Performed By:

Lanch 2/23/10

LANL 3/8/10

Tritium Que Sheet

08-FEB-10

Batch #: 950495 Analyst: KKK2 First Client Due Date 02-MAR-10 Internal Due Date: 19-FEB-10
 Spike Isotope: Hydrogen-3 Spike Code: Expiration Date: Vol:
 LCS Isotope: Hydrogen-3 LCS Code: 0134-K Expiration Date: 3/27/10 Vol: 0.1

Prep Date: 2/11/10 Initials: YK Pipet ID: 2910968 Witness: Aw 2/11/10

Sample ID	Client Samp ID	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date	Aliquot In vial (mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (mL)	Final Wt (g)	Dist Vol (mL)
245978001-1	RE15-10-7880	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-2	1		422.57	390.88	31.69
245978002-1	RE15-10-7891	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-3	2		246.33	187.28	64.05
245978003-1	RE15-10-7892	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-4	3		414.38	385.79	28.59
245978004-1	RE15-10-7967	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-5	4		291.16	220.99	70.17
245978005-1	RE15-10-7976	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-6	5		403.66	389.13	14.53
245978006-1	RE15-10-7968	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-7	6		403.61	360.42	43.19
245978007-1	RE15-10-7965	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-8	7		386.60	300.77	85.83
245978008-1	RE15-10-7975	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-9	8		286.44	213.46	73.04
245978009-1	RE15-10-7978	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-10	9		286.62	238.18	48.44
245978010-1	RE15-10-7978	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-11	10		500.79	460.73	40.06
245978011-1	RE15-10-7964	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	34-12	11		417.47	373.22	44.25
245978012-1	RE15-10-7973	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	20-1	12		317.50	259.08	58.42
245978013-1	RE15-10-7962	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	20-2	13		305.60	289.46	16.20
245978014-1	RE15-10-7963	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	20-3	14		234.25	185.76	48.49
245978015-1	RE15-10-7977	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	20-4	15		290.64	185.43	105.21
245979015-1	RE15-10-8062	SAMPLE		.25 pCi/mL SOIL	LANL010		27-JAN-10	10	20-5	16		426.90	386.77	40.13
1202036900-1	MB for batch 950495	MB		.25 pCi/mL SOIL	QC ACCOUNT			10	20-6	17		20.00	0	20.00
1202036901-1	RE15-10-8062	DUP		.25 pCi/mL SOIL	QC ACCOUNT		27-JAN-10	10	20-7	18		422.57	390.88	31.69
1202036902-1	RE15-10-8062	LCS		.25 pCi/mL SOIL	QC ACCOUNT			10	20-8	19		20.00	0	20.00

Bkg Rack #: 34-1

Comments:

Bkg prepared with dead water? Yes/No

Instrument Used (circle as appropriate): LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4140127, LS6000 (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299, Purple 7069123, Silver 7060656, Orange DG06095168

Calibration Used: Ecosoft Ultra 110 mL Sample/13 mL Ecosoft Ultra
 Data Reviewed By: Supriya Patel 2/23/10

GEL Laboratories LLC, Radiochemistry Division

Page 1 of 1

DATE	2/8/2010	INITIALS	KXK2	BATCH NUMBER	950495	
Sample #	Sample Wet (g)	% Moisture of Sample (Balance Interface using % Moisture Batch)	Total Moisture in Sample (mL)	Sample Dry (g)	mLS aliquoted into LSC vial	Collection Tube Number
245978001	422.57	0.075	31.69	390.88	10	
245978002	246.33	0.260	64.05	182.28	10	
245978003	414.38	0.069	28.59	385.79	10	
245978004	291.16	0.241	70.17	220.99	10	
245978005	403.66	0.036	14.53	389.13	10	
245978006	403.61	0.107	43.19	360.42	10	
245978007	386.60	0.222	85.83	300.77	10	
245978008	286.44	0.255	73.04	213.40	10	
245978009	286.62	0.169	48.44	238.18	10	
245978010	500.79	0.081	40.56	460.23	10	
245978011	417.47	0.106	44.25	373.22	10	
245978012	317.50	0.184	58.42	259.08	10	
245978013	305.60	0.053	16.20	289.40	10	
245978014	234.25	0.207	48.49	185.76	10	
245978015	290.64	0.362	105.21	185.43	10	
245979015	426.90	0.094	40.13	386.77	10	
MB	20.00	1.000	20.00	0.00	10	
DUP	422.57	0.075	31.69	390.88	10	
LCS	20.00	1.000	20.00	0.00	10	

T850495

Tritium Solid

Filename : H3VAC.XLS
File type : Excel
Version # : 1.2.6

Spike S/N :
Spike Exp Date :
Spike Activity (dpm/ml):
Spike Volume Added:

LCS S/N :
LCS Exp Date :
LCS Activity (dpm/ml):
LCS Volume Added:

Batch : 950495
Analyst : KXK2
Prep Date : 2/11/2010

H-3 Abundance : 1
Method Uncertainty : 0.0691
Geometry: 10mL DW/13mL
Eosclint Ultra

Procedure Code : LSC_VH3S
Paramname : Tritium
Required MDC : 250 pCi/L
Half-life of Tritium : 12.32 years

Pipet, 0.1 ml Stdev : +/-
Pipet, 0.5 ml Stdev : +/-
Pipet, 1.0 ml Stdev : +/-
Pipet, 5.0 ml Stdev : +/-

Sample Characteristics												
Pos.	Sample ID	Wet Sample Weight (g)	Total Moisture L	Sample Aliquot in Vial L	Sample Aliquot Stdev. L	Dry Sample Weight (g)	% Moisture of Sample	Rig number	Sample Date/Time			
1	245978001.1	422.57	0.0317	0.0100	2.5729E-05	390.88	7.50%	1	1/27/2010 12:00			
2	245978002.1	246.33	0.0641	0.0100	2.5729E-05	182.28	26.00%	2	1/27/2010 12:00			
3	245978003.1	414.38	0.0286	0.0100	2.5729E-05	385.79	6.90%	3	1/27/2010 12:00			
4	245978004.1	291.16	0.0702	0.0100	2.5729E-05	220.99	24.10%	4	1/27/2010 12:00			
5	245978005.1	403.66	0.0145	0.0100	2.5729E-05	389.13	3.60%	5	1/27/2010 12:00			
6	245978006.1	403.61	0.0432	0.0100	2.5729E-05	360.42	10.70%	6	1/27/2010 12:00			
7	245978007.1	396.60	0.0856	0.0100	2.5729E-05	300.77	22.20%	7	1/27/2010 12:00			
8	245978008.1	286.44	0.0730	0.0100	2.5729E-05	213.40	25.50%	8	1/27/2010 12:00			
9	245978009.1	286.62	0.0484	0.0100	2.5729E-05	238.18	16.90%	9	1/27/2010 12:00			
10	245978010.1	500.78	0.0406	0.0100	2.5729E-05	460.23	8.10%	10	1/27/2010 12:00			
11	245978011.1	417.47	0.0443	0.0100	2.5729E-05	373.22	10.60%	11	1/27/2010 12:00			
12	245978012.1	317.50	0.0584	0.0100	2.5729E-05	259.08	18.40%	12	1/27/2010 12:00			
13	245978013.1	305.60	0.0162	0.0100	2.5729E-05	289.40	5.30%	13	1/27/2010 12:00			
14	245978014.1	234.25	0.0485	0.0100	2.5729E-05	185.76	20.70%	14	1/27/2010 12:00			
15	245978015.1	290.64	0.1052	0.0100	2.5729E-05	185.43	36.20%	15	1/27/2010 12:00			
16	245978015.1	426.90	0.0401	0.0100	2.5729E-05	386.77	9.40%	16	1/27/2010 12:00			
17	1202036900.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	17	2/11/2010 0:00			
18	1202036901.1	422.57	0.0317	0.0100	2.5729E-05	390.88	7.50%	1	1/27/2010 12:00			
19	1202036902.1	20.00	0.0200	0.0100	2.5729E-05	0.00	100.00%	18	2/11/2010 0:00			

Count raw Data			Background				Counting		Count			Calibration Data			Detector		Backgrounds	
Pos.	Rack Position #	Counting Time (min.)	Quench#	Gross cpm	cpm	Count Time (min.)	Count Start Date/Time	Sample Decay	Counted on	Calibration Date	Calibration Due Date	Detector Efficiency (cpm/dpm)	Detector Efficiency Error (cpm/dpm)	Rack Position #	Count Start Date/Time			
1	34-2	95	125.3	6.99	5.76	95	2/13/2010 7:13	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2752	0.00792	34-1	2/13/2010 5:34			
2	34-3	95	125.8	136.28	5.76	95	2/13/2010 8:51	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2743	0.00792	34-1	2/13/2010 5:34			
3	34-4	95	126	28.16	5.76	95	2/13/2010 11:55	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2739	0.00792	34-1	2/13/2010 5:34			
4	34-5	95	125	470.27	5.76	95	2/13/2010 13:33	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2757	0.00792	34-1	2/13/2010 5:34			
5	34-6	95	126.3	53.72	5.76	95	2/13/2010 15:12	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2734	0.00792	34-1	2/13/2010 5:34			
6	34-7	95	125.5	434.96	5.76	95	2/13/2010 16:50	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2748	0.00792	34-1	2/13/2010 5:34			
7	34-8	95	124.7	44.14	5.76	95	2/13/2010 18:29	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2763	0.00792	34-1	2/13/2010 5:34			
8	34-9	95	125.8	12.21	5.76	95	2/13/2010 20:07	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2743	0.00792	34-1	2/13/2010 5:34			
9	34-10	95	126.3	6.69	5.76	95	2/13/2010 21:45	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2734	0.00792	34-1	2/13/2010 5:34			
10	34-11	95	125.9	37.97	5.76	95	2/13/2010 23:24	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2741	0.00792	34-1	2/13/2010 5:34			
11	34-12	95	127	9.35	5.76	95	2/14/2010 1:02	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2721	0.00792	34-1	2/13/2010 5:34			
12	20-1	95	125.1	12.33	5.76	95	2/14/2010 2:40	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2756	0.00792	34-1	2/13/2010 5:34			
13	20-2	95	128.2	68.75	5.78	95	2/14/2010 4:19	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2736	0.00792	34-1	2/13/2010 5:34			
14	20-3	95	126	14.09	5.76	95	2/14/2010 5:57	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2739	0.00792	34-1	2/13/2010 5:34			
15	20-4	95	126.4	7.56	5.76	95	2/14/2010 7:35	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2732	0.00792	34-1	2/13/2010 5:34			
16	20-5	95	126.4	54	5.78	95	2/14/2010 9:13	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2732	0.00792	34-1	2/13/2010 5:34			
17	20-6	95	125.1	5.59	5.76	95	2/14/2010 10:51	0.999	LSCSILVER	8/21/2009	8/31/2010	0.2756	0.00792	34-1	2/13/2010 5:34			
18	20-7	95	127.4	6.89	5.76	95	2/14/2010 12:30	0.997	LSCSILVER	8/21/2009	8/31/2010	0.2714	0.00792	34-1	2/13/2010 5:34			
19	26-1	15	125.9	39.73	5.76	95	2/14/2010 14:07	0.999	LSCSILVER	8/21/2009	8/31/2010	0.2741	0.00792	34-1	2/13/2010 5:34			

Notes:

- 1 - Results are decay corrected to Sample Date/Time
- 2 - Reference date for Spike Activity (dpm/ml) is the batch Prep Date
- 3 - Spike Nominals are decay corrected to Sample Date/Time

Results		Decision		Critical		Required		Sample Act.		Net Count		Net Count		Rate Error		1 SIGMA		1 SIGMA		Total Prop.		Sample		Sample		Nominal		Recovery	
Pos.	pCi/L	Level	pCi/L	Level	pCi/L	MDC	pCi/L	Conc.	pCi/L	Rate	CPM	Rate	CPM	CPM	CPM	Counting	Uncertainty	Counting	Uncertainty	pCi/L	pCi/L	QC	Type	RPD	RER	pCi/L	pCi/L		
1	133.1468	94.0028	250	193.1877	201.8439	0.288	0.013	1.230	0.366	60.1179	61.7397	1.230	0.366	60.1179	61.7397	1.230	0.366	60.1179	61.7397	1.230	0.366	60.1179	SAMPLE						
2	133.5859	94.3128	250	193.8248	21499.0659	0.013	0.013	130.520	1.223	201.3186	1510.1385	130.520	1.223	201.3186	1510.1385	201.3186	1510.1385	201.3186	1510.1385	201.3186	1510.1385	201.3186	SAMPLE						
3	133.7650	94.4392	250	194.0647	3692.9222	0.028	0.028	22.400	0.598	98.5118	275.4231	22.400	0.598	98.5118	275.4231	98.5118	275.4231	98.5118	275.4231	98.5118	275.4231	98.5118	SAMPLE						
4	132.8920	93.8229	250	192.8180	78080.5538	0.010	0.010	464.510	2.238	366.6350	5311.4903	464.510	2.238	366.6350	5311.4903	366.6350	5311.4903	366.6350	5311.4903	366.6350	5311.4903	366.6350	SAMPLE						
5	134.0341	94.6292	250	194.4750	7922.7139	0.019	0.019	47.960	0.791	130.7129	567.0680	47.960	0.791	130.7129	567.0680	130.7129	567.0680	130.7129	567.0680	130.7129	567.0680	130.7129	SAMPLE						
6	133.3295	94.1318	250	193.4528	70528.6671	0.010	0.010	429.200	2.154	353.9367	4924.8809	429.200	2.154	353.9367	4924.8809	353.9367	4924.8809	353.9367	4924.8809	353.9367	4924.8809	353.9367	SAMPLE						
7	132.6378	93.8434	250	192.4492	6274.1079	0.021	0.021	38.390	0.725	118.4774	452.7526	38.390	0.725	118.4774	452.7526	118.4774	452.7526	118.4774	452.7526	118.4774	452.7526	118.4774	SAMPLE						
8	133.5956	94.3198	250	193.8388	1062.0168	0.068	0.068	6.450	0.435	71.5117	102.9530	6.450	0.435	71.5117	102.9530	71.5117	102.9530	71.5117	102.9530	71.5117	102.9530	71.5117	SAMPLE						
9	134.0397	94.6332	250	194.4832	153.6371	0.369	0.369	0.930	0.362	59.8048	60.7545	0.930	0.362	59.8048	60.7545	59.8048	60.7545	59.8048	60.7545	59.8048	60.7545	59.8048	SAMPLE						
10	133.8865	94.3838	250	193.9708	5307.1085	0.023	0.023	32.210	0.678	111.7880	386.1614	32.210	0.678	111.7880	386.1614	111.7880	386.1614	111.7880	386.1614	111.7880	386.1614	111.7880	SAMPLE						
11	134.6709	95.0788	250	195.3990	595.8648	0.111	0.111	3.590	0.399	66.1948	78.1284	3.590	0.399	66.1948	78.1284	66.1948	78.1284	66.1948	78.1284	66.1948	78.1284	66.1948	SAMPLE						
12	132.9898	93.8918	250	192.9599	1076.8899	0.067	0.067	6.570	0.436	71.5246	103.6396	6.570	0.436	71.5246	103.6396	71.5246	103.6396	71.5246	103.6396	71.5246	103.6396	71.5246	SAMPLE						
13	133.9564	94.5744	250	194.3824	10399.5529	0.017	0.017	62.990	0.896	146.2139	736.9136	62.990	0.896	146.2139	736.9136	146.2139	736.9136	146.2139	736.9136	146.2139	736.9136	146.2139	SAMPLE						
14	133.7805	94.4502	250	194.1071	1373.4644	0.056	0.056	8.330	0.457	75.3687	121.7824	8.330	0.457	75.3687	121.7824	75.3687	121.7824	75.3687	121.7824	75.3687	121.7824	75.3687	SAMPLE						
15	134.1373	94.7021	250	194.6249	297.5786	0.208	0.208	1.800	0.374	61.9041	65.2815	1.800	0.374	61.9041	65.2815	61.9041	65.2815	61.9041	65.2815	61.9041	65.2815	61.9041	SAMPLE						
16	134.1387	94.7031	250	194.6269	7975.1913	0.019	0.019	48.240	0.793	131.1225	570.7191	48.240	0.793	131.1225	570.7191	131.1225	570.7191	131.1225	570.7191	131.1225	570.7191	131.1225	SAMPLE						
17	132.7000	93.6874	250	192.5385	-27.8035	2.033	2.033	-0.170	0.346	56.5310	56.5311	-0.170	0.346	56.5310	56.5311	56.5310	56.5311	56.5310	56.5311	56.5310	56.5311	56.5310	MB						
18	135.0443	95.3424	250	195.9409	186.0784	0.323	0.323	1.130	0.365	60.7351	62.1316	1.130	0.365	60.7351	62.1316	60.7351	62.1316	60.7351	62.1316	60.7351	62.1316	60.7351	DUP	7.1%	0.0556	5559.0122	5559.0122	100.5%	
19	255.4421	180.3443	250	393.5712	5585.1125	0.049	0.049	33.970	1.646	270.6231	473.8665	33.970	1.646	270.6231	473.8665	270.6231	473.8665	270.6231	473.8665	270.6231	473.8665	270.6231	LCS						

PAGE: 1

ID:TRITIUM

13 FEB 2010 05:27

USER: 4

COMMENT:SILVER

PRESET TIME : 95.00

DATA CALC : CPM H# :YES SAMPLE REPEATS: 1 PRINTER : STD
COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 :EDIT
TWO PHASE : NO AQC : NO CYCLE REPEATS : 1 DISK : OFF
SCINTILLATOR: LIQUID LUMEX:YES LOW SAMPLE REJ: 0
LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

CHAN: 20.0 - 280.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 1000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1		WIND2		LUMEX %	ELAPSED TIME
				CPM	%ERROR	CPM	%ERROR		
1	34-1	95.00	125.6	5.76	9.21	45.35	3.08	2.08	97.95
2	34-2	95.00	125.3	6.99	8.19	46.34	3.04	1.79	196.52
3	34-3	95.00	125.8	136.28	1.76	182.23	1.52	0.45	294.97
4	34-4	9.42	125.2	29.84	12.12	69.13	7.89	1.54	305.64
5	34-5	SAMPLE TERMINATED:							
6	34-6	SAMPLE TERMINATED:							
7	34-7	SAMPLE TERMINATED:							
8	34-8	SAMPLE TERMINATED:							
9	34-9	SAMPLE TERMINATED:							
10	34-10	SAMPLE TERMINATED:							
11	34-11	SAMPLE TERMINATED:							
12	34-12	SAMPLE TERMINATED:							

QP

INSTRUMENT CALIBRATION: Maxi 13 FEB 2010 10:36
Calibration successful

QP

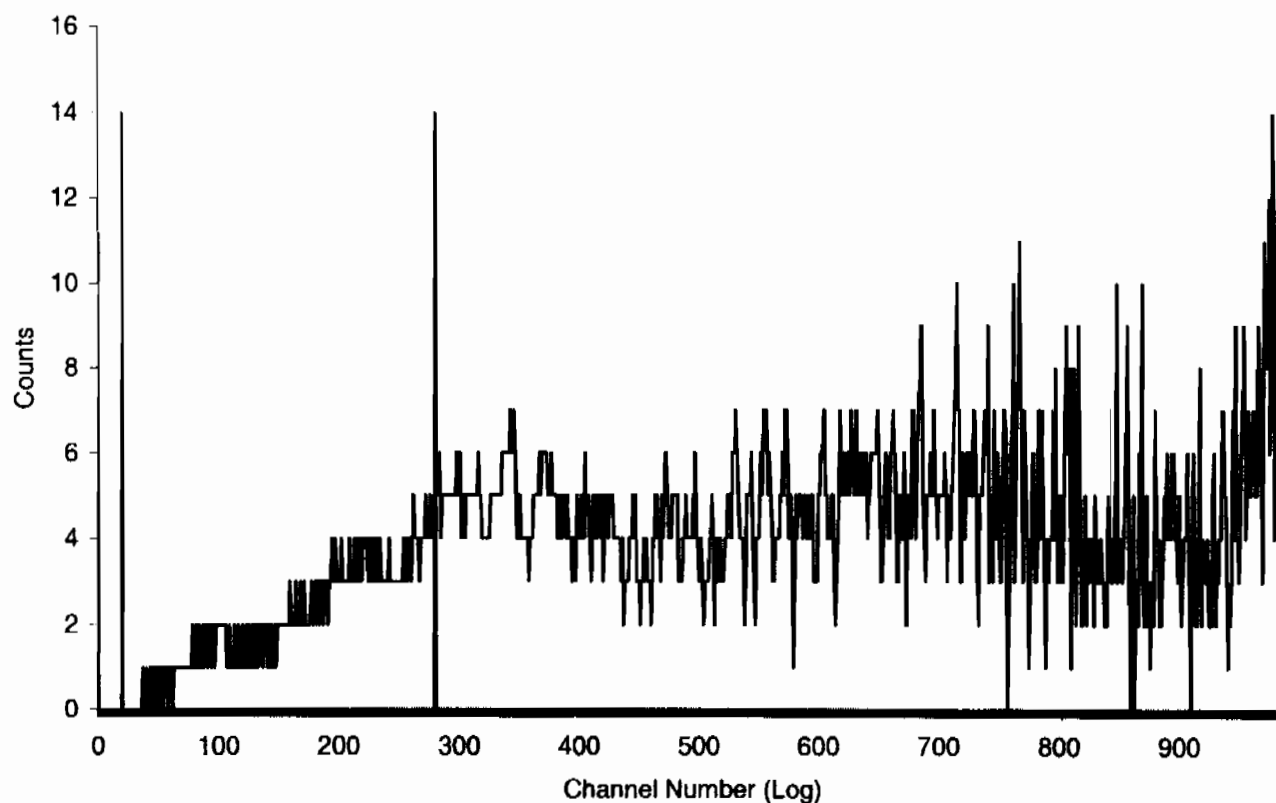
Calibrating Auto DPM
Counting Standard for 14C
Calibration Complete: 14C
Counting Standard for 3H
Calibration Complete: 3H
Calibration Successful

QPQP

Sample Count Start Time:	13 Feb 2010 05:34:56		
Data Capture Date	13 Feb 2010 07:10:17		
User Filename	S04021334-1A.XLS		
	U04021334-1A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	1	34-1	95.00
H#, Total Counts:	125.6	4308	
Win1: Tritium - Start, End, Counts:	20	280	547
Win2: - Start, End, Counts:	0	990	3938

SPECTRUM PLOT

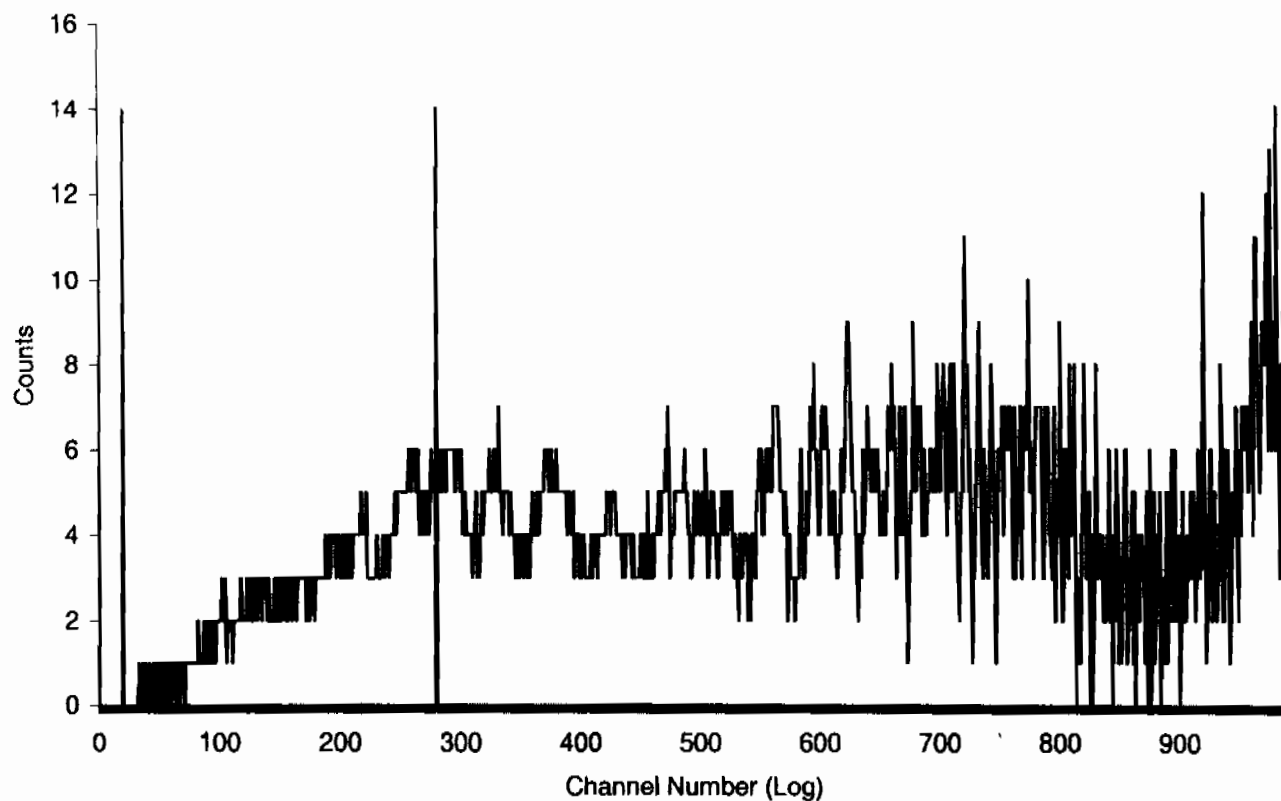
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 07:13:30		
Data Capture Date	13 Feb 2010 08:48:43		
User Filename	S04021334-2A.XLS		
	U04021334-1A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	2	34-2	95.00
H#, Total Counts:	125.3	4402	
Win1: Tritium - Start, End, Counts:	20	280	664
Win2: - Start, End, Counts:	0	990	4023

SPECTRUM PLOT

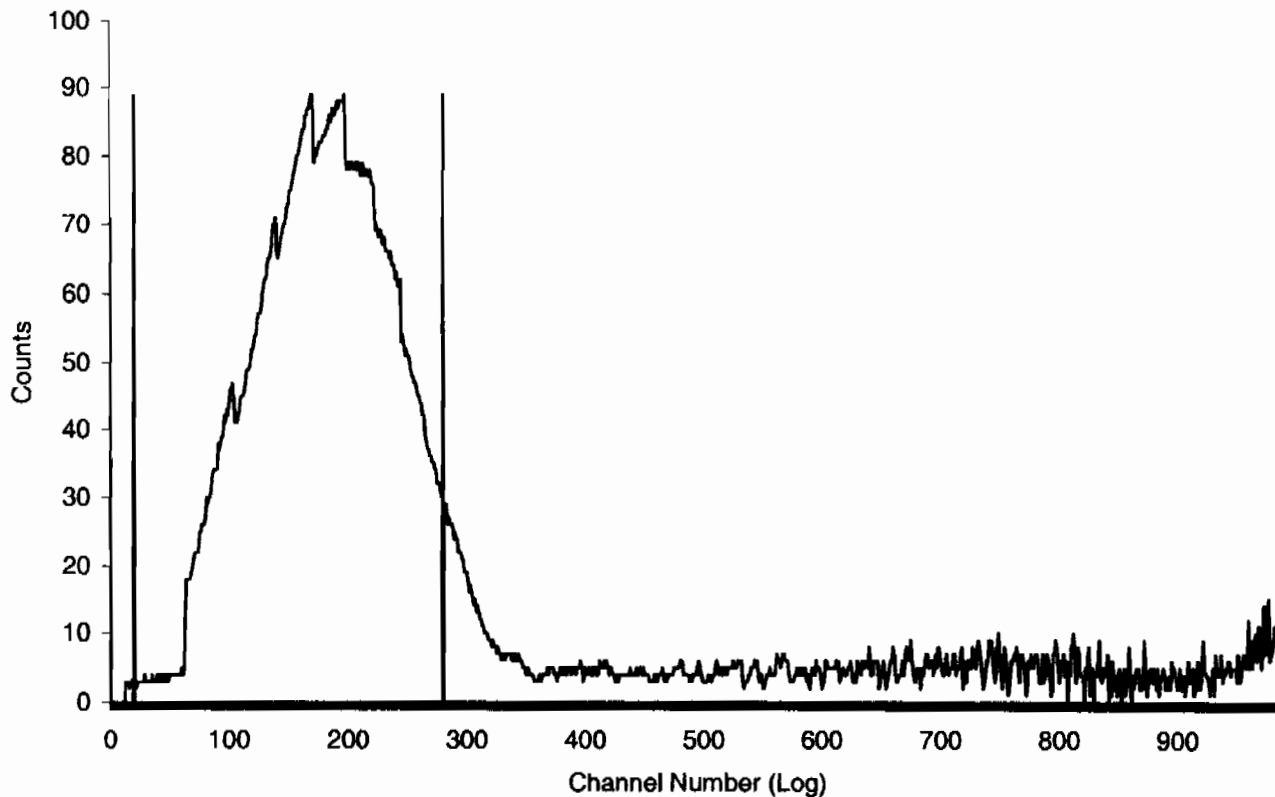
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 08:51:57		
Data Capture Date	13 Feb 2010 10:27:10		
User Filename	S04021334-3A.XLS		
	U04021334-1A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	3	34-3	95.00
H#, Total Counts:	125.8	17312	
Win1: Tritium - Start, End, Counts:	20	280	12947
Win2: - Start, End, Counts:	0	990	16954

SPECTRUM PLOT

USER 04 - TRITIUM



ID:TRITIUM

13 FEB 2010 11:48

USER: 4

COMMENT:SILVER

PRESET TIME : 95.00

DATA CALC : CPM H# :YES SAMPLE REPEATS: 1 PRINTER : STD

COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 :EDIT

TWO PHASE : NO AQC : NO CYCLE REPEATS : 1 DISK : OFF

SCINTILLATOR: LIQUID LUMEX:YES LOW SAMPLE REJ: 0

LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

CHAN: 20.0 - 280.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

CHAN: 0.0 - 1000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1		WIND2		LUMEX %	ELAPSED TIME
				CPM	%ERROR	CPM	%ERROR		

MISSING SAMPLE

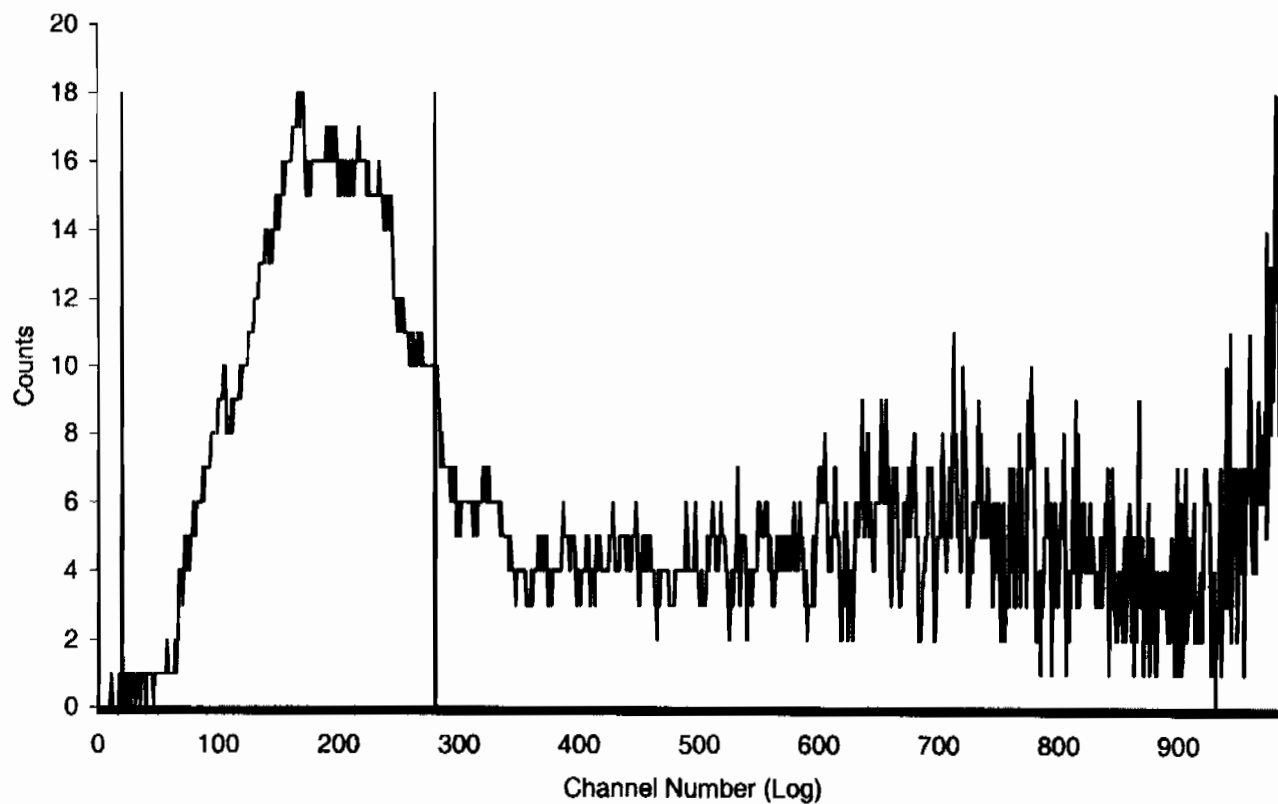
4	34-4	95.00	126.0	28.16	3.92	68.35	2.50	1.26	97.96
5	34-5	95.00	125.0	470.27	0.95	530.00	0.89	0.14	196.37
6	34-6	95.00	126.3	53.72	2.82	95.65	2.11	0.77	294.82
7	34-7	95.00	125.5	434.96	0.98	494.63	0.92	0.14	393.20
8	34-8	95.00	124.7	44.14	3.12	85.91	2.23	1.13	491.70
9	34-9	95.00	125.8	12.21	6.14	52.49	2.86	2.21	590.26
10	34-10	95.00	126.3	6.69	8.25	45.66	3.06	1.29	688.58
11	34-11	95.00	125.9	37.97	3.35	78.22	2.33	0.72	786.91
12	34-12	95.00	127.0	9.35	6.88	48.28	2.97	1.07	885.22
13	20-1	95.00	125.1	12.33	5.93	51.44	2.87	0.77	983.53
14	20-2	95.00	126.2	68.75	2.48	110.01	1.96	0.37	1081.78
15	20-3	95.00	126.0	14.09	5.53	53.78	2.81	0.69	1179.98
16	20-4	95.00	126.4	7.56	7.62	46.19	3.03	0.74	1278.17
17	20-5	95.00	126.4	54.00	2.80	95.98	2.10	0.38	1376.39
18	20-6	95.00	125.1	5.59	8.90	44.72	3.08	0.70	1474.57
19	20-7	95.00	127.4	6.89	8.02	46.04	3.04	0.87	1572.79

QPQP

Sample Count Start Time:	13 Feb 2010 11:55:16		
Data Capture Date	13 Feb 2010 13:30:42		
User Filename	S04021334-4B.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	4	34-4	95.00
H#, Total Counts:	126.0	6493	
Win1: Tritium - Start, End, Counts:	20	280	2675
Win2: - Start, End, Counts:	0	990	6133

SPECTRUM PLOT

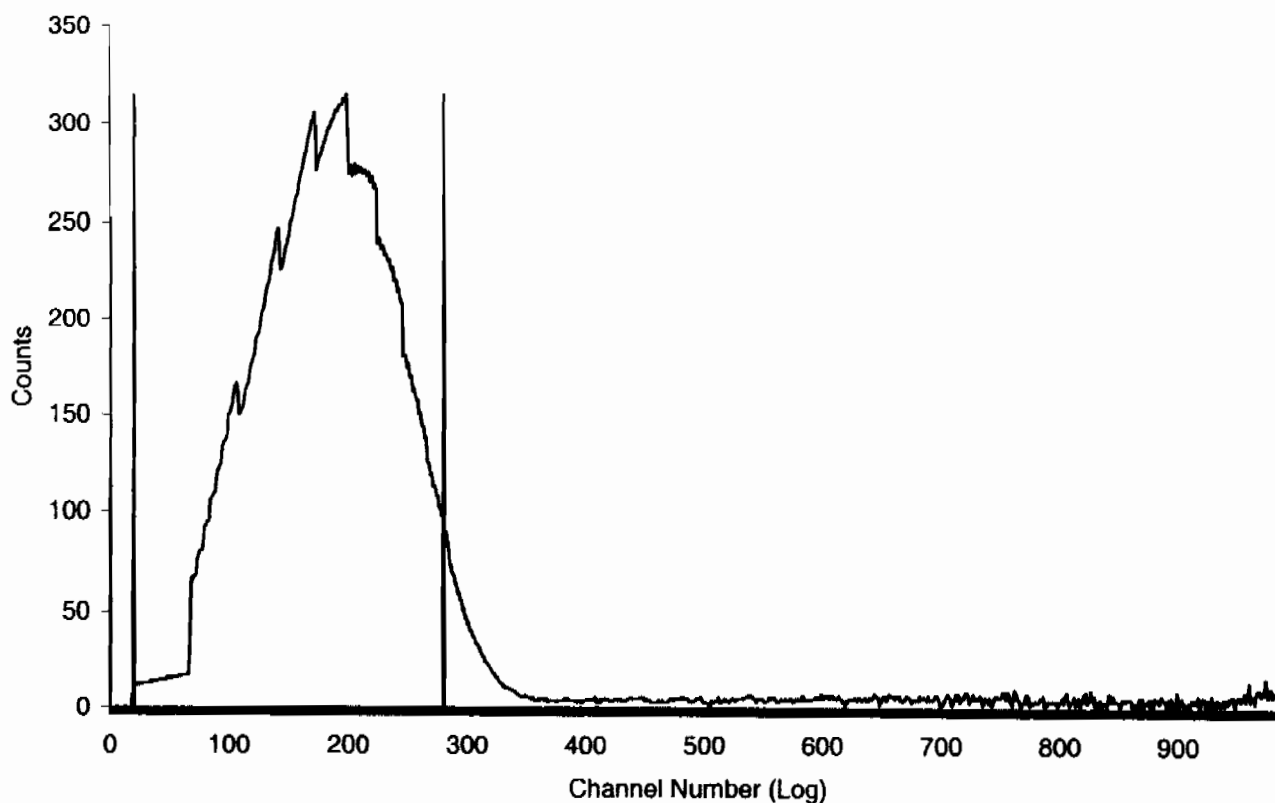
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 13:33:40		
Data Capture Date	13 Feb 2010 15:09:07		
User Filename	S04021334-5A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	5	34-5	95.00
H#, Total Counts:	125.0	50350	
Win1: Tritium - Start, End, Counts:	20	280	44676
Win2: - Start, End, Counts:	0	990	50004

SPECTRUM PLOT

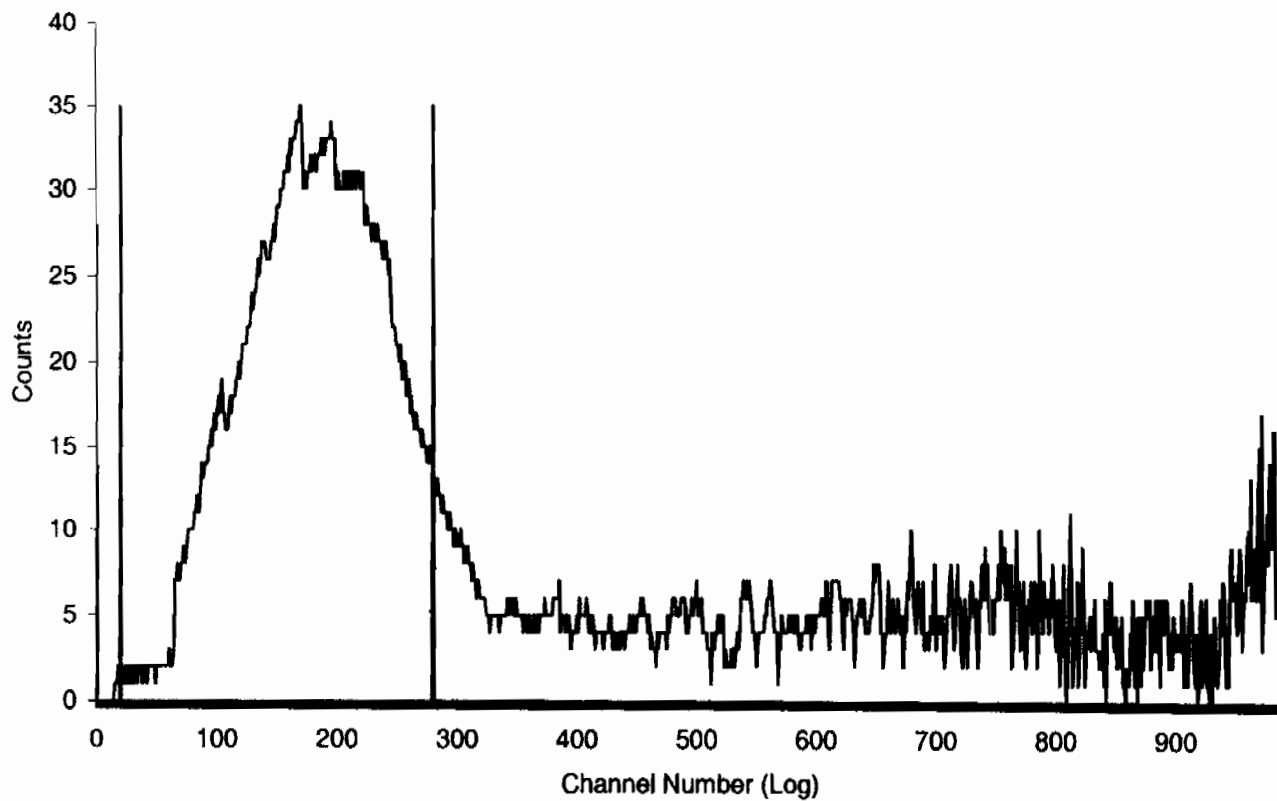
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 15:12:07		
Data Capture Date	13 Feb 2010 16:47:33		
User Filename	S04021334-6A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	6	34-6	95.00
H#, Total Counts:	126.3	9087	
Win1: Tritium - Start, End, Counts:	20	280	5103
Win2: - Start, End, Counts:	0	990	8756

SPECTRUM PLOT

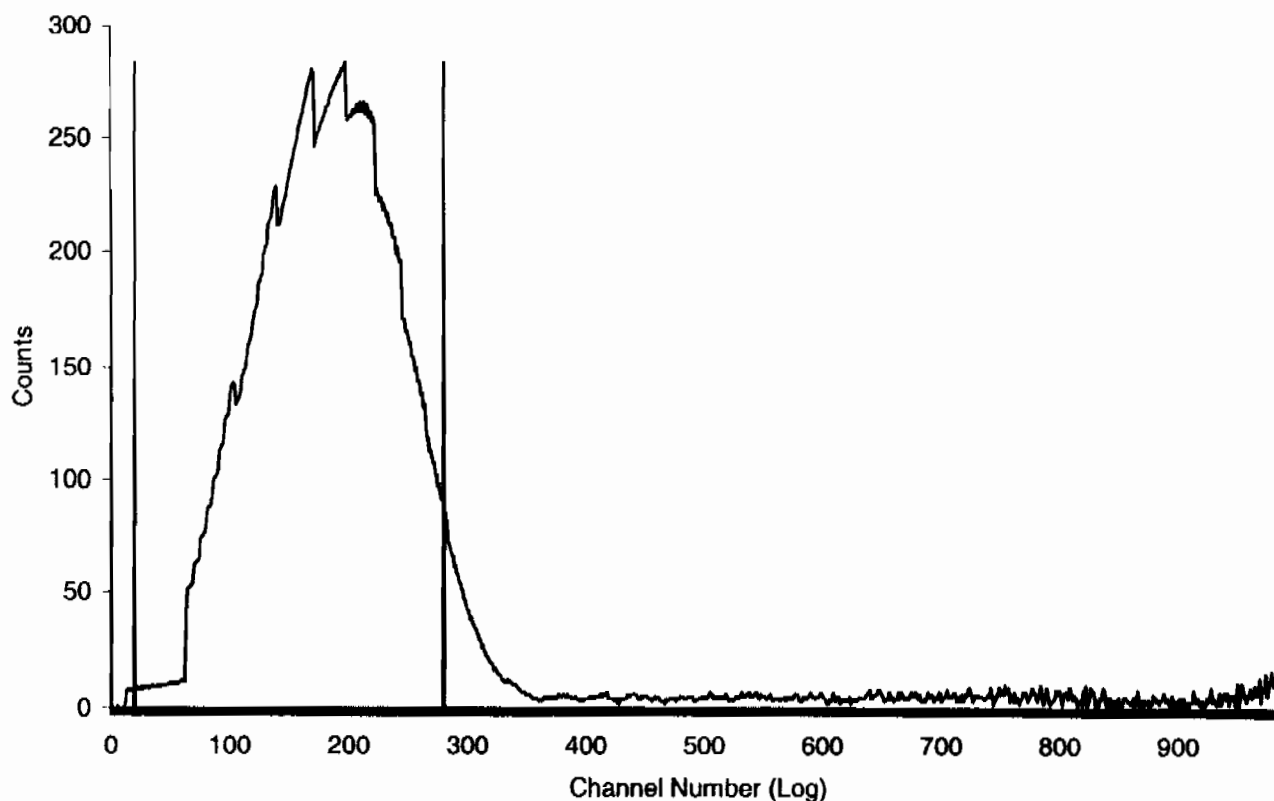
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 16:50:30		
Data Capture Date	13 Feb 2010 18:25:57		
User Filename	S04021334-7A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	7	34-7	95.00
H#, Total Counts:	125.5	46990	
Win1: Tritium - Start, End, Counts:	20	280	41321
Win2: - Start, End, Counts:	0	990	46605

SPECTRUM PLOT

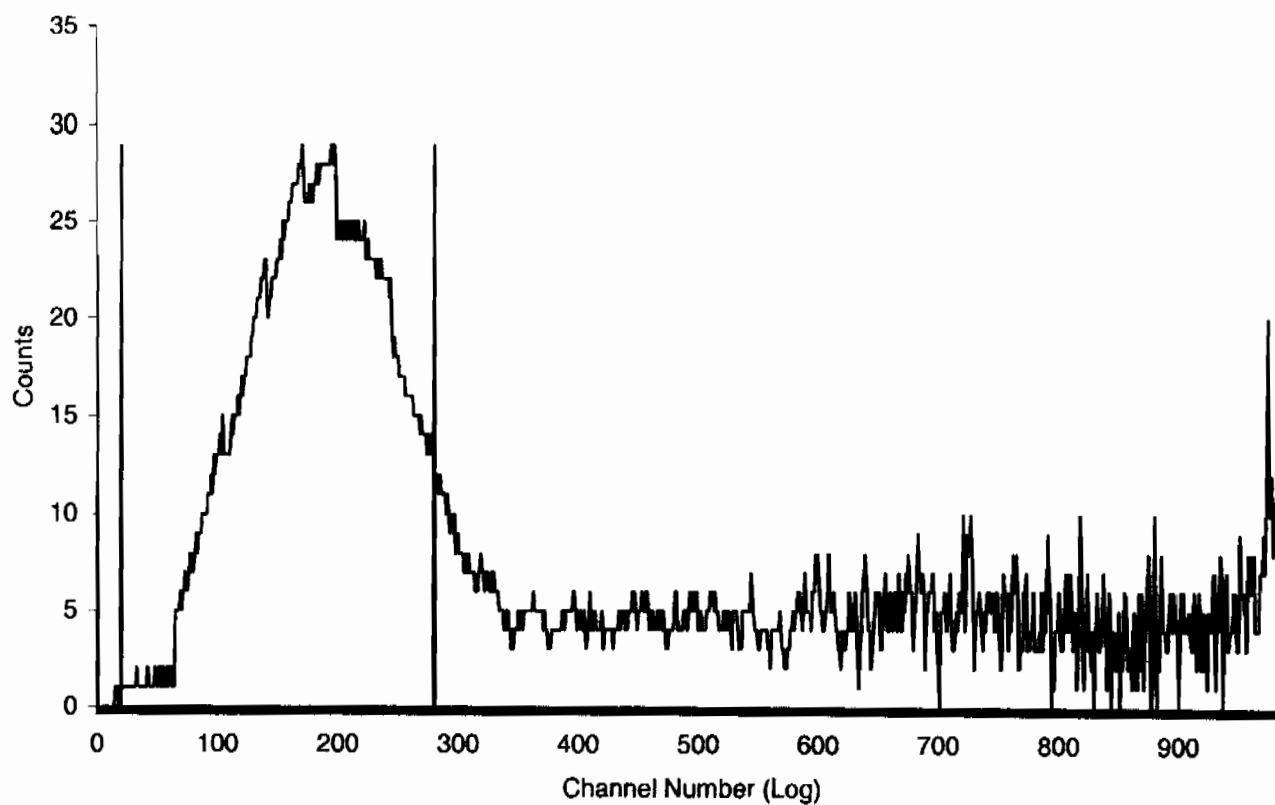
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 18:29:00		
Data Capture Date	13 Feb 2010 20:04:27		
User Filename	S04021334-8A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	8	34-8	95.00
H#, Total Counts:	124.7	8161	
Win1: Tritium - Start, End, Counts:	20	280	4193
Win2: - Start, End, Counts:	0	990	7785

SPECTRUM PLOT

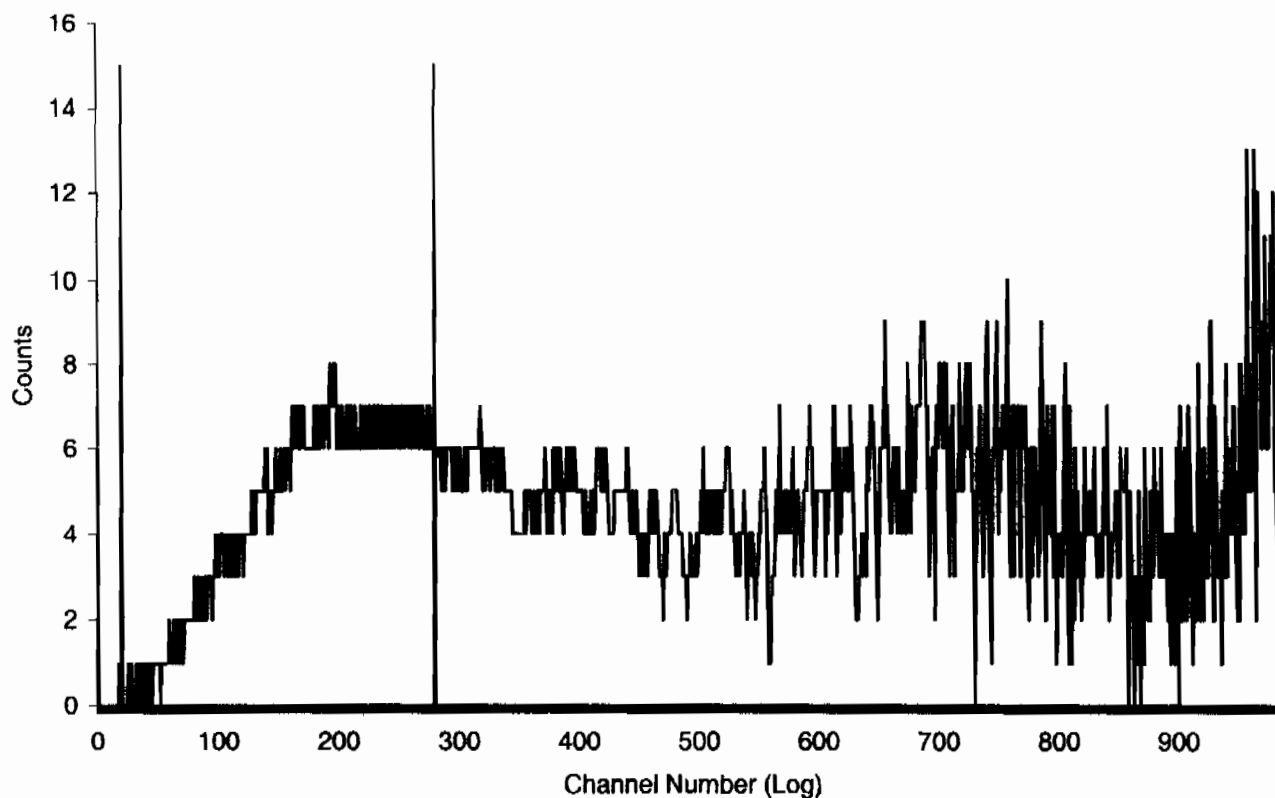
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 20:07:34		
Data Capture Date	13 Feb 2010 21:43:00		
User Filename	S04021334-9A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	9	34-9	95.00
H#, Total Counts:	125.8	4987	
Win1: Tritium - Start, End, Counts:	20	280	1160
Win2: - Start, End, Counts:	0	990	4635

SPECTRUM PLOT

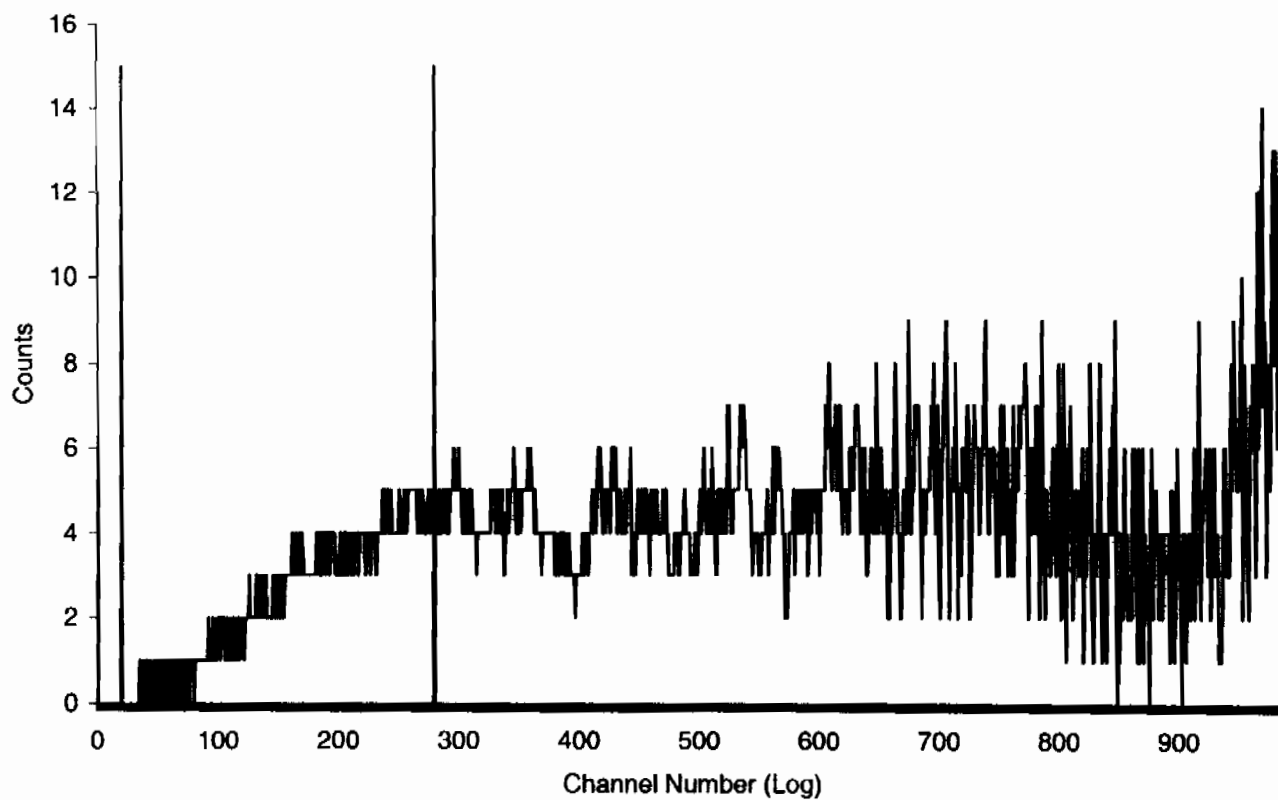
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 21:45:53		
Data Capture Date	13 Feb 2010 23:21:20		
User Filename	S04021334-10A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	10	34-10	95.00
H#, Total Counts:	126.3	4338	
Win1: Tritium - Start, End, Counts:	20	280	636
Win2: - Start, End, Counts:	0	990	3984

SPECTRUM PLOT

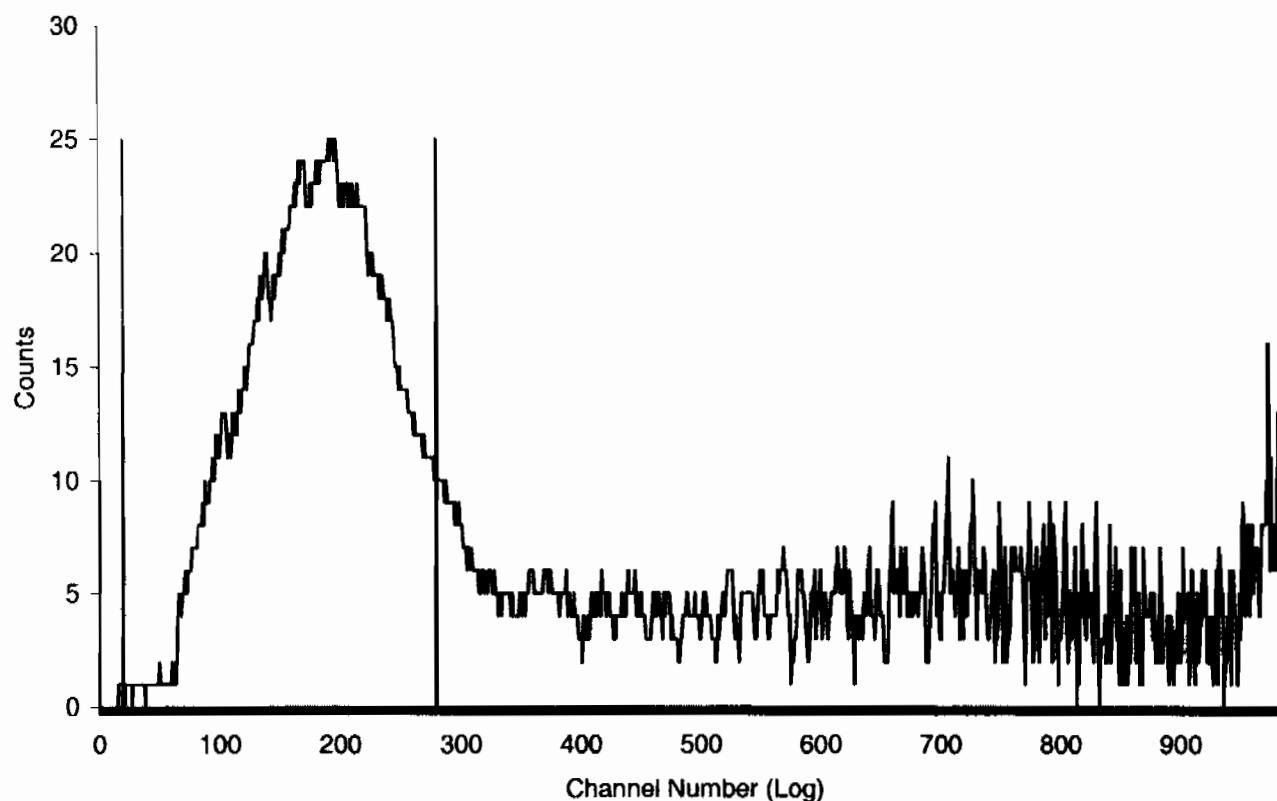
USER 04 - TRITIUM



Sample Count Start Time:	13 Feb 2010 23:24:13		
Data Capture Date	14 Feb 2010 00:59:39		
User Filename	S04021434-11A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	11	34-11	95.00
H#, Total Counts:	125.9	7431	
Win1: Tritium - Start, End, Counts:	20	280	3607
Win2: - Start, End, Counts:	0	990	7066

SPECTRUM PLOT

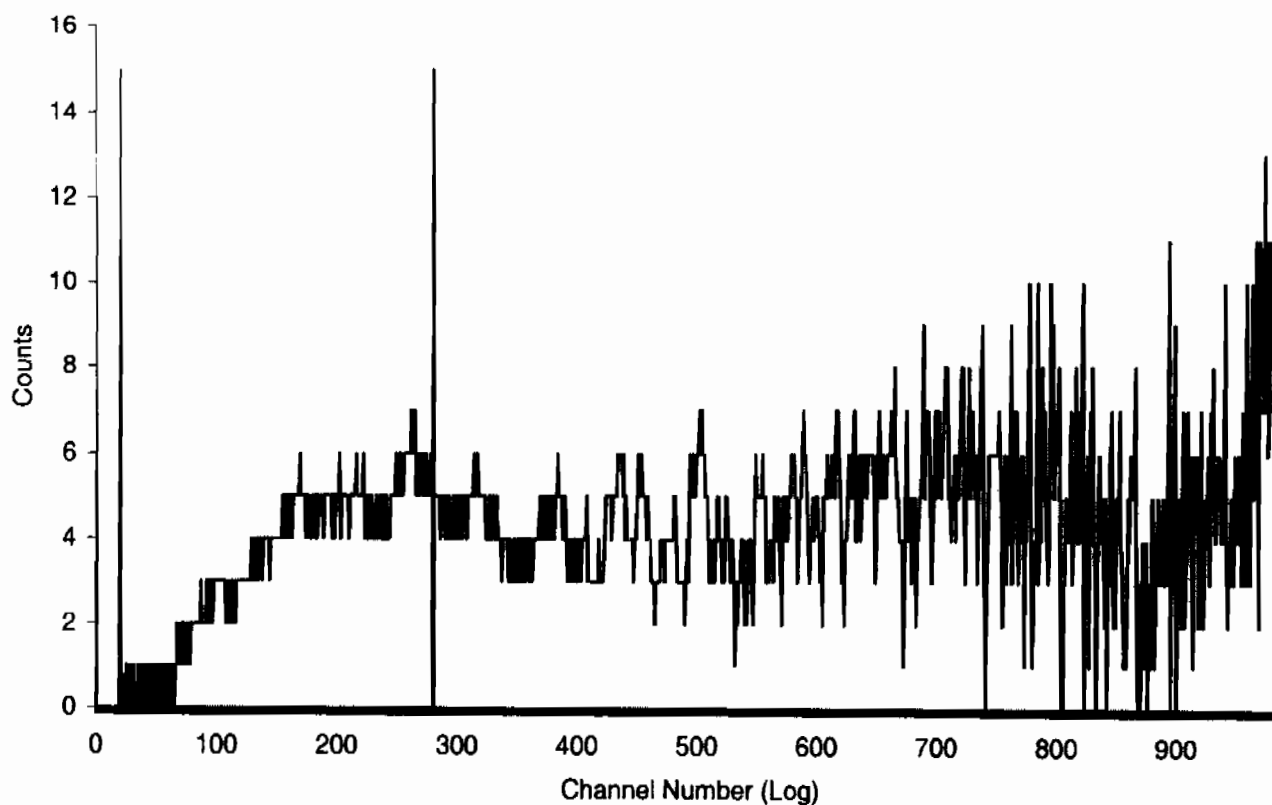
USER 04 - TRITIUM



Sample Count Start Time:	14 Feb 2010 01:02:31		
Data Capture Date	14 Feb 2010 02:37:58		
User Filename	S04021434-12A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	12	34-12	95.00
H#, Total Counts:	127.0	4587	
Win1: Tritium - Start, End, Counts:	20	280	888
Win2: - Start, End, Counts:	0	990	4250

SPECTRUM PLOT

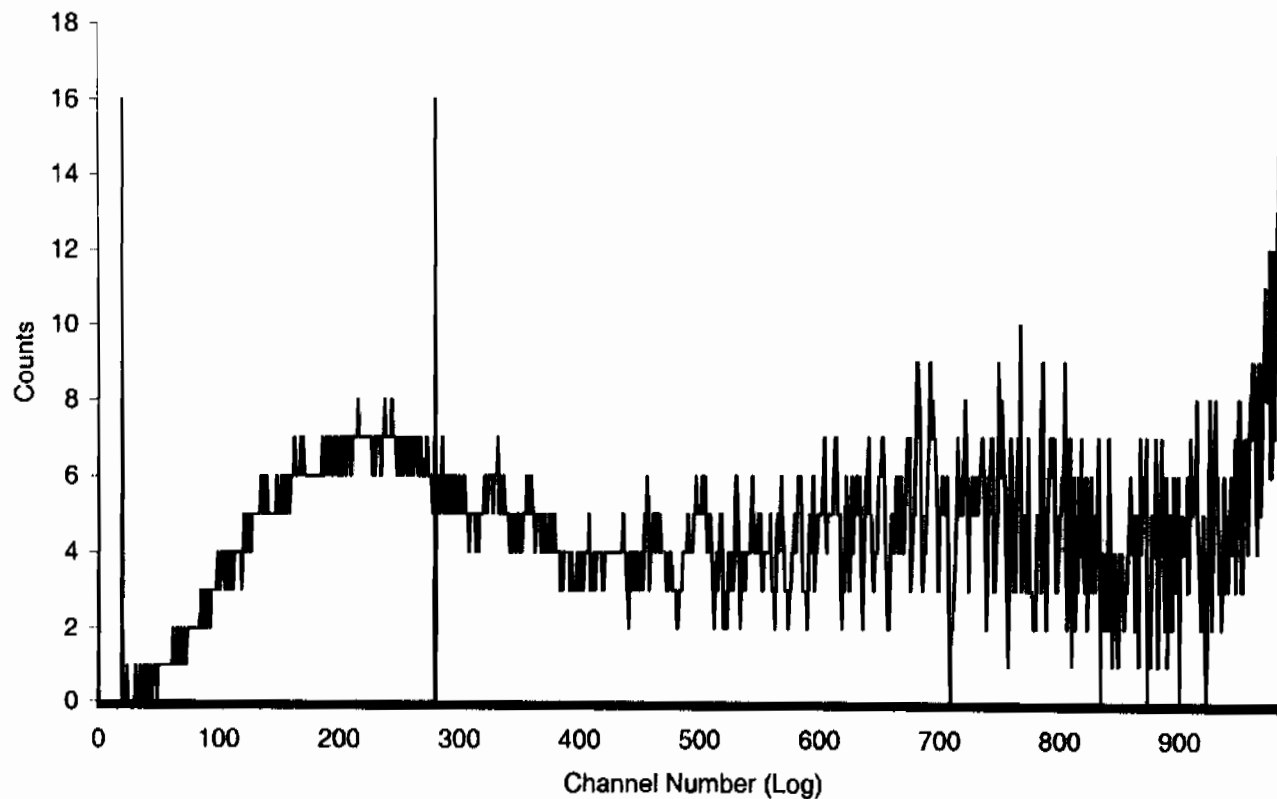
USER 04 - TRITIUM



Sample Count Start Time:	14 Feb 2010 02:40:50		
Data Capture Date	14 Feb 2010 04:16:17		
User Filename	S04021420-1A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	13	20-1	95.00
H#, Total Counts:	125.1	4887	
Win1: Tritium - Start, End, Counts:	20	280	1171
Win2: - Start, End, Counts:	0	990	4500

SPECTRUM PLOT

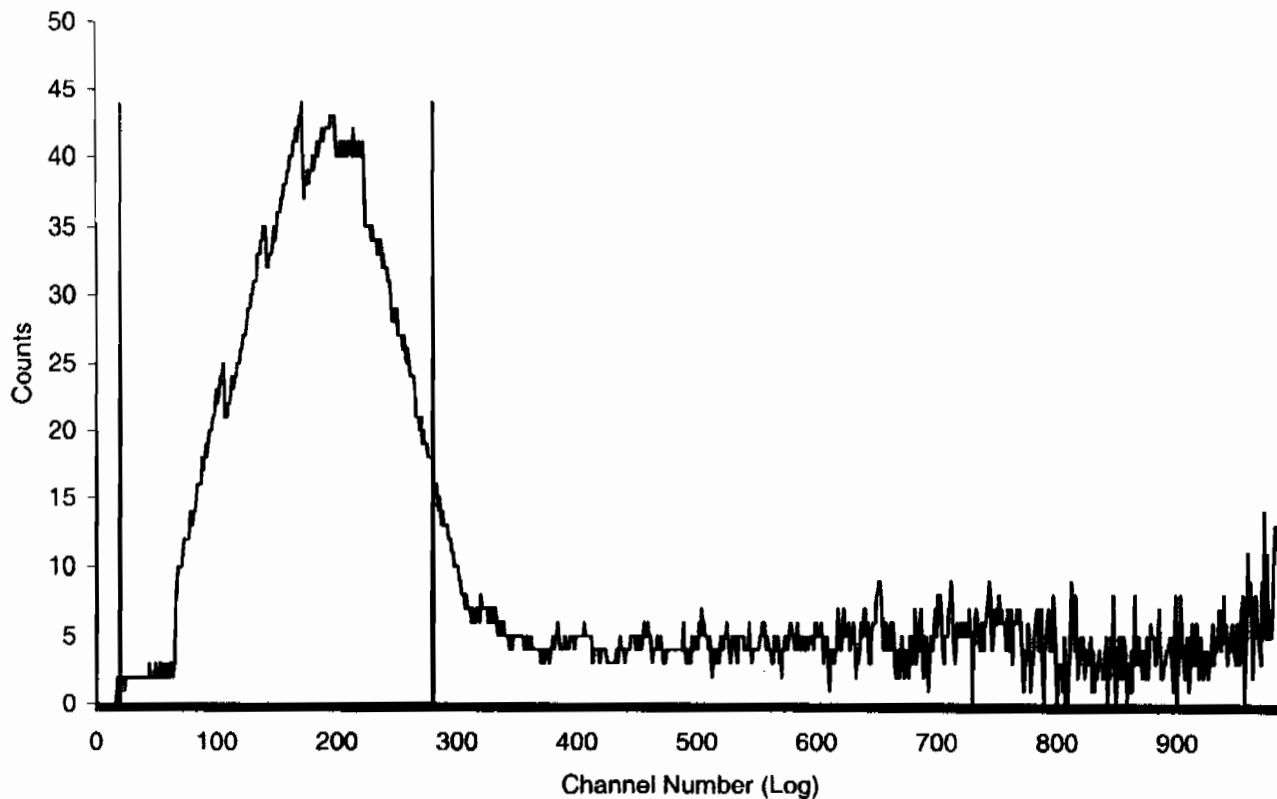
USER 04 - TRITIUM



Sample Count Start Time:	14 Feb 2010 04:19:05		
Data Capture Date	14 Feb 2010 05:54:32		
User Filename	S04021420-2A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	14	20-2	95.00
H#, Total Counts:	126.2	10451	
Win1: Tritium - Start, End, Counts:	20	280	6531
Win2: - Start, End, Counts:	0	990	10052

SPECTRUM PLOT

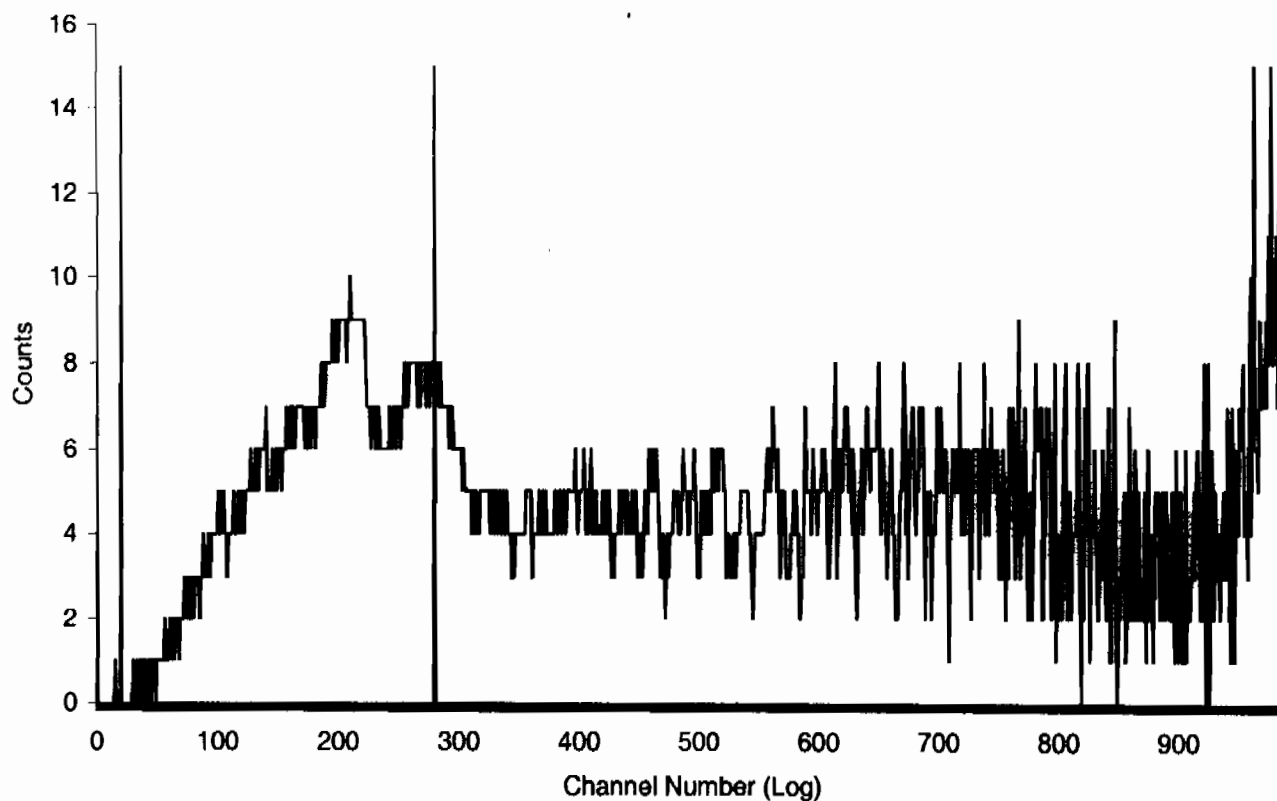
USER 04 - TRITIUM



Sample Count Start Time:	14 Feb 2010 05:57:17		
Data Capture Date	14 Feb 2010 07:32:44		
User Filename	S04021420-3A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	15	20-3	95.00
H#, Total Counts:	126.0	5109	
Win1: Tritium - Start, End, Counts:	20	280	1339
Win2: - Start, End, Counts:	0	990	4721

SPECTRUM PLOT

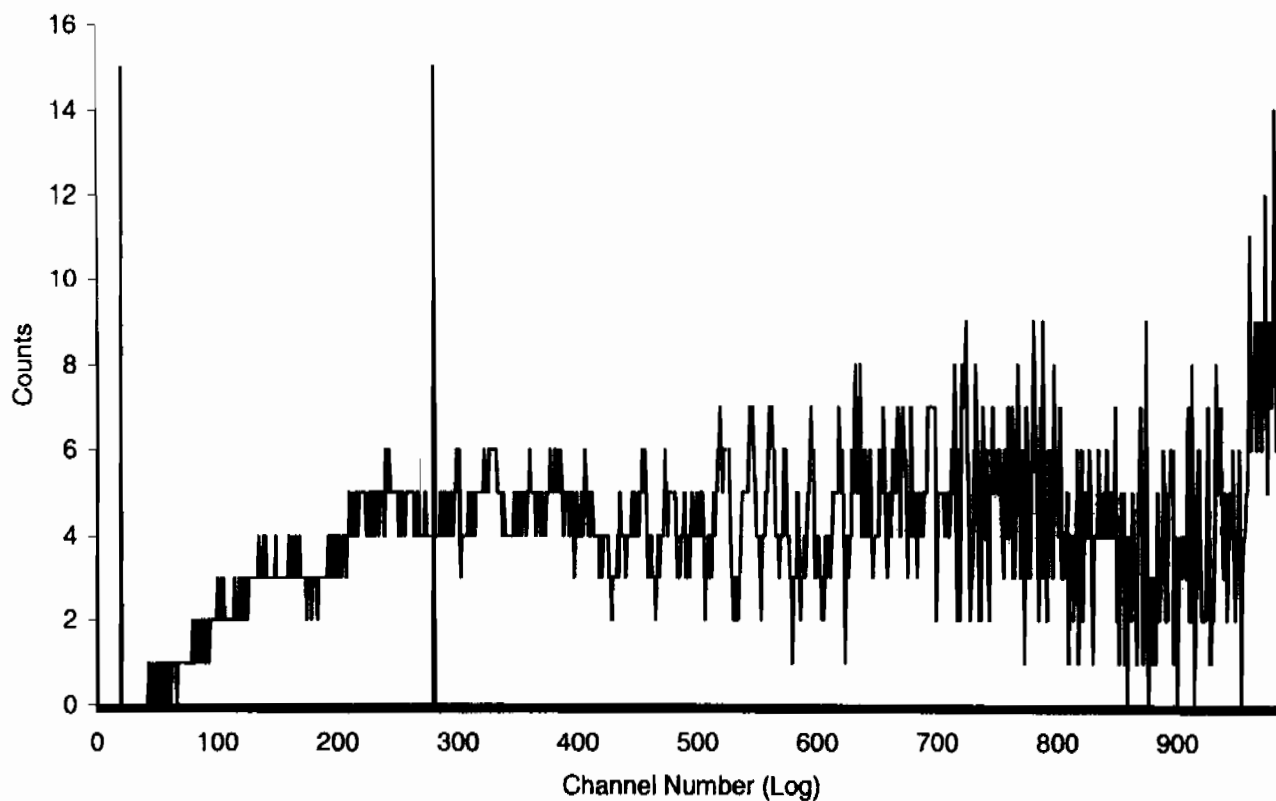
USER 04 - TRITIUM



Sample Count Start Time:	14 Feb 2010 07:35:28		
Data Capture Date	14 Feb 2010 09:10:55		
User Filename	S04021420-4A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	16	20-4	95.00
H#, Total Counts:	126.4	4388	
Win1: Tritium - Start, End, Counts:	20	280	718
Win2: - Start, End, Counts:	0	990	3997

SPECTRUM PLOT

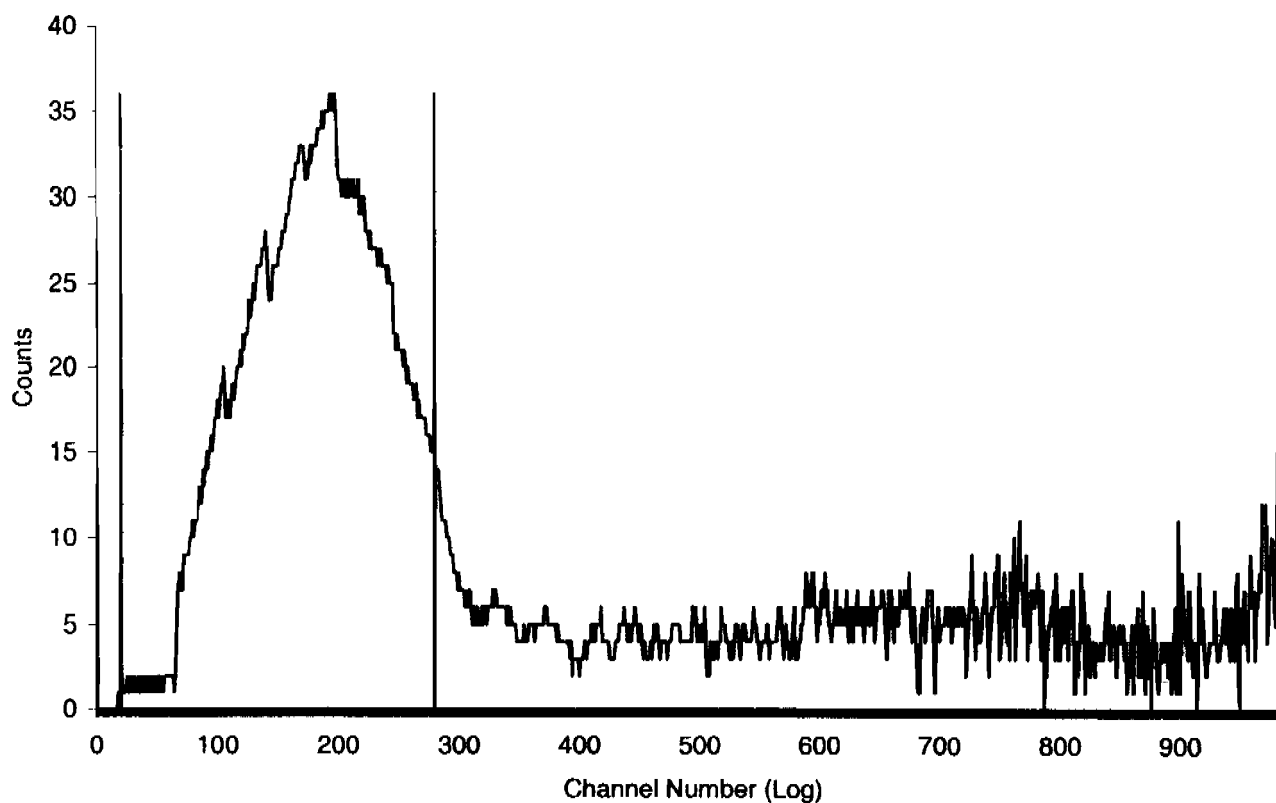
USER 04 - TRITIUM



Sample Count Start Time:	14 Feb 2010 09:13:41		
Data Capture Date	14 Feb 2010 10:49:08		
User Filename	S04021420-5A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	17	20-5	95.00
H#, Total Counts:	126.4	9118	
Win1: Tritium - Start, End, Counts:	20	280	5130
Win2: - Start, End, Counts:	0	990	8720

SPECTRUM PLOT

USER 04 - TRITIUM

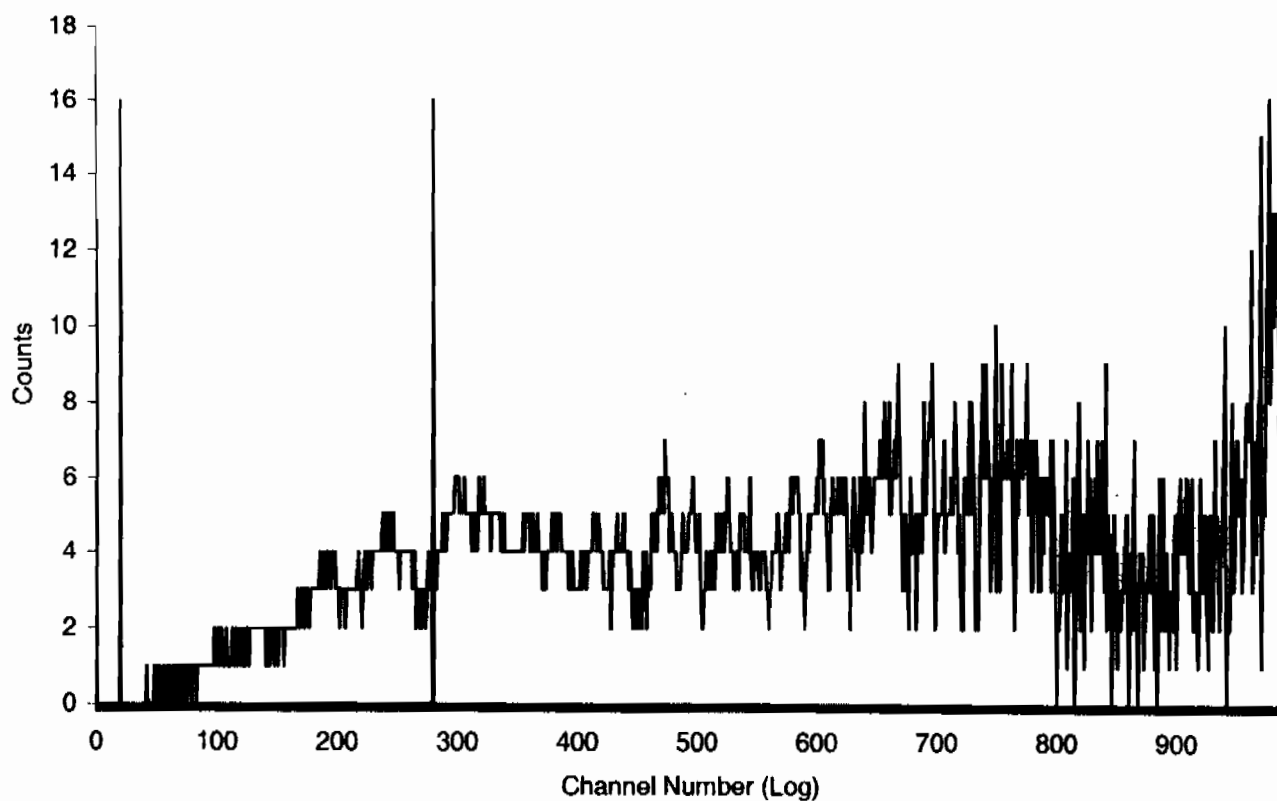


Sample Count Start Time: 14 Feb 2010 10:51:55
Data Capture Date 14 Feb 2010 12:27:19
User Filename S04021420-6A.XLS

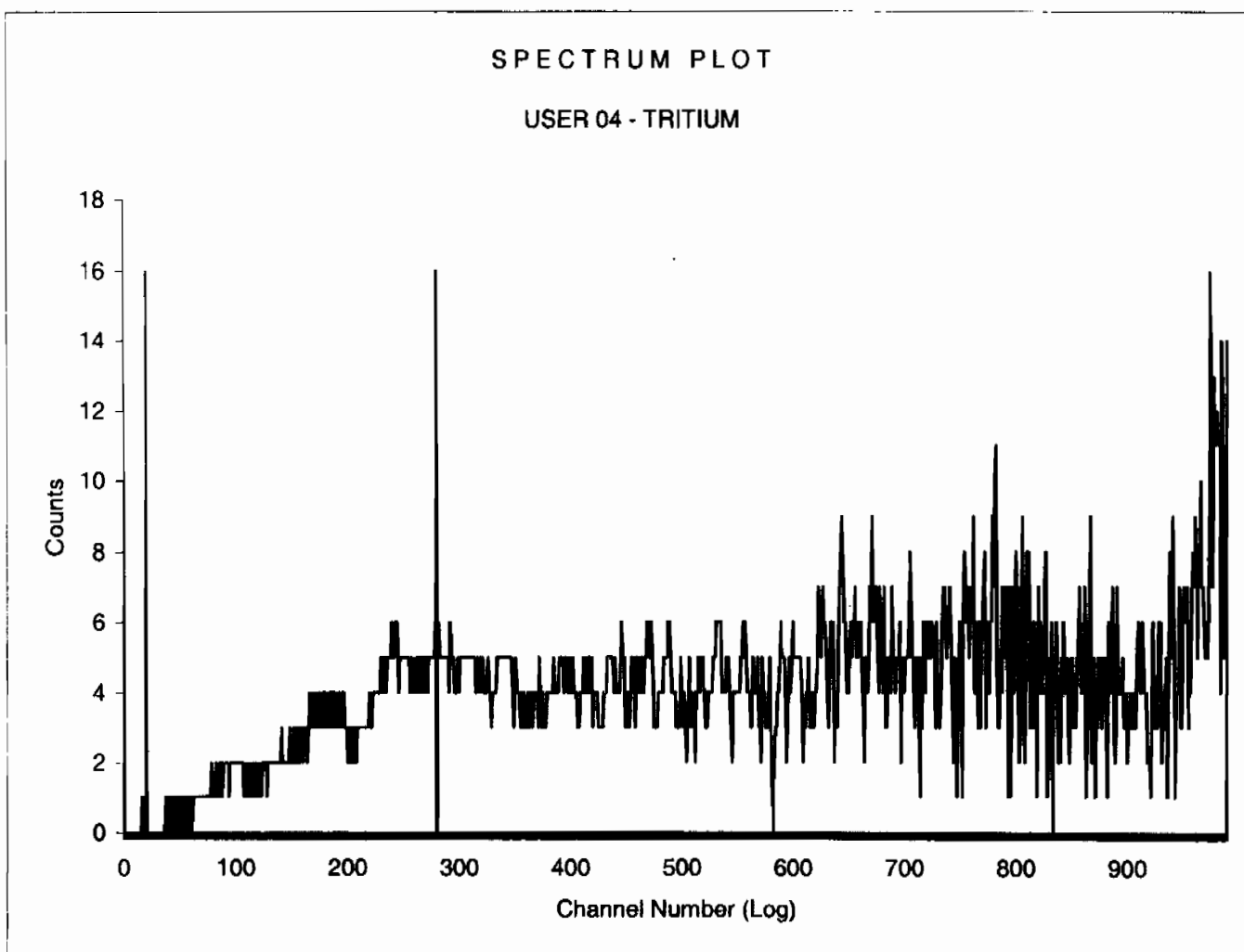
Spectrum Type	Log Counts
User Number	04
User Id	TRITIUM
User Comment	SILVER
Isotope Name	^{14}C
Scintillator	LIQUID
Sample, Rack-Pos, Time:	18 20-6 95.00
H#, Total Counts:	125.1 4248
Win1: Tritium - Start, End, Counts:	20 280 531
Win2: - Start, End, Counts:	0 990 3855

SPECTRUM PLOT

USER 04 - TRITIUM



Sample Count Start Time:	14 Feb 2010 12:30:05		
Data Capture Date	14 Feb 2010 14:05:33		
User Filename	S04021420-7A.XLS		
	U04021334-4A.XLS		
Spectrum Type	Log Counts		
User Number	04		
User Id	TRITIUM		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	19	20-7	95.00
H#, Total Counts:	127.4	4374	
Win1: Tritium - Start, End, Counts:	20	280	655
Win2: - Start, End, Counts:	0	990	4016



PAGE: 1

ID:H-3

14 FEB 2010 14:01

USER: 3

COMMENT:SILVER

PRESET TIME : 15.00

DATA CALC : CPM H# :YES SAMPLE REPEATS: 1 PRINTER : STD

COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 :EDIT

TWO PHASE : NO AQC : NO CYCLE REPEATS : 1 DISK : OFF

SCINTILLATOR: LIQUID LUMEX:YES LOW SAMPLE REJ: 0

LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

CHAN: 20.0 - 200.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

CHAN: 0.0 - 1000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1		WIND2		LUMEX %	ELAPSED TIME
				CPM	%ERROR	CPM	%ERROR		

1	26-1	15.00	125.9	39.73	8.22	80.40	5.77	0.48	15.85
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QP

INSTRUMENT CALIBRATION: Maxi 14 FEB 2010 16:15
Calibration successful

QP

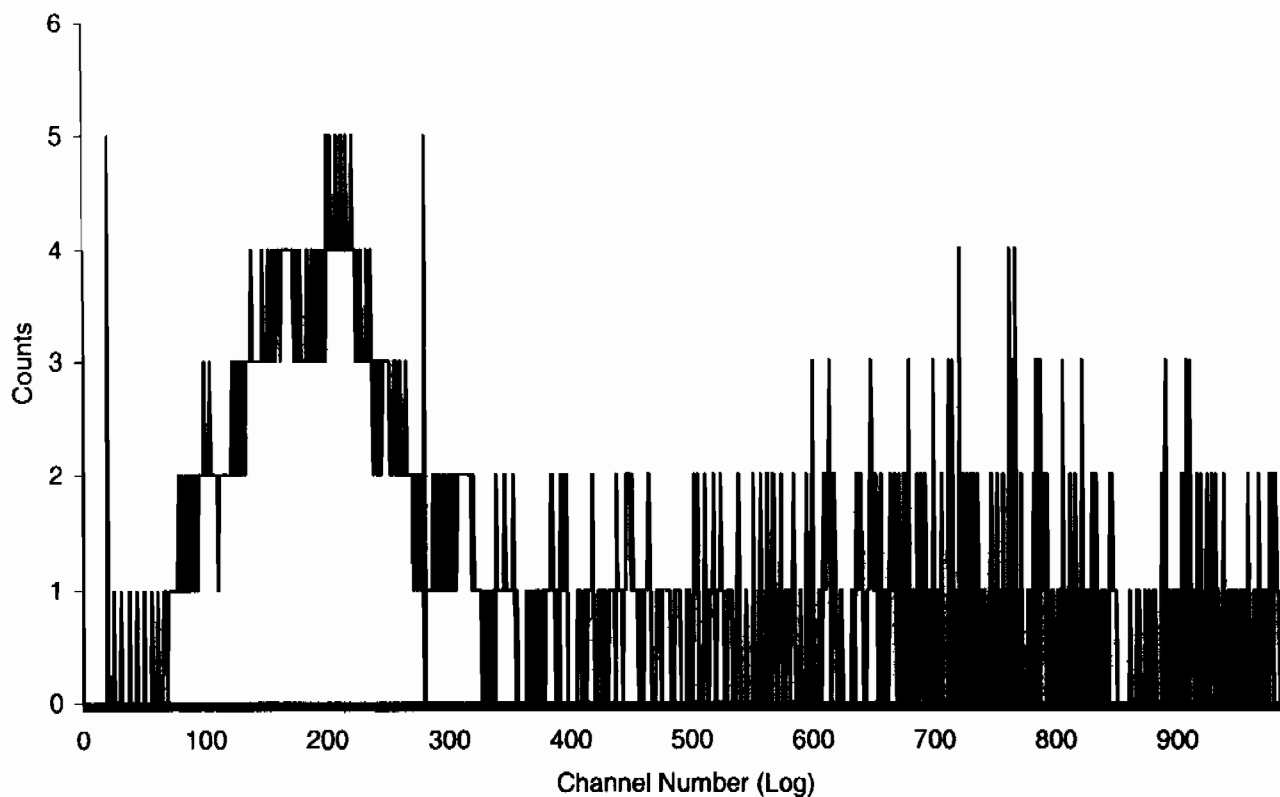
Calibrating Auto DPM
Counting Standard for 14C
Calibration Complete: 14C
Counting Standard for 3H
Calibration Complete: 3H
Calibration Successful

QPQP

Sample Count Start Time:	14 Feb 2010 14:07:28		
Data Capture Date	14 Feb 2010 14:22:07		
User Filename	S03021426-1A.XLS		
	U03021426-1A.XLS		
Spectrum Type	Log Counts		
User Number	03		
User Id	H-3		
User Comment	SILVER		
Isotope Name	14C		
Scintillator	LIQUID		
Sample, Rack-Pos, Time:	1	26-1	15.00
H#, Total Counts:	125.9	1206	
Win1: Tritium - Start, End, Counts:	20	280	596
Win2: - Start, End, Counts:	0	990	1149

SPECTRUM PLOT

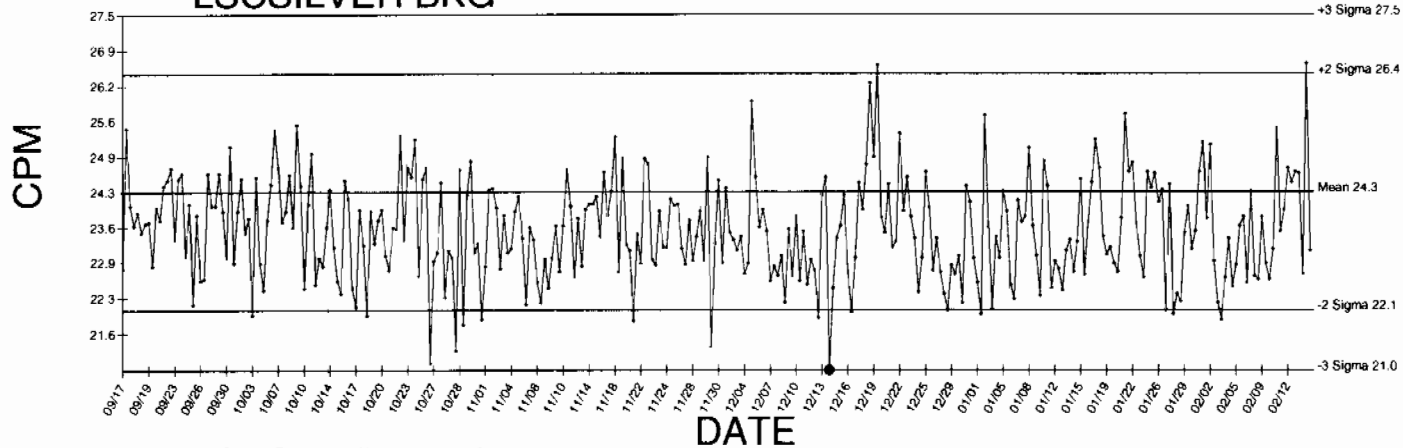
USER 03 - H-3



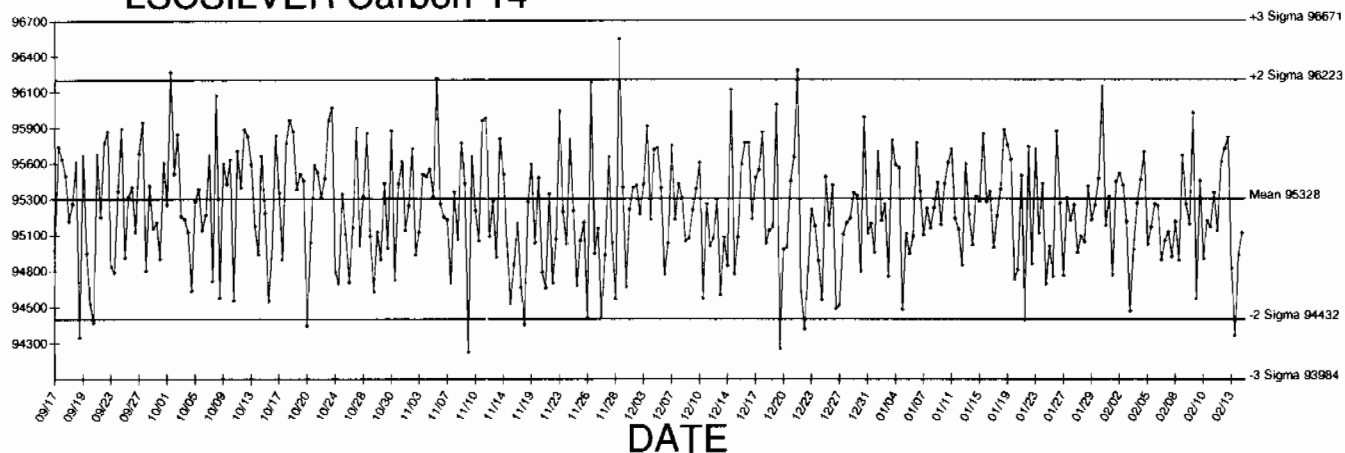
BACKGROUND AND EFFICIENCY DATA

LSCSILVER BKG

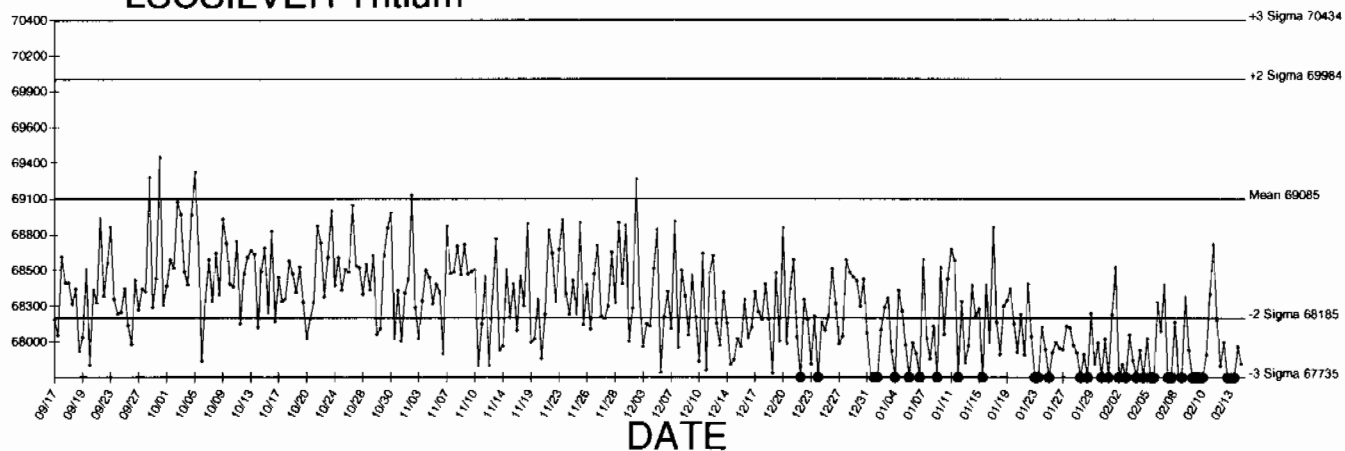
Generated 02/14/2010



LSCSILVER Carbon-14



LSCSILVER Tritium



● Denotes Outlier

STANDARDS DATA

0134



CALIBRATION
No. 0146

Description Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY-64
Chemical form: water Batch: 111

Measurement Reference time: 1200 GMT on 1 March 1996
Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water
which is equivalent to: 13.19 microcuries per gram of water
or: 2.93×10^7 disintegrations per minute per gram of water

Method of Measurement

This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

Accuracy The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than $\pm 2.5\%$

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99.7% confidence level, and the estimated systematic uncertainties.

Purity No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

Physical Data Half-life of tritium: 12.43 ± 0.11 years
Maximum beta energy of tritium: 18.6 keV

Remarks: The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore
1 curie (Ci) = 3.7×10^{10} becquerels exactly.

Useful conversion factors are:

1 microcurie (μCi) = 3.7×10^4 Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27.027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved
signatory

W. F. Case

2C-5-023-061a

Standard Traceability Log Rad

Source Material Info		A Solution Material Info	
Parent Code:	0134	Isotope:	Tritium
Prepared By:	Angela Johnson	Prepared By:	Angela Johnson
Carrier Conc:	DI WATER	Prep Date:	02/21/2001
Reference Date:	03/01/1996	Verification Date:	09/10/2008
Ampoule Mass (g):	5 g	Expiration Date:	03/27/2010
Uncertainty:	+/- 2.5 %	Primary Code:	0134-A
LogBook No:	RC S 023 061	Dilution(mL):	100 mL
		Mass of Parent(g):	3.3659 g
		Density(g/mL):	1.0004
		Balance ID:	38080204

Calculations Converting parent activity to dpm/mL|dpm/g

$(\text{Mass of parent(g)}) * (\text{Parm Activity (kBq/g)}) * (\text{conversion dpm to kBq}) / (\text{Dilution Vol}) = \text{Parent Activity (dpm/mL)}$
$(\text{Mass of parent(g)}) * (\text{Parm Activity (kBq/g)}) * (\text{conversion dpm to kBq}) / \text{Density (g/mL)} / (\text{Dilution Vol}) = \text{Parent Activity (dpm/g)}$
$(3.3659 \text{ g}) * (488 \text{ kBq/g}) * (60000 \text{ dpm/kBq}) / (100 \text{ mL}) = 985535.5200 \text{ dpm/mL}$
$(3.3659 \text{ g}) * (488 \text{ kBq/g}) * (60000 \text{ dpm/kBq}) / (1.0004 \text{ g/mL}) / (100 \text{ mL}) = 985180.3116 \text{ dpm/g}$

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/25/2006	07/25/2007
12/20/2005	Amanda Fehr	5.5451	1000	0134-I	5462.92 dpm/mL	12/20/2006	12/20/2007
07/11/2007	Daniel Roy	5.5863	1000	0134-J	5503.5128 dpm/ml	07/29/2008	07/29/2009
03/25/2009	Mary Aders	5.4917	1000	0134-K	5410.3147 dpm/ml	03/27/2009	03/27/2010

GEL Laboratories LLC
Version 1.0 9/18/2000

Verification for H-3 Standard 0134-K

M. Aders	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff Mass. Used (mL)	Source DPM/mL
4/9/2009	0134-K N1	1087.2000	54.0000	1043.2000	1.0000	2741.3099
	0134-K N2	1073.2000	54.0000	1019.2000	1.0000	2678.242955
	0134-K N3	1085.2000	54.0000	1031.2000	1.0000	2709.776428
Mean Value (Counting) =	2709.776428		104.954429	Pass		
Stddev =	31.53347278		0.01163693	Rule 3 (Pass/Fail)		

Certificate Value = 2581.86 dpm/mL
 Lower Limit = 2646.709482 dpm/mL
 Upper Limit = 2772.843373 dpm/mL
 Rule 1 Pass/Fail Fail
 Two sigma = 63.06694556 dpm/mL
 10 % of Mean = 270.9776428 dpm/mL
 Rule 2 (Pass/Fail) Pass

*exception taken due to full recovery of standard

Verification Rules

- Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
 Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
 Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for H-3 source 0134-K by transferring 0.1 mL portions of the standard into glass liquid scintillation vials. Ten mL of Ecocint Ultra liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ecocint Ultra liquid scintillation cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on Silver for H-3 source standard verification. The H-3 efficiency calibration which was used for verification calculations was performed on 4/9/09 using 0020-A (H-3). Calibration data is recorded in this logbook under H-3 0020. Each verification source calculation was performed as follows:

$$\text{Source dpm/g} = (A - B)/(C/D)$$

where:

- A = Ver. source cpm,
 B = BKG cpm,
 C = System efficiency, (cpm/dpm), and
 D = mass used for standard verification.

Reference RAD SOP M-001

Handwritten signature: Amanda J. Dehn 4/9/09

RUNLOGS

Instrument Run Log

Instrument Type: LSC

Batch ID: 950495

Sample ID	Sample Type	Analyst	Instrument	Run Date	Status	Geometry	Calibration Date
245978001	SAMPLE	KXK2	LSCSILVER	13-FEB-10 07:13	DONE		
245978002	SAMPLE	KXK2	LSCSILVER	13-FEB-10 08:51	DONE		
245978003	SAMPLE	KXK2	LSCSILVER	13-FEB-10 11:55	DONE		
245978004	SAMPLE	KXK2	LSCSILVER	13-FEB-10 13:33	DONE		
245978005	SAMPLE	KXK2	LSCSILVER	13-FEB-10 15:12	DONE		
245978006	SAMPLE	KXK2	LSCSILVER	13-FEB-10 16:50	DONE		
245978007	SAMPLE	KXK2	LSCSILVER	13-FEB-10 18:29	DONE		
245978008	SAMPLE	KXK2	LSCSILVER	13-FEB-10 20:07	DONE		
245978009	SAMPLE	KXK2	LSCSILVER	13-FEB-10 21:45	DONE		
245978010	SAMPLE	KXK2	LSCSILVER	13-FEB-10 23:24	DONE		
245978011	SAMPLE	KXK2	LSCSILVER	14-FEB-10 01:02	DONE		
245978012	SAMPLE	KXK2	LSCSILVER	14-FEB-10 02:40	DONE		
245978013	SAMPLE	KXK2	LSCSILVER	14-FEB-10 04:19	DONE		
245978014	SAMPLE	KXK2	LSCSILVER	14-FEB-10 05:57	DONE		
245978015	SAMPLE	KXK2	LSCSILVER	14-FEB-10 07:35	DONE		
245979015	SAMPLE	KXK2	LSCSILVER	14-FEB-10 09:13	DONE		
1202036900	MB	KXK2	LSCSILVER	14-FEB-10 10:51	DONE		
1202036901	DUP	KXK2	LSCSILVER	14-FEB-10 12:30	DONE		
1202036902	LCS	KXK2	LSCSILVER	14-FEB-10 14:07	DONE		